SCIENCE IN COMMON SCHOOLS.

BONES.*

BONES are the framework of the human body. If I had no more bones in me, I should not have so much shape as I have now. If I had no bones in me, I should not have so much motion, and grandma would be glad; but I like motion. Bones give me motion, because they are something hard for motion to cling to. If I had no bones, my brains, heart, lungs, and larger blood-vessels would be lying round in me sort of loose-like and might get hurted; but not much, lest it is hard hit. If my bones were burned, I should be all brittle, and you could crumble me up, because all the animal would be out of me. If I was soaked in a kind of acid, I should be limber. Teacher showed some bones that had been soaked. I could tie a knot in one. I had rather be soaked than burned. Some of my bones don't grow snug, and close to my other bones, like the branches to the trunk of a tree do; and I am glad they don't; for if they did, I could not play leap-frog, and other good games I know. The reason they don't grow that way is because they have joints. Joints is good things to have in bones. There are two or three kinds. The ball-and-socket joint, like my shoulder, is the best. Teacher showed it to us, only it was the thigh-joint of a cow. One end was round, smooth, and whitish: that was the ball end. The other end was saucer-like: that is the socket, and it oils itself. Another joint is the hinge-joint, like my elbow. It swings back and forth oiling itself, and never creaks like the school-room door does. The other joint aint much of a joint. That is in the skull, and it don't have no motion. All of my bones put together in their right places makes a skeleton. If I leave out any, or put some in the wrong place, it aint no skeleton. Cripples and deformed people do not have no skeletons. Some animals have their skeletons on the outside. I'm glad I aint them animals; for my skeleton, like it is on the chart, would not look well on my outside.

This composition is an excellent illustration of "how not to do it." An illustration of so-called science *teaching*, telling facts to children instead of leading them to find out facts for themselves, of learning instead of the acquisition. In this case the fault lies partly with the topic. A child learns by sight and by touch, not by *faith*. While it is possible for an excellent teacher to illustrate an abstract or an abstruse subject, which cannot be seen or touched, so that the child may grasp the essential points, it is not probable that one in a hundred of those now engaged in teaching will do so without too great an expenditure of time. Teachers as well as housewives often fail to remember that children and uneducated persons are able to grasp but one idea at a time. The above composition shows plainly that too many words were used in the attempt to give too many ideas to the child in too short a time. Professor Hyatt ("Science Guide," No. 1, p. 6), has well expressed the creed of those who are advocating elementary science in public schools, when he says: "The idea is not to teach, but to lead the mind to work out for itself the simple physical problems herein described,

* Composition by a boy in one of the lower grades of a New England grammar school.