

eral physical science. He laid great store on physiography, but did not wish to see it squeeze geography wholly out. It was a separate subject, preliminary to much of geography, but not identical with it. They would do wrong, however, to become slaves to the inductive idea. The "multiplication table" of geography must be learnt very early, and not postponed until after the study of physiography. Only so can the broad outlines of land and water, the great facts of geography, become woven into the very texture of the mind like the multiplication-table, or the spelling of the mother-tongue. The lecturer then went on to refer to the use and abuse of names, and of map-drawing. He insisted that map-drawing should be very frequent, but that they should beware of the mere slavish copying of the hackneyed Atlas series. That tended to rigidity, and prevented the learner from realising the nature of maps. For instance, Italy might be drawn one day by itself, the next as a part of Western Europe, on a third as part of the shores of the Mediterranean. The necessity of reducing as much as possible of the more advanced teaching to the working out of definite problems was adverted to, and in this connexion the ordinary classification of the text-books was condemned. Such a country as France ought not to be treated of in one or two lessons, and then dropped as soon as the study of the next country was taken up. The desirability of appealing to the senses in as many ways as possible was urged. For this purpose many appliances should be combined—maps, sections, models, views, lantern slides, black-board, and experiments. Finally, knowledge on the part of the teacher was treated as a *sine qua non*.

LECTURE II.—In this lecture two examples were dealt with, both of them drawn entirely from physical

geography. The first was a description of the Gulf stream, so given as to teach incidentally the form of the North Atlantic. The chief capes, inlets, and islands were shown to influence the course of the currents, and in so doing to be important factors in determining the climate of England. The second example was drawn from the Alps, and showed that the valleys were longitudinal and transverse, how the contrast between the two kinds might be detected on the map, and how that it was based on the structure of the rocks and the mode of their denudation. This example was intended to illustrate the employment of physiographical knowledge in geography.

LECTURE III.—Two examples were treated. In this case, however, they were physical and political. The Old World was shown to be nearly cut in two by deep intrusions of the oceans, and to be crossed diagonally by a great belt of desert. Hence the population is concentrated chiefly in two great districts severed by the deserts. These districts owe their character on the one hand to the Gulf Stream system, on the other to the Monsoons. There is difficulty in communication from one to the other, because the Isthmus of Suez breaks the water-belt which crosses the Old world. Many historical results were shown to follow from this. The region in the centre of the island of Great Britain was then dealt with. It severed the fertile and populous districts of mediæval Scotland from the similar but larger districts of middle and south England. When coal-mining and its attendant industries were developed; it became wealthy and populous, and allowed the fusion of England and Scotland.

LECTURE IV.—In this, the last lecture, three examples were given, each with a different object. The first dealt with the site of London.