

Appeal has also been made to the vegetable kingdom for examples of the production of organic beings, namely, plants without seeds. Who has not observed, for instance, how the clearing up and burning over of a piece of land will often cause an entirely new tribe of plants to spring up and flourish? Whence came the seeds? We have seen, for instance, (in Richmond, Virginia,) a thick growth of pines upon a spot where from six to ten feet of soil had been removed a few years previously.

It is very possible, in some cases of this kind, that the soil, having been produced by aqueous agencies, may contain seeds to a considerable depth, and that their vitality may have been preserved for centuries; for we know that seeds three thousand years old, taken from Egyptian catacombs, have germinated, in favourable circumstances. In most cases of this sort, however, the winds have probably supplied the seed, it may be, long before. We were one day wandering over Mount Holyoke, where a spot recently cleared was covered with the fire-weed, a species of *senecio*; and as we were musing upon its origin, a strong blast of wind swept over the plants, just ready to throw off their seeds. Sustained by their light egrets, they floated away on the air in numbers sufficient to cover half the mountain with the plant, when it should be cleared and burned over. Yet their existence would never be suspected till those circumstances should be developed. At least, until we can prove that the soil contains no seeds by the most careful examination, it will be premature to infer the equivocal production of the plants growing upon it.

Vegetable physiology furnishes another fact, which seems to me to look still more favourable to this law hypothesis than the preceding, although it has not been noticed, so far as I know, by the advocates of that hypothesis. Speaking of the matter of which certain flowerless plants are composed, Dr. Lindley says, "It is even uncertain whether this matter will produce its like, and whether it is not a mere representation of the vital principle of vegetation, capable of being called

genesis' of Professor Owen, page 76, (London, 1849;) Steenstrup's 'Alternation of Generations,' published by the Ray Society in 1845, and Sedgwick's 'Discourse on the Studies of the University,' Supplement, p. 193, (London, 1850.)