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PRIZE ESSAY

ON AGRICULTURE AND ITS ADVANTAGES AS A PURSUIT.

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[Read before a meeting of the Agricultural Association of Upper Canada, at their Annual Exhibition at Brockville, Sept. 25, 1851: to which was awarded a Gold Medal of the value of £10; given by the Directors of the Johnstown District Agricultural Society.]

"He that causes two blades of grass to grow where only one grew before is a benefactor of his country."—
DR. JOHNSON.

If this motto be true how great a benefactor of his country must be the good practical farmer!

The changes which the power and susceptibility of cultivation are able to effect on the vegetable kingdom, as well as the animal, are truly wonderful. Nature has bountifully and beautifully endowed every vegetable, whether root, flower, or fruit with a certain capability of change, according to circumstances of soil, climate or position;—and the farmer or gardener who judiciously practices upon this power has succeeded, and will ever be able to succeed in rearing products far superior to their natural originals, as to bear but slight resemblance to them. In a state of nature almost all plants are confined to certain localities suitable to their nature in soil or climate, and if allowed to remain uncultivated and unremoved will retain their natural condition; but as soon as removed to a more congenial soil, or a better climate, or even cultivated in their own soil and climate, they undergo a change clearly discernable in their external character in some point or other. In some descriptions of plants the change is greater in their roots,—in others in their leaves and stems; and in others in their blossoms and fruits. By continued cultivation these changes are transmitted through successive races; but if the stimulus be kept up plants again will degenerate to their natural condition. Take as an example the potatoe: This

plant is a native of Tropical America. When found wild the tuber is about the size of a common chestnut and not by any means palatable; but how valuable as food both in quality of nutriment and facility of production is almost beyond calculation! In its natural state there would not be 4 cwt. on an acre, (could an acre of them be found,) but when the farmer applies his power and skill of cultivation, we frequently see an acre produce from six to eight tons, *i. e.* from 240 bushels to 340, in this country, and even much more in the Old Countries. Within the last century the cultivation of this plant has produced innumerable varieties of shape, size, colour, and quality. Sir Walter Raleigh imported them into Britain from Virginia, and directed his attention to their cultivation in his garden in Ireland. It is related that his gardener being ordered to supply the cook with a dish of them, gathered the seed apples or buttons (as they are sometimes called) and had them sent up much to his master's dismay. He had no idea that it was the *tuber* that was edible, and the gardener only discovered his mistake when in trenching the garden for the winter frosts, he turned out the first improved potatoes!

The turnip too is another example of the power of cultivation—it has been changed not only in colour from white and yellow to purple and green, but in weight also, from 2 ounces to 24 lbs! The carrot too, which in its natural state is a slender root of a yellowish white colour about the size of a common quill is now metamorphosed into a deep red or orange colour, about the size of a man's arm! Such is the effect of cultivation and removal to a richer soil, where it meets with all the elements essential to its growth, and where its bed is deepened and softened to admit the easy expansion of the root in every direction.

Plants just like animals have a tendency to reproduce their own qualities in their offspring, and the skilful farmer taking advantage of this feature is enabled to rear such descriptions as best