

terpretation should be fairly easy to elucidate. It is the Pennine Chain. It is the source of the rivers, the womb of the mineral wealth. It provides material for profitable industries, and attracts a great population. The estuaries of its rivers are converted into ports for the outlet of this human activity. Its geographical position on the western side explains the disproportion in the length and rapidity of the rivers, and the greater development of the eastern rivers accounts for the richer character of their alluvial plains. Let the pupil remove in imagination the Pennine Chain, and the rich and populous North of England will cease to exist. Let him discover such a chain in another country, another such distribution and correlation of geographical facts, and he will be able to predicate with accuracy the possibilities for that country. His knowledge, in fact, will have become useful, his reasoning scientific and his conclusions sound. Geography will have ceased to be a matter of "dry bones" and will live.

The valley and estuary of the Thames, and the medieval as well as modern importance of the cities in its basin, may be treated in the same way; or the objective peninsulas of East Anglia and Kent, which he will be able to show are naturally what they have ever been—points of contact with the Continent. And here history will help him, and show how East Anglia, when the wool industry depended on the geographical juxtaposition of Flanders, was the most populous district in England.

Another instance. Let the teacher take a map of Switzerland—the playground of Europe—and direct the pupil's attention to the upper course of the Rhone, which is wholly Swiss. In the pursuit of facts he will gather that the basin of the Rhone is not a wide fertile plain like that of the Aar, but extremely narrow and flanked by

mountains, down whose gorges fall commercially useless streams. The valley declines at so great an angle that the Rhone cannot do else but rush rapidly to Lake Geneva. Directing his glance to the Aar, the pupil will see that that slower river winds here and there, both denuding and fructifying a larger area. He will be forced to conclude that while the basin of the Aar contains the most important towns and densest population in Switzerland, the Rhone benefits the dwellers on its banks but very slightly, that the population of its valley is therefore poor and sparse, and that commercially or politically it is a wholly unimportant region. I have here shown how the method of *contrast* can be used to accentuate the principle, viz., that the character of the dominating river is a key to the character of the country it drains.

Whatever geography may be said to include, and, regarded on its purely descriptive side, its function would seem to exclude nothing of the earth's surface which affects man, it cannot be denied that M. Drapeyron and those eminent modern geographers who think with him, are right in insisting that topography is the actual text of geography; that the basis of all geographical inquiry is found in the surface features of the earth's crust. In pleading, therefore, for the more scientific study of geography I would point out the value of regarding topographical features in the light of geological facts, of regarding them locally and in detail. It would be tempting to make an excursion into some of the fields which such a vista opens out; but if I would reach the end in the space at my disposal I must be satisfied to indicate a mere half-dozen of those which at once arise in view.

Restricting my examples to Europe and, chiefly, to England, I may cite, as evidence of geographical change