

wanted. We do not mean to say that legislation alone is the only means to be adopted in order to renew old and worn out farms; neither do we expect that legislation, be it ever so good, will fill the country with bread, without industry, energy, skill and the expenditure of capital. But what we do say, is, if legislation is necessary to the advancement of other pursuits in life, which will not be denied, then it must be equally so when applied to the advancement of agricultural operations.

Farmers will have to take a stand, not simply as a class, but as a profession; they will have to assume a position commensurate with the lofty nature of the pursuit, and the place that agriculture holds in the scale of the world's callings. Necessity, accompanied with a desire to elevate and render it profitable, has been the means of placing agriculture among the first occupations in other countries,

and why not let the same principles operate with regard to agricultural operations in these provinces? The large annual importations of flour into our country point us to the necessity of cultivating more systematically a portion of the fine arable land with which the country abounds.

Legislation may do a great amount of good, by encouraging agricultural societies, the manufacture of agricultural implements, and the spread of useful knowledge. But, to aid these departments efficiently, two-thirds at least, of the men composing the legislature of these provinces should be practical farmers, not men who follow fishing, lumbering, ship-building and a little of what some call farming, along with half a dozen other pursuits. No, but men who understand how to farm, and do farm properly, and are alive to its interests. Such are the men to legislate for the interests of agriculture.

### Elements of Vegetable Life.

THE elements combined in the grand process of vegetation are numerous,—the principle are chemistry, geology, botany, physiology, meteorology, heat, light, and electricity.

Some soils, composed principally of sand, are very unproductive, while others composed of the same element are highly productive. The efforts of chemists to discover positively all the causes of the fertility of soils have not yet met with conclusive success. The mechanical structure of soils is of primary importance.

On naked rocks will be seen growing lichens, — the same rock crushed into coarse grains grows a much higher order of vegetable matter,—pulverize it and it will produce the various

seeds. Then again there is a great difference in the quality of the rocks scattered over the face of the earth, and of which the crust of our earth was once composed. The red sandstones possess a much larger percentage of vegetable nutriment than that of the grey sand stones,—and either of them contain a much larger proportion of fertilizing matter than the granite, gneiss, slates, etc.

However, important experiments are being made, both in the laboratory of the chemist, and in the practical operations on the farm, with a view to obtain higher results—more feed for both man and beast, with the least possible expenditure of money and physical force.

A correspondent of the *Ohio Farmer* gives it as his opinion, that the common practice of making farm animals jump over the lower rails of fences

and bars tends to make them unruly, and says that if the top bar is left up, so that they are compelled to go under it, they will never learn to jump.