

within the reach and conception of the thousands of farmers who till the fields and farms of this great country. The prosperity of the nation is based on agriculture, and it must, in the future, be regarded as a great, profound and complicated business, and every legitimate effort made to raise it to the highest place of intelligence and place within the reach of our farmers the means by which they can acquire information that will enable them to have true power and dominion over the fields they cultivate; for then, and then only, can crops be produced in the most economical manner, and the plant food in the soil used in the most judicious manner, and a part at least preserved for future generations.

How shall the importance of agricultural education be brought home to the attention of the farmers of this country? This is the question above all others that needs solution in the present time. How shall this problem be made plain to the farmer so that he who runs may read? For the past fifty years there has been a profound contempt in the mind of the average farmer for so-called scientific agriculture. He no more believed that it was possible to secure better results from the soil through a knowledge of its composition and physical properties than he believed that it was possible to turn night into day. If his son was to receive an education he was to become a professional man, for in this field alone could honor, wealth and position be obtained. How very unfortunate, how utterly out of harmony with the facts, are these conceptions of the farm and the farmer. It is going to be a hard struggle to change views which have become so firmly fixed through usage and through the belief of past generations. Nevertheless, this is the task before us, and the work must be resolutely undertaken, and there should be neither faltering nor change of purpose until a complete revolution in the attitude of the farmer and educator generally has been brought about with regard to the questions of agricultural education and the fundamental principles of progress involved therein.

It is useless to pursue the question further from the academic standpoint. Rather let us look into the cause and effect and see wherein the benefits pertaining to agriculture lie, for when these facts are properly conceived, it will do more than anything else to throw light into the dark places and make for progress. How many of us realize that the soil is the farmer's capital? Quite as much so as stocks and bonds represent the wealth of the directors of our national banks, and pray you, what is in the soil that stands for the farmer's capital? Is it the acres he owns? Is it the rock from which the soil was originally derived and on which its firm foundation rests to-day? No, it is none of these things. It is the elements of plant food; the constituent parts of the soil that enable the little grain of wheat to grow and expand into the perfect plant and ripen into a harvest yielding, some twenty-fold and some a hundred-fold. The soil, therefore, is the storehouse of plant food containing a great variety of elements, of which some fourteen are more or less useful and necessary to plants. Is it not remarkable that thousands of farmers should cultivate the soil from year to year without knowing why they do it and without understanding what the elements of plant food are, without