

to other kinds, whose mineral constituents differ in their proportions.

The only apparent exception to this law of nature, is in the growth of pine forests, but this is more apparent than real, and is owing to the smaller proportion of mineral constituents required by the pine, which can, therefore, forage longer in one place than the deciduous trees.

We find, however, in many situations, if the ground be left undisturbed after removing a forest of pines, that trees of other kinds will succeed. There are soils so unsuited to any other than pine trees, that they will again spring up from the scattered seeds; but so far as we know at present, this second growth is never thrifty.

The cutting of wood for the use of iron works in Maryland commenced nearly 150 years ago, and in many cases trees were permitted to grow up again.

It was the practice of the iron masters to harvest a crop of wood once in twenty years. We are without records of the characters of each crop, but the traditionary testimony is to the effect that the kinds of trees which predominated during one of these periods materially differed from their immediate predecessors.

The preceding facts, which have been given somewhat in detail, show that a succession of plants in the same land is one of the inflexible laws of nature. It is true that there are cases in which certain kinds of crop had been raised for many years in soils abounding in all the constituents of plants, but these are very rare exceptions. Every farmer knows that in attempting to raise wheat on the same field from which he has taken a crop of this grain the preceding year, that it will not turn out well unless the soil be very liberally supplied with the proper kind of manure. And if he persists he will have less and less every year.

Severe cropping with grain attracted the attention of Charlemagne more than 1,000 years ago, who by law required that no land should be cultivated more than two years out of three. During the third year there was of course a crop of weeds, the decay of which assisted the growth of the succeeding crops, and time was given for mineral matters to become soluble and available to plants. Maryland planters and farmers were soon obliged to adopt the same rule, leaving each field for one year out of two or three to a growth of weeds, formerly called pasture. Upon the introduction of clover, which was sown upon the wheat land, we acquired a valuable forage plant in the place of the weeds. This formed an era in our agricultural history which requires at least a passing notice.

The principal money crops, as they are termed, which are