children when teaching a lesson such as that on America (*Book of Lessons* No. 3).

America, or the New World, is separated into two subdivisions by the gulph of Mexico and the Carribbean Sea Soon after it was discovered, this vast continent was seized upon by several of the nations of Europe, and each nation appears to have obtained that portion of it which was most adapted to its previous habits. The United States, the greater part of which was peopled by English settlers, while they possess the finest inland communication in the world, are admirably placed for intercourse with the West India islands, and with Europe, etc.

In what direction from Europe is America? By whom discovered, and about what time? In the service of what nation was Columbus, and what were the names of its sovereigns?—the teacher telling them his difficulties, and interesting them with the story.—Who was king of England at the time? (explain the word *contemporary*.) Was the passage round the Cape of Good Hope to India known then? No, sir: discovered a few years later. In the service of what nation was Vasco de Gama?—and then point out to them how this discovery affected the line of commerce with the East—its course through the Mediterranean previously—the attempts made at discovery by England about the same time—Newfoundland—Sebastian Cabot—the variation in the polarity of the needle.*

The lesson says "Soon after it was discovered, each nation appears to have obtained that portion of it which was most adapted to its previous habits." What does this mean?—look at the map.—What is there that would lead you to fix upon the parts taken possession of by the English?—anything in the names of places—the names of rivers—of divisions of the country—pointing out Jamestown, New England, and New Hampshire. Where would the early settlers be likely to fix themselves? Why upon rivers? Why particularly navigable rivers? What would guide you in your choice if your were going to an unsettled country?—the teacher to point out such things as attract an agricultural people. What is the most remarkable mountain chain in the two Americas—its direction, and how it runs into the Pacific, and on the other into the Atlantic—those into the Pacific a short course, and probably rapid, and not navigable—those into the Atlantic, as the Amazon, of great length, lazy, sleepy, running through a flat country, and therefore likely to divide into many branches—slow, navigable—the character and employments of a people how affected by this? Do you recollect any passage in your book about a river being *lazy*? Yes, sir:

> Remote, unfriended, melancholy, slow,
> Or by the lazy Scheldt or wandering Po.

Reading at other times on this subject, the teacher would draw their attention to the Gulf of Mexico—the rivers that run into it—the course of the equatorial current, splitting into two on the coast of the Brazils; one branch going to the south, the other into the Gulf of Mexico, and called the gulf stream—most rapid between the coast of Florida and the Bahamas, striking against the coast of of Newfoundland and meeting the polar current, is again sent back across the Atlantic to the Azores, and so into itself again;—in the time of Columbus, remains of trees, also two dead bodies, were found at the Azores, washed over by this streams—how and why this encouraged him in his views.

The connection of North America with this country, when declared independent, etc., and in like manner, how other divisions of this large continent were, at an earlier period, connected with other European nations—Canada with France—the Brazils, etc., with Portugal—Mexico, etc., with Spain.

It is not meant that all this is to be taught to children at one lesson, but in the course of their reading the lessons on the subject of America, introduced into their schoolbook; this is the sort of information given by the teachers in the school here.

After a first lesson, they would be made to sit down and write on their slates the meaning conveyed to their minds by such a sentence as the one quoted above, which occurs at the beginning of their lessons: "Soon after it was discovered, each nation," etc.;—at another to sit down before the map and make an outline of the coast bordering on the Gulf of Mexico, noting the river mouths, towns, etc., or to put down on their slates the longitude of the extreme east and west points of South America, and then to work out the difference in time.

The first class of boys are reading Sullivan's "Geography Generalized," one of the most useful books on this subject for the purposes of teaching I have ever seen.

By most of them questions of the following kind would be answered with a good deal of intelligence: what is the difference between a great and a small circle on the same sphere? What sort of a circle is the parallel of latitude on which we live? What parallels of latitude are great circles? Is the sun ever vertical to the inhabitants of Europe? In what direction is he seen, when on the meridian, by an observer north of the northern tropic? Always south. To an observer between the tropics? Explain why he would appear north or south of him at noon, according to the time of year? To an observer in a higher southern latitude then 23½, where would he appear at noon? Always north.

Explain how and why the rising and the setting points of the sun shift on the horizon every day during the course of a year.

What arc of a circle would mesure the angle between the point of the horizon on which he rises on the 21st of June, and that on which he sets on the 21st of December?

To the question, if the sun rises at five or at seven o'clock in the morning, what time will he set? in nine schools out of ten you will get in answer. At five and seven in the evening: explaining that there are as many hours from sun-rise to noon as from noon to sun-set, at once opens their eyes on the subject.

Two men walking out of the school, the one direct east, the other west, and always keeping equally distant from the equator and pole, on what line would they walk supposing the earth a sphere? Is it a straight line? How would their reckoning of time vary? Supposing each to walk a degree a day, how would their respective noons differ from the noon of the place where they started from and each other?—at the end of one, two, three, etc., days—at the end of 360 days? When would they meet a first, second, third, etc., time? When they come to the place from which they set out, how many times will the one walking east have seen the sun-rise? How many the one walking west? What is the circumference of the circle on which they walk, supposing them to start from a place in latitude 51o?

Two men starting from the same point in the name meridian, latitude 51o; point out their course, supposing one to go due north, the other due south, and always to walk on the same meridian. Will they have described a greater space when they meet than the two walking on the same parallel of latitude? How much longer? How will their reckoning of time differ? How long will it continue to be noon to both at the same time?

The sun is said never to set on the Queen's dominions—how is this? would he set on a belt of land running from pole to pole?—on a belt on each side of the equator, and running round the earth?—5/6ths of the equator is in seas—1/6th in land—show this on the map, reckoning the exact number of degrees through which sea and land run.

Point out the advantage of knowing the figure of the earth, in answering the above.

Supposing a ship to sail from the Sea along the east coast of Africa, round the Cape of Good Hope, and so to Europe, would the men always see the sun south of them at noon? Answer: No, sir. Point out, then, where they would begin to see north according to the time of year—how this direction would vary in different latitudes up to the Cape of Good Hope. That to a people ignorant of the figure of the earth, and of its motions, and never having been beyond the Tropic of Capricorn, seeing the sun to the north of them at noon would appear as something supernatural.

Now, we find a book written before the time of our Saviour, that in the time of Pharaoh Necho, king of Egypt, some Egyptians had made their way in a boat setting out from the Red Sea, along the east coast of Africa, turned round what is now called the Cape of Good Hope, in passing which they would have, with their faces to the west, the sun on their right hand and towards the north of them, their left hand to the south, and of course their backs to the east. They then coasted along the west coast of Africa, found their way into the Straits of Gibraltar, which perhaps were known to them, and so sailed up the Mediterranean until they came to Egypt again, having thus coasted along the entire sea-coast of the continent of Africa. They took three years to do this in, and when

* The teacher placing the compass before them, should show what is meant by the directive powers of the needle—what by its variation, dip, etc. "The variation was unknown until the time of Columbus, who observed on his first voyage that the needle declined from the meridian as he advanced across the Atlantic. The dip of the magnetic needle was first observed by Norman in 1576. The line of no variation passed through London in 1658, since that it has moved slowly to the westward, and is now near New York in America. The needle is also subject to a diurnal variation, which in our latitude moves slowly westward in the forenoon, and returns to its mean position about ten in the evening; it then deviates to the eastward, and again returns to its mean position about ten in the morning."