

mains; and bog iron ore is said to have a similar origin. A kind of silicious marl, similar to that from Bilin, exists probably in almost every town in New England, beneath peat bogs. In some places, in Massachusetts, this deposit, mixed with a little clay, is fifteen feet thick; and in Virginia are beds of fossil animalcula from twelve to twenty-five feet thick.

We have now arrived at the *ne plus ultra* of the animal kingdom, and yet who can tell what new mysteries will be unfolded by future improvements in optical instruments? I turn, therefore, to the vegetable world, — literally a flowery field, — and yet I shall have time to refer to only a very few facts, abundant as they are.

A moderate estimate of the number of species already described in the vegetable kingdom makes it 69,403. Of these, 9100 are flowerless, and their structure is cellular; such as mosses, lichens, fungi, and sea weeds. 60,303 have regular flowers, and they have a vascular structure. Of the latter class, 10,629 are monocotyledons, and 49,674 are dicotyledons.

The largest known flower is the *Rafflesia Arnoldii*, a parasitic plant, a sort of vine, that bears a flower three and a half feet in diameter, growing in Sumatra.

Microscopic plants are no less abundant and remarkable than microscopic animals. Indeed, many of those which I have described as belonging to the infusoria are regarded as plants by some of the ablest naturalists.

In the Alps, as well as in high latitudes, the snow has sometimes a red color; and it is found to proceed from the presence of a minute fungus, the *hæmatococcus nivalis*. The snow seems to be the soil natural to its growth. It is said to be associated with living infusoria, which die when the snow melts.