flax, which in Britain is a very large and annually increasing one. Mr. Montgomery Martin, in a recent work, states, that the manufacturers of the United Kingdom consume about 100,000 tons of flax per annum, in value about £500,000. Of this large amount, Russia furnishes five-eighths of the whole, Ireland not quite two-eighths, and the remaining eighth is drawn from various sources. Besides this market, France, Holland and Germany all derive a part, if not nearly the whole of their supplies of flax, from Russia. We see then, that there is an almost illimitable market, and one which will be indefinitely increased with the growth and increase of the population of the various countries which consume articles made of flax. Why then should Russia be allowed to retain the monopoly of the production of this valuable article of export and consumption? our soil and climate combine to render its production easy and profitable, will not then the prospect of such an unlimited market encourage us to attempt the growth of flax on an extended scale? If necessary, let legislative aid be extended to foster its production. It is true that it may be some time before our Canadian farmers produce it in any great quantity, or in the requisite perfection, but the sooner a commencement is made the better. We think that the growing of hemp and flax on a large scale, would add materially to the prosperity of the country, and would besides be a step in the right direction, for the greater the breadth of land covered with crops, and the more varied their description, the more likelihood is there of a good return for the labour expended on the preparation of the soil.

Montreal, April 12, 1849.

The following article is copied from "Thaer's Principles of Agriculture," in a note to that work by the translators, and is interesting:—

As we have, in another place, had reason to remark, "no branch of chemistry is more interesting, even to the Journal reader, than that which relates to the vegetable world, for objects of the highest interests here present themselves in all directions. The fingers of God seems evident in every plant we chemically examine. Thus their juices, which are always so regular and uniform, so sweet in some, so bitter or acid in others, tasteless in many, yet saline in several—the order and the regularity are alike incomprehensible to us. Neither by any contrivance of ours can this regulated order of things be altered. For instance, the wild sorrell still secretes its acid, if nourished with only sugar and water; the sea-kale, which grows wild on the sea-shore, will yet secrete in its juices common salt, when growing on our most inland gardens. Neither can a plant be made to absorb one salt in preference to another. If a sprig of mint is placed in a solution of various salts, it will absorb some, but entirely reject others.

The power which the plant thus exercises is to the chemist utterly unknown. To effect the same separation of the salts when dissolved together in water, the chemical analyst has to perform a series of decompositions and other chemical operations, before the desired result can be obtained, a process which the sprig of mint performed at once. The reader must not suppose that this is the effect of mere filtration, for the most delicate filters are utterly useless in any attempt to separate a salt from its solution. Then, again, certain plants show a decided preference for, and absorb only, particular salts. The nettle and the sun-flower, for instance, saltpetre, (nitrate of potash,) clover, gypsum (sulphate of lime.) And these absorbent powers of the plant are not confined to soluble substances, allumina, manganese, phosphate of lime, &c., which are not dissolved by water abound in plants; and moreover, the required substance seems always placed by some magical and unerring arrangement in the very part of the vegetable where its presence is most needed. Thus flint (silex) abounds in the straw of wheat, where its presence helps to impart the requisite degree of firmness to enable it to support the loaded ear; but it is found in a very diminished proportion in the seed, where it is not required. Is not this the contrivance of its Divine Author? or is all this arrangement also chance? The progress of chemistry continually unfolds many a beautiful vegetable phenomenon, just as mystic, just as astonishing as any of these, and the field is not yet nearly exhausted, but still the conclusion the chemist arrives at is the same. The deeper he penetrates, the more numerous are the contrivances he observes, and more clearly manifested become the works of the Creator. Examine, as another instance of these mysteries, merely a cubic inch of soil, composed at most of only four simple earths, and notice the discordant nature of the chemical ingredients so uniformly and so regularly produced by the different plants which that soil produces with only the aid of water and the atmospheric gases. Observe the wheat producing its flour; the sorrel, its oxalic acid; the beet, its sugar; the poppy, its opium. From one plant comes the fragrance of the rose; from another, the odor of the garlic. Dr. Thomson thought of these things when he observed, ("System of Chem," vol. 4, page 303;) "The multiplicity of operations continually going on in vegetables at