

ditches. From which of these places do we get the best drinking water? Do you know of any country where water is not so plentiful as with us? Why is it so scarce there?

RAIN.—We often complain because of wet weather, but there are countries where the people would often be glad to exchange their days of sunshine for some of our dull, rainy ones. What would happen if we had no rain for many months? The ponds, brooks, and wells would be dried up, and what could we have then for drinking? Tea, or coffee? How are these made? Does not the mother put boiling water on the coffee or tea to prepare it for use? Milk? Can the cow give us milk if she has no water to drink for days? And if there were no rain how could the grass grow to feed the cow? What would the gardens and fields look like after months without rain? Name some of the things we would have to do without. Some of the children may remember having heard of the famine in India, and they may have sent money to buy bread for starving children there. Lead them to see that it is lack of rain that causes such distress.

CLOUDS.—Where does the rain come from? Looking at the rain we notice that usually it comes in a slanting direction. Why is this? Let the children draw blackboard pictures of a rain-storm with easterly wind, —or with southerly wind. Encourage them to watch for a rain when the drops come straight down. Have the special features of such a storm described. Have various kinds of clouds observed, allowing the children to suggest names to suit.

VAPOR.—What are the clouds made of? How does this water get up into the sky? Draw attention to the vapor rising from the damp roofs of the houses on a warm sunny morning. Explain that these tiny water-drops or specks, as we may call them, like to fly up to the sky to form clouds. Leave a saucer of water standing in the room and tell the children to observe what happens. What has become of the water? What is it that we often find making the window-glass so dim? Children sometimes like to draw pictures on the damp window-pane. On winter nights Jack Frost makes pictures on the glass, using this very moisture for the purpose. Let the children breathe on a cold slate, observing the water specks. Then recall the cold mornings of winter when every breath showed so plainly in the frosty air. The water-specks in our warm breath are so tiny that we cannot see them, but on meeting the cold air they join one to another, making larger specks, which can be seen.

STEAM.—Have any of the class ever watched water boiling? What do we call the cloud of water-specks

that comes from the spout of the kettle? Explain that though we do call it *steam*, it is really vapor; in true steam the drops are too small to be seen. Close to the spout we may see where the real steam is, and if we should put a finger there it would be badly burned. As the steam meets the colder air the specks become larger. Holding a cold slate over them will cause more of them to join together, and then we have drops of water. Steam is very powerful. When we try to shut it up it pushes very hard, trying to get free. If we were to close up the spout and cover of the kettle, so as to prevent the steam from escaping, it would soon burst the iron kettle.

DEW.—Have any of the children ever noticed the drops collected on a pitcher of cold water sitting in a warm room? Does the pitcher leak? Explain that the air is full of moisture, and that the cold surface causes it to condense. Ask if any remember fine mornings in summer when the grass and flowers were covered with drops of water. What is this called? Refer to the drops on the outside of the pitcher and show that when the ground gets cool on a summer evening the moisture in the air forms in drops which disappear in the warm sunshine of the morning.

FOG.—Reference should be made to fog, and the difference between fog, mist, and rain noticed and explained.

ICE.—Mention may be made of ice, noticing its transparency, its value when stored away for summer use, and its frequent beauty in the form of icicles. Experiments may have been made during the winter showing why the water-pipes burst under the action of frost. In that case review questions should be asked, bringing out the explanation of such an effect.

SNOW.\*—What is it made of? Let a snow-flake melt on your sleeve and observe how small a drop of water is left. Notice forms of different snow-flakes. Of what use is snow? Refer to the roots of plants protected by it during severe frosts. Also refer to its value to lumbermen and others working in the woods.

SLEET AND HAIL.—What is sleet? What is the difference between, sleet, hail, and snow?

During the spring months encourage the children to observe the changes going on around them. Watch the opening of leaf-buds. Keep a black-board record of the order in which the trees come out, and see that the children know the names of the trees about their homes. Notice shrubs also, and while doing so note carefully the pronunciation of "lilac," as children very commonly make mistakes in it.

A grass-sod brought into the school-room at this time of year frequently becomes a thing of beauty, especially if there are a few violet roots in it.

\* For special talks on snow, see EDUCATIONAL REVIEW, February, 1901.