

Nothing has given me greater pleasure for a long time past, than to hear that an Agricultural and Horticultural Journal is about to be published in St. John. There is no publication more wanted, or of more value to this province. In the prosperity of agriculture, the Legislature of every country ought to interest itself; for in, and through it alone does a country succeed; and there is no place where it requires more nursing than in this province, where the population is rapidly increasing; and unless the raising of bread and other produce increase with its population, it must undoubtedly continue poor. We have abundance of land in this province, yes, and some as fine land as is in any country; and if our Legislature takes the agriculturist under its fostering care, together with enterprise and industry, we must "*go a-head*" without fail.

There is one remark, which I should like much to impress upon every one connected with the purchasing and selling all kinds of country produce, that is, the selling by *weight*, in place of the loose manner hitherto adopted. It does not give the industrious farmer a fair chance. You will often see that the man who comes to the market with a light, half cleaned grain, gets about as much for it, as he who brings in a good and well cleaned article. There should be a *standard weight*, and he who brings a poor article, ought to make up the difference in weight, regardless of bulk. The farmer would then find it to his advantage to bring in a good and clean article.

If you think these remarks worthy of insertion in your Journal, I shall, with much pleasure, write another communication for your next number, more fully upon the advantages to be derived from selling produce by weight.

St. John. May, 1841.

ALPHA.

SOILS.

As soil is the material, upon which the Agriculturist has to operate, it is requisite, that he should understand the nature and varieties of it, to pursue farming upon a scientific, and profitable

system. Soil is defined "to be that layer of loose earthy matter, which constitutes the upper covering of the globe, affords a stratum to the roots of innumerable tribes of vegetables, and supplies them with nourishment to promote their growth, and bring them to maturity." This is termed in agricultural language, the *vegetable soil*, and rests upon an under layer, or stratum, different in its composition, and called the *under-soil* or *subsoil*.—A knowledge of the nature of these soils is of the utmost consequence to the farmer—as in some instances the mixture of the two soils by ploughing, would improve the productiveness of the upper soil, and in others, it would seriously injure it.

Soil is formed from the decomposition and decay of rocks by the agency of heat, frost and rain—the small particles on the surface crumble down, and are acted upon by the air; they thus form a thin layer or bed, for the seeds of a particular vegetable production, called Lichen, which are seen attached to rocks; these again decay, the crust thickens; the seeds of other vegetables, carried by the wind and birds, are deposited upon this new layer, which is further assisted by various animal deposits, and remains, giving fertility to the new made soil. In this manner, soil is formed upon the upper surfaces of the earth—but when this process takes place in less elevated situations, subjected to washing by water, the soil is then taken to other places, and deposited by the stream or flooding, forming low lands. In this manner the rocky girdle of the earth is covered with its different soils, which, notwithstanding the variety of appearances, "is composed almost entirely of four substances, formed by the original union of simple elementary matters. These four substances, washed at a former period from rocks, and called *primitive earths*, are *clay*, *sand*, *lime*, and *magnesia*. It is by due combination of these, that fertility ensues."

Every kind of rock, even of the hardest and most dense nature, is subject