each other, their population, navigation, character of inhabitants, varieties of animals, various productions, adding, it may be, the accompanying history of events connected with the different countries; and to what purpose? To be forgotten nearly as soon, and much more easily, than learned.

The introduction of maps, as aids to the study of geography, was a great improvement over the mere verbal text, and has tended greatly to facilitate the study of this branch, so that more may now be learned in one year than formerly in two or three.

We think that the judicious introduction of physical geography, in connection with topography, will very much increase the interest of the latter, while the knowledge it will afford, in and of itself, will exceed, by far, in importance, what is usually obtained, at the present time, even in our best schools.

Of what use is it that we know that there are certain mountains, seas, or rivers in Europe or Asia, if we are totally ignorant of their effects upon vegetation, upon civilization, and the condition of mankind? or that the different continents are so many miles in length, and so many in breadth, if we are unacquainted with the corresponding oceanic influence and the resulting facts?

How many scholars know why all the great deserts of the world are situated where they are, and that the physical laws are such that it is not possible that there could be anything but deserts in those places? How many know why the northern part of the Andes is almost wholly desert upon their western slope, and the southern part upon their eastern? or that, were this chain removed to the eastern side of South America, nearly the whole division would be one continuous desert?

These things are seldom spoken of as having any connection with the study of geography, and yet it would seem that they should constitute its very foundation.

Probably the difference in the civilization of Europe and Africa, is to be attributed more to the inland seas and gulfs, and the numerous rivers of the former, and their effects; and the absence of the same in the latter, together with other physical characteristics, than to any other causes whatever; but these things are seldom learned in the schools.

The scholar learns the results of these causes as merely abstract facts, and remembers them about as well as he would the conclusion to a proposition in Euclid, without having been through with the demonstration.

These things are not too difficult to be understood by the scholars in our grammar and high schools, and many of them come within the range of the lower classes. While a class are upon the rivers of North America, for example, if their attention should be called to the four distinct water systems formed by the Rocky Mountains, Alleghanies, and the table lands of British America, and to the length and course of the rivers, as determined by these table lands and mountains, they would learn to associate these things with the natural features of the country, thereby learning facts and reasons together; and when this class should pass to any other continent they would search first for the same natural data.

In giving a lesson upon the climate and productions of different portions of North America, the difference in the temperature of the eastern and western coasts, also of the coast and the interior, might be noticed, together with the course of the mountain ranges, and the fact that this continent is a great triangle with its base upon the arctic circle, and its vortex within the tropics. Many new thoughts would be suggested here, some of which could be digested at the time, and others might be filed away for future investigation. How many classes, while they recite upon the productions of British America, and the north of Spain, locations in about the same latitude, ever take into account the difference in climate, and especially ever inquire for the causes of the same?

The trade and periodical winds are intimately connected with physical geography, and, if properly illustrated, would open a rich vein of thought to the student. These great currents of air, constantly in motion, have to do with the amount of rain, the temperature, the vegetation, the animals, and the general condition of nature and of man throughout the tropical regions, and even beyond this limit.

Let the oceans, seas, gulfs, channels, lakes, rivers, mountains, peninsulas, capes, et cetera, be all studied, not as *mere words*, nor as simply places in certain geographical positions upon the earth, but let them be viewed in their relation to each other, and as indispensable parts of a great whole, performing well their several offices as good citizens.

To illustrate these topics, no costly apparatus is needed. If the class have not seen the ocean, they have seen a lake or pond, with its miniature islands, bays, capes, &c.; and if they have not seen the Andes, they have been upon a hill and have gathered flowers in the valley; they have felt the wind and the heat, and can easily be made to understand the effects of the latter upon the atmosphere.

Let these be called in to speak for themselves, and to teach a lesson, which, while it illustrates the subject in hand, shall lead the minds of the young out into the kingdom of nature, and shall give to the hills and brooks, over and beside which they daily gambol, a voice which shall greatly instruct them.

[In connection with the foregoing article, we would direct the attention of parties interested to the catalogue of maps and atlases specially devoted to physical geography, kept for sale at the Educational Depository, Toronto. See Descriptive Catalogue, published in this and previous numbers of the *Journal of Education*, and also to the pamphlet edition of the "*Descriptive Catalogue*" just issued.]

PHYSICAL TRAINING IN SCHOOLS.

GYMNASTIC EXERCISES.

CONCLUDED.

No. V.

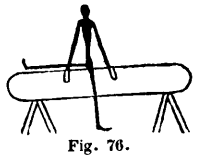

Fig. 76.

Action 117. Hands on the pommels, spring up, rest a moment, then throw the right leg over the horse, lifting the right hand to let the leg pass over the back pommel into the saddle, bringing down the hand quickly on the pommel. Throw the leg back again, observing the same precautions: do this several times without coming to the ground.

Action 118. As action 117, with the left leg on the other side.

Fig. 77.

Action 119. Hands on the pommels, spring up, at the same time turn the body a little on one side, and throw the right leg over the front pommel, lifting up the left hand to let the right leg pass (fig. 77).

Action 120. As action 119 on the other side, with left leg.

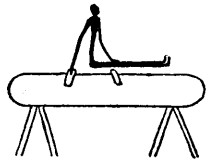

Fig. 78.

Action 121. Hands on the pommels, spring up, and instead of one leg, as in action 119, throw both legs over in front, so as to come down to the ground on the feet, with face towards the head of horse. (fig. 78).

Action 122. As action 121, on the other side.

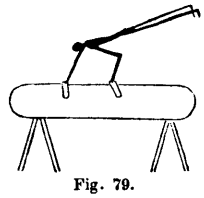

Fig. 79.

Action 123. As action 110, but instead of coming against the side of the horse, throw both legs over the back of the horse, and come down on the toes on the other side, with face towards the saddle (fig. 79).

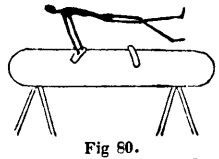

Fig 80.

Action 124. As action 114, then swinging backwards cross both legs behind; turn the body, and sit in the saddle face towards the tail of the horse (fig. 80).—N. B. When in crossing the right leg goes over the left, you must turn the body to the right side, and when in crossing the left leg goes over the right, turn the body to the left side.

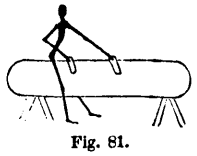

Fig. 81.

Action 125. Spring on the back of the horse, behind the saddle, place the left hand on the front pommel, and right hand on back pommel, raise the body a little, and swing round, and sit on the neck of the horse, so as to face the front pommel. Then put the right hand on front pommel, and left hand on back pommel, and swing round on back of horse; do this alternately several times (fig. 81).