

kept away and killed the mice? Whether, if it killed the mice, it would injure the animals feeding on the oats, or spoil the straw for food? Has any one else experience on this subject? If so let him publish it in your *Journal*. None of us need fear the strain on the brain involved in narrating our own experiences and discussing those of others; and we shall certainly, by the benefits we obtain thereby, recoup ourselves the cost of the pen, ink, and paper we use—so that we shall at least lose nothing by such a BOLD step.

The man of science, or even the artisan has more reason to keep his discoveries to himself. If he can simplify a process beyond his neighbours powers, he is thereby enabled to sell his discovery, or to manufacture at an advantage with them and to undersell them. He has good reason for his reticence—not so the farmer. Let him double, quadruple his produce, let all of us do so; if agriculture prospers, the whole country prospers, and by building up the towns in which we buy and sell, we create our own market.

Therefore, for our own advantage, I urge a free discussion on all agricultural questions, and press on all farmers to join in and thus make the *Nova Scotian Journal* the organ of a Mutual Benefit Society.

I remain, &c.,

J. W. L.

LUCERNE—HISTORY AND DESCRIPTION.

BY W. BUSTIN, ESQ., CARLETON CLUB FARM.

Carlton, Yarmouth Co., March 28, 1870.

DEAR SIR,—In the present number of the *Journal* I notice an enquiry as to *Lucerne*. I beg to send you the enclosed jottings on the subject; perhaps you may find them suitable for publication. I am, dear sir, yours respectfully, W. BUSTIN.

Lucerne, *MEDICAGO SATIVA*.—Has been grown for ages in Spain, Italy, the southern part of France, and the northern shores of the Mediterranean; from the Greeks and Romans we have very particular information of its habits, uses, and cultivation. In the islands of Guernsey and Jersey, where the soil and climate are peculiarly suited to its growth, it is very highly valued. It is also cultivated to some extent in Kent and some of the southern counties of England, but its cultivation generally has been on the decline in the British islands. It was early introduced into the United States, and in 1791 Chancellor Livingston made extensive trial of it, who estimated that it yielded a profit over clover of \$35 per acre, while its relative value was decidedly inferior. The climate of the northern and middle States has proved too rigorous for it.

Under cultivation it attains a height of upwards of two feet. It is thickly covered with leaves, *downy* on the under side. It flowers in June and July. The flowers

are of a fine violet colour tinged with purple. The lighter soils subtended by an open mellow subsoil, are the best suited to its wants; on any other soils it is useless to attempt to cultivate it for profit. It can be sown broadcast in spring with a grain crop, as the other grasses and clovers; but as it does not grow well under the shade of the grain crop, it is better sown alone. The best practice is to sow it in drills, as it is subject to be crowded out by the other grasses and natural plants; and for this reason it ought to be sown in rows in order to allow of their being kept down by the cultivator and hoe. When sown in drills and well cultivated and hoed, its roots may be preserved in the ground for a very long period, but when sown broadcast it seldom lasts more than ten years. Its roots are perennial. When sown in rows, ten pounds of seed is sufficient per acre, but when sown broadcast eighteen or twenty pounds will be required. The soil should be previously well prepared by deep ploughing and sub-soiling, thus the proper place for this crop may be after a crop of potatoes, turnips, carrots, or parsnips, when the land should be *both rich and clean*. In the Channel islands the land is prepared by being trenched as for a garden. The rows or drills should not be over twenty inches apart, which will give ample space for working with the cultivator and hoe. Special care must be taken to keep down all weeds after the seed is sown.

The first year or season when the crop is fully in flower it should be mown, and if the soil is in a dry state, the after shoots may be slightly pastured by sheep, which must not be done too late. As early as possible next spring the crop must be well cultivated and the earth stirred about the roots of the plants. About the end of June or early in July, the crop will be ready for the first cutting; immediately after which it must be again well cultivated and hoed between the rows, when it will grow rapidly and soon be fit to cut again, after which the process of cultivating or hoeing must be repeated and another crop will soon be produced. By proceeding in this way it may be mown three or four, and even five times in a season. It does not arrive at its full growth till the third year, after which time it will yield a heavy return of rich and early forage. It requires to be liberally manured with well-rotted barn-yard manure, ashes, or crushed bones, every second year, the ashes at the rate of fifteen bushels per acre, and the bones at the rate of forty bushels per acre,—which manuring must be done after the last cutting in the fall or early in the spring.

When *Lucerne* is sown broadcast, which is a slovenly practice, it should be well harrowed after each cutting to keep down the weeds, the other treatment as

to manuring being the same as when it is sown in rows.

Lucerne is a most wholesome and nutritive forage plant, causing cows fed upon it to yield rich and abundant supplies of milk. It is also well suited to soiling horses or any kind of stock. Its chief value for soiling arises from its being earlier than the clovers. When it is cultivated with care on a small scale, soil and climate being suitable, it will maintain a great number of animals, and thus some have formed an erroneous estimate of its profit for extended cultivation. It must be borne in mind that to be productive it requires a deep rich soil; that it takes three years to arrive at maturity; that it is subject to attacks of insects during its first year; and that it requires a large supply of manure to be applied to the surface to keep it productive, which is a most wasteful way of applying manure. Hence its cultivation is limited in practice to small patches for the supply of early forage in spring, and also to be used as a supplement to pasture and the other forage crops.

This variety, *Medicago sativa*, is the most productive under cultivation; but the *M. falcata* is sometimes cultivated on poorer soils in Switzerland and some parts of Europe. The *M. lupulina*, sometimes called yellow clover from its yellow flowers, is readily eaten as pasture, and may be grown for forage or herbage when the land is only to remain one year in grass.

NOVA SCOTIA AS A FARMING COUNTRY.

The following communication contains some remarks that may be read with interest and instruction by many of our readers. It is from a letter addressed to the Secretary of the Board of Agriculture, and therefore the name and residence of the writer are not given. He may not have written for publication; but his remarks bring out two points which have been repeatedly referred to in our columns, (1) that Nova Scotia is a better farming country than is generally believed; and (2) that Nova Scotians are, as a class, poor farmers:—

"I lived seven years in farm service in England, for other six years I followed general farm work and gardening with my father. Since then I have spent some time in Canadas and nine months in the United States, and three years in Nova Scotia, where I hope (D. V.) to make my home for life. I am well pleased with the country, and feel confident that almost everything can be produced here that will grow in England. Land being single and unsettled, I have made but few experiments either in agriculture or horticulture; but I was fully satisfied with the results obtained from such trials as I did make. I expect a brother of mine will be back here ere long, after ransacking the States and Ter-