

that between the size of the Rocky Mountains and that of the Pacific; and again the ratio of the Rocky Mountain region to that of the North Pacific with the ratio of the size of the Andes to that of the South Pacific. 4. He sees in the case of the Altai and Himalaya a similar relation to that between the Andean system and the secondary American highlands. He might have instituted a third instance in the highland masses of northern and southern Europe; a fourth in those of east and west Africa; and a fifth in those of east and west Australia.

He also gives the following observations about the contours of the continents: 1. That the prevalent trends of coast lines both in continents and in island groups are towards N. W. by W. and N. E. by N., meeting at right angles. 2. That where deviations occur they are mostly in curves. 3. The longest lines of coast lie on or near the wooden horizon of a globe when its poles are alternately elevated  $23^{\circ} 30'$ ; or in other words that they form great circles, tangential to the Arctic circles.

Now, if any think these generalizations vague, if not puerile, let them thoughtfully follow out the probable effects of any great alterations in some of them. Think, for instance, what would result if the wide Pacific were placed where the narrow Atlantic now lies, or if the two coasts of this continent changed places, and America turned her back on Europe literally, as some of her more foolish children propose to do commercially, and heaved her Andes right athwart the way of infant colonization—or if the long cordon of narrow seas which happily separate the triple series of northern and southern land masses were removed to the northern coasts, giving a far vaster Sahara in the east, and perhaps one in the west to match it; how mightily would man's fate be changed!

This principle of comparison and association may be carried out in numberless other directions and link facts at first sight unconnected. Thus our gulf stream has its analogue in the *Kuro Sivo* or "Black Stream" of the Pacific, the Japan current. The equatorial current of the Pacific is deflected in a similar manner to the north-east, there, as here, it meets like ours an Arctic current flowing from Behring's Straits, which causes fogs in that sea like those on the "Bank," and give the same wealth of fish; for it seems also to be a general rule that the fish of cold waters are the most prized for purposes of food.

Wherever possible a fact ought to be coupled with every geographical name, and facts may be associated in other connections than that of cause and effect, on the principle of association. For instance: Our Province has one river of more than 400 miles in length, twice that number of half the length, viz., the Miramichi and Restigouche, and twice that number (4) of half that length again, viz., the Nepisiguit, Petitcodiac, Magaguadavic, and St Croix, each being about 100 miles. This makes seven independent rivers of 100 miles or more, to which may be added as many tributaries of our greatest, river also of about 100 miles each, viz., the Aroostook and Oromocto on the right, and the Tobique, Nashwaak, Salmon river (with Grand Lake and the Jemseg), Washademoak, and Kennebecasis on the left. So with our counties. There are seven on the coast and the same number up the river, besides our own county, which belongs to each class. And every county has some characteristics of its own. Northumberland is the largest, our own the smallest, Victoria is the most hilly, and Kent the most level, Charlotte and Gloucester, at opposite angles, contain the important islands, Sunbury is the oldest, and once included the whole Province,

and Madawaska is the youngest, Albert is the richest in minerals, and Westmorland in marsh, York has the capital, and so on.

Again, a fact may be presented in a dull or in an interesting way. A New Brunswicker engaged in setting up telegraph wires in S. E. Siberia, then recently acquired by Russia from China, described the climate to me as what is called extreme in these words: "The tiger and sable, the vine and the pine meet on the Usuri River." This is what is called the "art of putting things."

A few words about our manner of dealing with geographical names. It is to be feared that in the common sense reaction against the old etymological fribbling, the pendulum has swung too far. Much useful and interesting information clusters round proper names. How many traces of the old Celts in Europe live in the four river names, Don, Dour, Avon, Uisge; the 14 Avons of Britain, the Adour, Derwent, Trent, Douro, Dordogne; the Usks, Axes, Esks, Exes, Ouses, Oxus, Oise, Iser "rolling rapidly;" the Dons, Tyne, Teign, Donau or Danube, and so on through a host of instances. We have in Acadia too our three Tracadies, each on the north shore, and the loyalists in each Province laid out their Kings and Queens counties, coupling them in the Island with the names of the reigning Sovereigns—just as the Catholics in Ireland laid out theirs, with their shire towns of Philipstown and Maryborough. Still more useful is it to mark the meanings of the names in physical geography, which are generally descriptive. There is a good list in the *Globe Dictionary*, which is classified and enlarged in my speller to a list of about 450, which might be useful.

Another great point to observe is the proper understanding of maps and map projections. The full understanding of mathematical geography is perhaps only to be gained in college work, but the foundations should be laid in school. The theory of the globular projection may be explained, but that of Mercator's Projection is still more necessary, why it appears distorted, and the great use it serves to mariners. Everything about a map should be made clear, even to such points as the *hachures* and *contour* lines; why, for instance, the north slope of the Cantabrians is darker than the southern, the northern *hachures* being darker because the slope is steeper. It is a sign of progress that we are attempting relief maps in a rude way. A very simple and effective expedient is to form the model of a continent or that of a locality on a horizontal black-board in dry earth or moulding sand. Asia makes a most interesting one, with its three huge plateaus and their mountain buttresses; those of the centre and southwest showing their three platforms, with the dividing ranges, and the Deccan with three also. The work takes some time it is true, but it would more than repay the trouble, and could be allowed to stand some weeks.

We could learn much from the way in which the press deals with the subject. Now and then a bright, breezy article makes us rub our eyes, as we see how fascinating the topic can become. Now it is a project to dam Lake Athabasca and throw its drainage with that of the Saskatchewan south into the Mississippi, now to shut up the Straits of Belleisle, now to flood the Sahara, and so trade with the Tuaricks and Tibboos of inland Africa. Lately the *Pall Mall Gazette* thus reflected on the last meeting of the *savans* of the geographical society.

"Suppose some philanthropic Gulliver, hailing from the larger air of Saturn, to be contemplating this Lilliputian world from an arm-chair slung at a convenient distance out in space. As it spun round before him, like