

The freshness of the illustrations, which are largely drawn by the author, and the constant references by this means to well-known plants is a very valuable feature of the work. One is thus introduced to the study of nature in the most natural and easy manner.

Part I. is devoted to Organography, and takes up 1st, the organs of vegetation, and second, those of reproduction. Practical exercises are appended to each chapter, a most useful addition especially for the student who wishes to pursue microscopic examination of plant life apart from the class-room. The subject of *Plant Hairs* is considered by the Professor as of sufficient importance to occupy a whole chapter. Those upon the roots are shown to be useful in absorbing nourishment from the soil, while those on the stems and leaves are active agents in absorbing nitrogenous compounds from the air. This is of interest to us just now when so many are discussing the sources of nitrogen for the supply of plant growth.

Part IV., which is devoted to Vegetable Taxonomy, or the classification and naming of plants, is also a valuable contribution to Horticultural Science. Prof. Bastin divides vegetable life into seven groups, beginning with such low organisms as jelly-like sea-weeds and bacteria, and gradually leading the student on up through the various kinds of parasitic fungi which play such an important factor in the injury or destruction of plant life, to those mosses and ferns and flowering plants which are commonly treated of in our botanical text-books.

In our humble opinion, however, the book has one serious fault, viz. its advocacy of the doctrines of Evolution. Why should a botanical text-book so step out of its sphere—viz. the study of nature as it is—as to deal with metaphysical hypotheses? Because there is a wonderfully planned gradation of

species from the lowest to the highest forms in both animal and vegetable life, why should the botanical student be expected to swallow such teaching as the following, found on page 173?

“Plants and animals resemble each other fundamentally; the protoplasm which constitutes the physical basis of life of both has in both the same essential properties. We must regard plants and animals as two branches of a common trunk. *The first living being that made its appearance on our globe was probably neither distinctly plant or animal, but a bit of undifferentiated protoplasm (!)*”

Has Prof. Bastin, or Prof. Huxley, or Prof. Darwin ever yet discovered one single instance of one genus of either plant or animal life, reverting to an inferior one, or of one new genus developing from an inferior one? Is there any proof on p 22 where we read:

“As now in tropical regions evergreen trees are much the more common, while in our own climate they are rare, there is good reason to believe that in the warm ages of the world preceding the ice period, all trees were evergreens, and that our northern trees have become deciduous-leaved by gradual adaption to the vicissitudes of the climate.”

Did any one ever find a Norway Spruce in process of development into an apple tree, or an apple-tree reverting into the direction of a Norway Spruce.

Granting that vegetable growth may somewhat adapt itself in time to its surroundings, and this is all that has been proved, we cannot see in this the slightest ground upon which to base the theory that one genus has ever, or ever will, pass into another by any power except that of the Divine Being who first originated it and bestowed upon it its essential characteristics.

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This report is full of valuable information concerning hardy fruits for our northern sections. For instance, on page 151 we notice a *black list* of