

mixture made so striking a difference in the plants that it could have been observed by anyone passing along the side of the field. The untreated rows had the foliage smaller, more upright and badly spotted with the fungus, while the sprayed plants showed a rank growth of foliage, nearly green throughout, more inclined to lop and much less spotted than the untreated plants.

The difference between the roots in the treated and untreated rows shown below in pounds was not so great as that seen in the foliage.

	Sprayed.	Unsprayed.
Roots,	416½ lbs.	331 lbs.
Leaves,	63½ lbs.	49 lbs.
Total,	480 lbs.	380 lbs.

This is an increase of nearly twenty-six per cent., or one-quarter in round numbers. Therefore, the conclusion is that whatever the crop may have been per acre in this case, spraying with Bordeaux mixture would have increased it one-fourth, or, for example, from nine tons to twelve tons.

BYRON D. HALSTED.

SCIENCE IN CANADA.

A NEW volume of the transactions of the Royal Society of Canada (Volume XII.) will shortly be issued. It will be the largest of the series and will contain a bibliography of the work of the Society, collectively and individually. This Society was founded in 1882 by the Marquis of Lorne, at that time Governor-General of Canada, and was organized, to some extent, on the basis of the *Institut de France*. It consists of four sections, of which two are scientific, one being devoted to the physical and chemical, the other to the biological and geological sciences. The system of *éloges*, introduced originally by the French Section (I.), has of late been adopted by the other sections also. Carefully conducted, this feature cannot fail to be of value to the future inquirer. An accurate catalogue of deceased members' works, with their dates of publication, etc.,

and an impartial estimate, ought to accompany the biography.

The scientific members of the Royal Society of Canada comprise several scientific workers and writers of continental, a few of European, fame. Except one year (1891) it has always met at Ottawa, a rendezvous which, though inconvenient for members living at a great distance, has some important advantages, such as access to the National Library, the Archives Bureau, the offices, museum and library of the Geological Survey and the Central Farm, with its laboratories, etc. All these departments are represented in the membership.

Not the least of the services that the Royal Society has rendered to Canada is that which arises from the affiliation of the principal local societies throughout the Dominion. Some of these are important bodies, which publish transactions of their own, and have done a fair share of original work. Among these may be mentioned the Natural History Society of Montreal, founded in 1827; the Canadian Institute (1851), the Hamilton Association (1856), the Nova Scotia Institute of Natural Science (1862), the Entomological Society of Ontario (1863), the Murchison Society, Belleville (1873), the Ottawa Field Naturalists' Club (1879), the Canadian Society of Civil Engineers (1888), the Natural History Society of British Columbia (1889) and the Literary and Scientific Society of Winnipeg (1879). It will be seen that this list practically covers the Dominion from Atlantic to Pacific, and when it is added that every one of these bodies is represented at the May meeting by a delegate, who reads a statement of the year's work, published in the ensuing volume, it will be admitted that the plan is not unfruitful. Some of these allied societies have organized their work into departments, and their reports in the proceedings of the Royal Society form a valuable record of scientific

development. The yearly volume of the R. S. C. is thus both a stimulant and a testimony to scientific progress.

To even outline the character of the work done by the local societies just enumerated would occupy a good deal of space. In some cases the name indicates the general trend of inquiry, but for the most part this can only be learned by consulting reports. The Entomological Society of Canada has long had a reputation for steady and painstaking work, and the commendations that it won at the Centennial Exposition (1876) were not undeserved. The Natural History Society of Montreal has two courses of lectures every winter; the regular monthly meetings yielding papers that are strictly scientific, while the Somerville lectures (founded by a Presbyterian minister more than half a century ago) are of a more popular character.

The two latest of these Somerville lectures were delivered by Prof. Saunders, Superintendent of the Central Farm, Ottawa, and Dr. Robert Bell, F. G. S., of the Geological Survey, their subjects being 'The Resources of the Soil,' and 'The Mammals of Canada,' respectively. Dr. Bell's lecture, which was delivered on the 15th ult., covered an immense habitat or succession of habitats, and was the result of personal observation from the international frontier to the extreme north. The members of the Survey have traversed the vast region between Hudson Bay and the Rocky Mountains, some of them having spent seasons in the Yukon country, others in the Barren Lands. Dr. Bell went on two expeditions to Hudson Bay. In his lecture he spoke of the moose, the red deer, the reindeer, the Rocky Mountain sheep, the antelope, the arctic bear, the seal, the walrus, the whale, the porpoise, the beaver, the cat family, the fox, in his varieties and the smaller mammals, especially the fur-bearing species. He mentioned the domestication of wild animals by the aborigines, and suggested the follow-

ing of their example. The lecture was perhaps rather economic than scientific; though, as largely the result of personal observation, it had a greater value than most popular lectures.

A Montreal society that has been doing good work in an unostentatious way is the Society for the Study of Comparative Psychology, of which Professor T. W. Mills, M. D., author of a work on 'The Dog,' may be said to have been the founder. Most of the papers read at the Society's meetings are based on observations of the habits of animals, several of the members being, like the president, Dr. Mills, connected with the Veterinary College, affiliated to McGill University. At the last meeting (on the 8th ult.), Mr. A. Dell read a paper on the Evolution of Language, Mr. C. A. Bantelle another on Habit. In both observations of animals were used (in part) for illustration. Mr. B. K. Baldwin read a paper on the relation between the intellectual status of the horse and his owner, in which he showed that by sympathy and kindness lower races attained greater control over their horses than higher races without those qualities.

Another society that has been doing some quasi-scientific work is the Folk-Lore, or rather the Montreal Branch of the American Folk-Lore Society. It meets at the houses of members monthly, when papers are read and discussions take place. At the last meeting, Dr. D. S. Kellogg, of Plattsburg, N. Y., gave an interesting paper on the Folk-Lore of the Lake Champlain Valley, the importance of which was increased by the fact that every belief, usage, saying and tradition mentioned had been collected by the essayist in the course of an extensive practice. In almost every case, the source of the story or incident was mentioned. Dr. Kellogg's paper admirably exemplified how profitably a busy professional man, of scientific habit of mind, may utilize his spare *quarts d' heures* and odd moments. J. T. C.