

### PHYSICAL GEOGRAPHY.

We hope our readers have carefully studied the excellent paper that appeared in the February REVIEW, by Mr. Manning, on Physical Geography. The writer claims a more excellent way of studying geography than by the methods that are unfortunately too prevalent in our schools; and the clearness and force with which he has presented his views should set every teacher thinking whether his methods of teaching this subject are in accordance with nature and reason; whether they inspire a love in the minds of children for this most fascinating of school studies or create an aversion for it; whether they unfold nature's truths or deal in details fit only for gazeteers or encyclopedias.

We submit this proposition to every intelligent teacher who has calmly studied the matter of how to teach geography: Is not this the subject, above all others, for cultivating the powers of observation in children? And how can this be done better than by referring constantly to the natural scenery in the neighborhood of the school, and by the daily observation of natural phenomena? Every warm day with its attendant evaporation of moisture, every rain storm, or snow storm, the varied forms of frost, either on the stream, the ground, the window pane, the branches of trees in a "silver thaw," the coming out of the frost on a stone or brick building, the sharp reports made by "Jack Frost" on a cold winter night—the varied forms of moisture, as dew, fog, mist, clouds, hail, rain, sleet—all furnish material most valuable as illustrative lessons in geography. We have seen pupils absorbed hour after hour in trying to determine why the surface only of rivers and lakes freezes; why there is an abundant dew on a still, clear night and little or none on a windy or cloudy night; why some forms of moisture have a definite shape and others have not. These and other questions stimulate inquiry; they teach pupils to observe and reason, and they open the doors to other sciences of which physical geography may be regarded as the parent,—to physics, chemistry, geology and botany.

Again, the natural scenery in which every district of these provinces abounds affords ample opportunity to study nearly every physical feature which the earth presents—hill, plane, slope, basin, river, island, etc., so that from the small world of the pupil, if accurately studied and understood, he may be led to reason and generalize about the larger world that he may never see, but still may have a far more correct conception of than he who travels over large portions of it with his eyes shut. The child may be led to see also in his own neighborhood the operation

of those forces, which have helped to mould our earth into its present shape—the action of air, frost, running water—and to see in the manifold changes of the landscape around him the operations of laws which are eternal,—laws which have for ages been gradually shaping the scenery of our earth and giving it here and there those touches of rare beauty which meet our eyes everywhere,—laws which have made life possible on this earth and which continue to govern our existence.

The physical geography that does not lead the student to see beauty and harmony in nature is scarcely worthy the name. The many colored hues of a golden sunset, the varying tints of the distant hills, the ever changing forms of the clouds, the hush that comes at eventide over forest, or river, or lake, appeal to the imagination and sense of beauty. And if one has been led aright in the study of nature he will see design everywhere. There will gradually be unfolded to him the unity and grandeur of this Design; and he will catch a glimpse of some of the wonders of this world and of Him who created it. If these are some of the results that come from the study of physical geography, should it not be pursued with a spirit of earnestness?

### THE BOTANICAL EXPLORATION OF NOVA SCOTIA.

A valuable and interesting address on the general botany of the Province was given by Professor Lawson, of the University, to a large audience of botanists at the last regular monthly meeting of the Institute of Science of Nova Scotia in Halifax. He called attention to the cosmic problems which may be solved by an accurate knowledge of the distribution of plants. He divided the land surface into the below mentioned seven areas; and the coast line, for the study of the marine algæ, into eleven sections. He suggests that the botanists of the Province should immediately proceed to make a full and accurate examination of these with a view to publishing complete lists for each area or section. From such data, when obtained, very important conclusions would likely be derived.

We are glad Professor Lawson has undertaken the task of directing the energies of our botanists into definite lines, which promise valuable results. As a botanist he has few peers. As a student he first made a practical acquaintance with European floras. While Professor in Queens University he gave a great impetus to the study of botany in Ontario; and so thorough has his researches in some departments been, that during the lapse of over twenty years very little more could be added to his investigations, as can be seen by reference to his papers in the Canadian