They have been sent to the Jardindes Plantes, where no specimen of the kind has been before seen.

MECHANICS' INSTITUTE.

(From the Patriot.)

On Friday sennight, a lecture on "The Relation of Science to Modern Agriculture," was delivered by George Buckland, Esq, Editor of the *Canadian Agriculturist*, and Secretary of the Provincial Society.

The lecturer remarked, that in writing or speaking on the subject of Agriculture, it is usual to descant on its antiquity and importance.—Notwithstanding both, however, it seemed to him that this art derived less aid from the pursuit of physical science than any other of the useful arts of life. Many of the ancient nations understood as well, and practised as thoroughly, the practical principles of agriculture, 2, or 3,000 years ago, as many of the European nations did not more than two centuries since; nay, as well as they were understood at the present time in many parts of Europe and in a large portion of the continent of America. Within the last half century, the art had made a very rapid advance, particularly in Britain, and was now assuming a position to which it had hitherto been a stranger. Its generally slow progress was attributable to many causes. It was partly accounted for by the great diversity of climate in the world, each involving some peculiarity in the practice of Agriculture. The ancient cultivators of Egypt, or of Sicily, however skilful in their own countries, would have altogether failed if transported to the widely different climate of France or England. The same observation applied to the difference in the nature of the soil observable even in the same country. The Scotch deservedly held a high place as cultivators of the soil, yet there were numberless instances on record of failure by the most skilful Scotchmen when transported to the different soil which was found in several parts of England.—The experience of men in different climates and on different soils had rendered it difficult to form a regular systematic codification of results. But as the science of agriculture became better understood, these circumstances would be converted from obstacles into advantages, well calculated to subserve its interests and promote its improvement. Another obstacle was connected with the mode of life inseparable from agriculture. A farmer's life must always, to a greater or less extent, be an isolated one. The marvellous progress of manufacturing skill and industry was doubtless in a great measure attributable to the quickened intellect and unremitting enterprise which residence amongst masses of men was certain to produce. Of this advantage the farmer was deprived. Again: very much in agriculture depended on experiments which involved a large extent of time. The most rapid experiment required a year to develop its success or failure; and those experiments which were connected with the different methods of rotation in cropping required a much longer period. The co-operative principle furnished the only method of overcoming this difficulty. Numbers by associating and publishing the results of their different modes of practice, would speedily furnish such an accumulation of facts, that the scientific man would be able to generalise and to deduce some great principles. This process was going on in Great Britain and in some parts of America, and furnish solid grounds of hope for the future. Another encouraging fact was the intimate connection which must henceforward subsist between agriculture and other sciences. The labors of the geoligist and chemist would be of essential service to the farmer: the mechanician would assist him in other departments of labour; and the spread of railroads and other improved modes of transit and communication would produce a great agricultural as well as a great social change.—The lecturer proceeded to epitomise the history of agricultural improvement in England and Scotland. He characterised the introduction of the turnip culture in the Lothians, in 1723, as the beginning of the great change which was still going on. Root culture and the culture of artificial grasses, soon afterwards extended to England, and led to the rearing and fattening of large quantities of stock and to the improvement of their breeds; more manure was obtained, and in turn served to augment the grain crops; alternate systems of cropping to a great extent superseded naked fallows; while beneficial changes were all the time going on, first in the implements employed, and next in the mechanical texture of the soil by means of under draining and manuring.—Many of these improvements were yet little known in Canada or in the neighbouring States. Rotation of crops could hardly be said to exist here; but our farmers must be resort to it if they hope to cultivate their farms with profit. In Canada and New York the wheat crop averages only about fourteen bushels per acre; the average used to be larger, but it was gradually becoming less and it would continue to decline unless more scientific culture than now prevails be adopted. The only farming that could permanently pay, here or elsewhere, was high farming. Men tilling the soil must use their brains as well as their hands; for as Cobbett had remarked, "the soil though ever grateful, must have something to be grateful for." The education of the farmer, while adding to the profitableness of his labor, would tend more than anything else to secure to him the respect to which his true social position entitled him.

COAL AND WOOD ASHES.—A writer in the North-British *Agriculturist*, contends that coal ashes rank very low as a chemical meliorator of earth and soils. Wood ashes, according to Liebig are of far more value. We agree with the author and the chemist in their estimate of the value of coal and wood ashes, and so will our friends beyond the Atlantic, where there is more wood to spare for making ashes than on this side of the water. Soot is more favorably reported of; an analysis of it is given, and a report of the results as a Manure, in raising potatoes, appears favorable. Soot is one of those manures which acts rapidly on vegetables; but it seems of too volatile a nature to last long as a manure in the soil. From our own experience, we would say that at the rate of 25 to 30 bushels of soot an acre, as good a return of potatoes might be obtained, where the soil was not in an exhausted state, as with from 15 to 20 tons of farm yard manure. Green broom tops, as we have formerly stated, we have found to be much superior to either in raising potatoes.

RAISING GEESE.

A GOOSE is more easily raised than any other domestic bird of our experience. Here is the simple course we pursue: Feed the geese kept for breeders, moderately well all winter with a mixture of grain and boiled roots. Provide a warm, dry, well-sheltered place for sitting; and when the goose is on her nest, give her regular daily food, principally of cooked vegetables, lest she should get costive, and plenty of fresh, clean water. When sitting, a goose does not eat so much as ordinarily. If she inclines to come off the nest let her do so; and even let her go to the water and swim and dive to her heart's content. She is only