

out for himself that the cylinder will roll, stand and slide. Some one may call the flat face round, because of the round edge. A ball, cylinder, cent and round paper (circle) are shown to the pupils. We find that the ball is round everywhere, the cylinder has one round face and two round edges, while the cent and circle have only round edges and a flat face.

Although the word cylinder is long, it is quickly taken up by the little folk after they once hear it. They seem to be mastering something very hard to do, and rather delight in saying it after you have told them that the name of this block is very hard to remember and a very hard word to say.

Attention is drawn to how much of the cylinder can be seen as it stands in front of you, and I have known children who had never seen a drawing of a cylinder go to the blackboard and draw the top, two sides, and a curve for the bottom. Some find it very hard to make a picture of the cylinder, and so I would talk some time about what can be seen of it before I asked them to go to the board, teach them how to look at it so they have the outline in their minds before they attempt to make a picture of it.

We might close the lessons of the second gift for the present with one more lesson. I say, for the present, because we cannot exhaust one gift before we proceed to another. We introduce each gift and then take up another afterwards, returning to find something new in the old one.

Give to each a round paper to fit the top of its cylinder, and a square paper to fit the top of its cube. Compare the objects with each other, leading the child to clothe his thoughts in good language. Try the round paper on the cube and tell why it does not fit. Try the square one on the cylinder and tell why it does not fit. Ask each pupil to arrange the ball, cube and cylinder as he likes best, and have some tell you just how they have arranged theirs, as: "My ball is on top of my cylinder, and my cylinder is standing on my cube," or "My ball, cube and cylinder are on the desk side by side," etc.

Blindfold a child and ask it to feel the different objects you hand to him and to tell you what they are. This is most interesting, and you will see the little fingers feeling earnestly. Ask some to tell you how they knew it was a cube and the answer will be, "Because they felt it." Then we know that our hands are very useful. Ask one who is blindfolded to feel a colored ball and to tell you the color of it. Several will try because they are sure they know the colors even with their eyes shut, and only find out when they have tried and make a mistake. They know now that we cannot tell the color unless we see it, that we feel shape, but can only see color.

We find the children always interested in observing the difference between the ball, cube and cylinder, at rest and in motion. The sphere is always the same, whether at rest or in motion. The cube, as it revolves, becomes a cylinder, a double cone, etc. The cylinder looks like a sphere, a double cone, etc.

The second gift comes to us provided with the necessary staples and holes for suspending in the air.

Froebel felt that this gift brought out the "law of opposites" more than any other.

The cube, sphere and cylinder taken together are the column in architecture; the cube is the base, the cylinder is the shaft, and the sphere the capital.

A monument made up of a ball resting on a cylinder, and the cylinder on a cube, stands at Froebel's grave with his name and this inscription: "Come, let us live with our children." D.

to be continued

For the Review

Interesting to Geological Students.

In some parts of Kings County and perhaps in other parts of Nova Scotia the sub-soil is found to be full of the stones or "pits" of the wild cherry. In these districts, land covered with forest, primal in which not a cherry tree appears, will, when cleared by the woodman's axe, or by fire, produce the thickest possible growth of cherry trees. Other districts will produce trees of other previously unknown varieties, doubtless growing in the same way from long buried seeds. Is there not an interesting field here for the student? The appearance of our country hundreds, perhaps thousands of years ago,—the length of time for which seeds will retain their vitality, the nature of the preserving element and many other interesting subjects for investigation may be suggested by these facts. A pioneer settler in the "Big woods" of Minnesota informed me that in 1857, in digging a well, he struck, at the depth of twenty five feet, a red, loamy soil, very different from the soil at a lesser depth. The next spring he was surprised to find that wherever this red soil had been deposited the ground was covered with plants of the white clover, though that grass was totally unknown in the vicinity. Are similar instances known in these Provinces? W.

Cornwallis, N. S. Dec. 21, 1884.

These observations are very interesting. To make valuable observations, the depth of the cherry stones, the character of the soil in which they are imbedded, etc., should be most accurately noted. If living seeds are found deep in the soil, whether in gravel, drifts, boulder clays, or in other formations, it would seem to indicate that they are survivors of a previous geological epoch. By their observation and study, a portion of the flora of a post-glacial, if not of a pre-glacial period, might be reconstructed. Extreme precautions would have to be taken to prevent errors of observation.

There is no short road to a competent knowledge of history. The study must be pursued beyond the school room and by the pupil himself.