

so carefully the stage and the scenery of the theatre in which his plays are presented. The linguist must for the sake of his scholars be glad that they find in physiography a discipline so unlike that which his own lessons afford. But the fashion of the day keeps each of us in his own field. It is not from the mathematicians and the philosophers, but from the classical scholars that we learn the value of Latin and Greek ; so it is left to the geographers to advocate the claims of their own subject.

Geography being the study of the earth in relation to man, physical geography, or physiography, is the study of those features of the earth which must be understood in order to appreciate its relation to man. The essential characteristic of modern physiography is the replacement of the old-fashioned absolute or empirical descriptions of earth features by a rational and systematic treatment. Explanation of existing features as the result of natural processes is freely introduced in addition to description of the features themselves ; not, however, so much to gain an understanding of the processes as to secure an appreciation of the features resulting from the processes. The subject of course has its elementary, intermediate, and advanced phases, but throughout it is characterised by rational explanation as a means of approaching a closer perception of the facts of nature than can be gained by description alone. Consider, for example, the study of land forms. Studied in relation to time, the forms of the land to-day as well as in the past belong to geology or the history of the earth. But the same forms, studied in order to understand the world we live in, constitute an important division of the subject matter of physiography. The old-fashioned method of studying land forms was to describe them in abso-

lute terms, as if they had always existed, and to take practically no account of their development. This is unsatisfactory and insufficient. To be sure, a timid and incomplete attempt was made to explain certain elementary forms, such as sand-dunes, deltas, volcanoes ; but it was not perceived as a general principle that explanation greatly aided description, and that explanation of origin should, for this reason, be systematically extended over all parts of the subject. Physiography to-day should certainly not claim to understand the origin of every land form, but it may fairly claim to understand that its duty is to press vigorously forward towards a fulness of knowledge ; and, in the meantime, it may fairly claim to understand the origin of so many forms as to supply a large amount of rational study for the high school, or even for the college. Borrowing freely from geology—just as chemistry borrows freely from physics—physiography takes up various considerations about structures and processes, and many inheritances of the present from the past, not simply with the object of understanding these structures, or processes, or past conditions, but only as the best means of reaching the chief end ; namely, an appreciation of existing facts.

There are three chief divisions of the subject matter of physiography ; the atmosphere, the oceans, and the lands. Plants and animals and their distribution do not belong under physiography, and should not be introduced into the study except so far as they, like geological processes and structures, serve to aid us in understanding the existing conditions of the earth.

The study of the atmosphere, comprising the teachings of meteorology, in so far as processes are concerned, and of climatology,* in so far as average values of recurrent sensible con-