

"Instruction in agriculture should proceed upon the lines recognized in general education; the faculty of observation, the spirit of enquiry, and the training of the reasoning powers of the children should be the principal work of the teachers. In agriculture more than in any other industrial occupation are these qualities of the mind necessary. In no other subject of education are there so many details within which may be found matter of disciplinary value in training the minds of children; but the teaching of agriculture requires that the teacher shall place the matter before his pupils in an appropriate way that the elements for mind-training that exist in the subject may be turned to the best account. The efforts of the teacher should be mainly in the direction of bringing to the minds of his pupils scientific principles that bear upon agricultural practice. In agriculture there exists, ready in its every phase and varied in its extent, matter for useful instruction, provided that the teacher has "that within" to enable him to turn the opportunity to account. The rocks and soils of a district may be utilized for object lessons in geology. How much may be learnt in a walk along a roadside fence. The weathering of the rocks; the first efforts of soil-formation in the growth of lichens and mosses; the mixture of mineral matters at the base of the wall—are object-lessons that cannot be so well observed in the lecture hall. How instructive will be the sight of matter of considerable weight being taken long distances by earth worms, and of their attempts to take them into the earth, in illustrating Darwin's teachings on the influence of earth-worms in soil-formation. No diagram or drawing upon the blackboard can prove such an exponent of natural processes as is the witnessing of the acts themselves. In vegetable physiology and botany there is in the neighborhood of all rural schools matter for thought, observation and teaching. In the farm implements may be found material for lessons in mechanics. The opportunities for illustrating physics abound in the material world. The village forge or roadside smithy will provide considerable matter for profitable instruction. How much might be taught in reference to the scales that fall from the hammered iron! What experience can better illustrate expansion and contraction through the influence of temperature than the shoeing of a wheel! 'Nature teaching,' conducted upon well-defined lines, is one of the most useful methods for promoting the education of our people. Here we have at least a sufficiency of the illustrations and processes that are necessary for cultivating the faculty of observation. Results are traced to causes; the reasoning powers are developed; and thus our young people may have lessons adapted to cultivate their intelligence, and such teachings as will enable them afterwards to acquire information that will be useful to them in most of the occupations of life. But in order that this teaching may be given successfully, the teacher must have in the first place a varied amount of information himself, and he must be of sufficient skill and judgment to apply that information and knowledge to good purpose."

