

analysis, of examination, of scientific testing; an age of getting at the deep-laid laws of nature and the ingredients and formations of substances, their qualities and their processes, and the manner in which these can be put to the best practical use. Whatever pursuit a man may earnestly engage in, however wild it may be in theory, he may either take up himself or reveal to others who are by his side some things which are of great benefit; some things which are like seeds that afterwards bring about a bountiful harvest of the better and the more practical and the more scientific.

Chemistry in Modern Agriculture.

Take, for instance, agriculture, the old, primal industry of the world. For thousands of years the farmer has farmed and the world has lived through his farming. During the most of those years the farmer used material, the laws and properties and qualities and tendencies of which he had no scientific knowledge whatever. He planted as his fathers planted. If he was as good a man as or a better man than his father, he observed things during his planting and effected improvements according to his observations. His observations, however, were only those of sight, of touch, of the senses. Yet he farmed, and the world lived. I suppose it is not much more than half a century ago that science was first applied to the farming industry and became its helper and subsidiary. Within the short time that has since elapsed, observe how everything has improved, how everything has speeded, how everything has gone ahead, until to-day the intelligent farmer is on the high road to the greatest success in his profession. Over the things with which the farmer had been dealing from the earliest period without knowing their qualities or being able to direct their tendencies, he now has full mastery because of the application of this scientific knowledge. Farming owes, and in the future will owe, the greatest part of its success to this released, helping force which has been brought to the hand of the agriculturist—this scientific knowledge deduced by patient examination, testing, analysis and synthesis. So that the oldest of the professions or occupations of the world, linked up, as it has been, with this new helpmeet and subsidiary, has before it in the future the achievement of its greatest conquests and its greatest progress.