

they get there? Perhaps from their nature it could be guessed where they probably came from, but what about the means of transportation? Here is a chance for lessons on glaciers. Show the children the parallel striation marks on exposed surfaces of bed rock. Are they equally well preserved on different kinds of rock? Compare their direction with that of lakes, hills and valleys, both in your neighborhood and on the map of Eastern North America. If the child can be shown that all harbors and river valleys have probably been gouged out by glaciers, he will know that the gouged out material had to go somewhere,—and the mystery of the gravel hills and drift boulders is, in part at least, solved. The melting of glacial ice, and its southern boundary, are very well shown in the mass of stones and gravel beaches off the New England coast, and in the comparative absence of deep harbors south of Chesapeake Bay.

Innumerable questions arise both to the teacher and the pupil, all of which furnish valuable subjects for lessons. Trace such changes as a pond filling to a swamp, a bog, and finally to a level field. This explains the formation of peat and coal. In Carboniferous rocks, fossils of vertical trees show proof of such filling. Diatomaceous earth (Tripolite), so much used for polishing powder, making dynamite, naturally suggests itself here. So does petrified wood. The next time your children walk across a bog they will have more than mischief to occupy their minds, for you have taught them to read the interesting book of Nature, whose stories have always something new.

Lack of space compels me to leave the subject here. I should like to go into the details of cave formation, growth of stalactites and stalagmites, and call attention to the varied scenery of limestone and gypsum countries. Extremely interesting to the boy, too, would be the manufacture and uses of the common metals. In connection with mineralogy, one could teach such things as the coloring of glass, the glazing of porcelain, the hardening of steel, the manufacture of paints, the making of fireworks, the making of bricks, and scores of other equally instructive facts. The flame tests and bead tests illustrate many of these points.

The teacher who will undertake this work, will find it a pleasant diversion from the more ordinary schoolroom routine. The students will search everywhere for specimens and those on the sea coast will find on ballast heaps some foreign rocks which will be useful for exchanging with teachers of neighboring districts, and in a short time the schoolroom will be adorned with a beautiful and instructive mineral collection.

[The above is an abridgment of a series of papers now being written in *The Educational Review*, St. John, N.B.]