

limited experience and draws his conclusions therefrom. A man of this class tells me that he has noticed that calves always do best on milk that has become thick or soured, instead of sweet skim milk, assigning as the reason that the skim milk is just like water with nothing in it, but when it becomes thick it has some substance or body to it, and consequently has more nourishment. If you explain to him that the difference between the sweet and sour milk is that the milk sugar of the sweet milk has changed to lactic acid and in consequence has coagulated the casein and become thick and sour, he will look at you as much as to say, "such knowledge is too wonderful for me, it is so high I cannot attain unto it, but nevertheless from the appearance of things I think I am right." A man of this kind, though his method of reasoning may be tolerably correct, yet lacks the fundamental knowledge on which to base a correct conclusion. To a young man of this kind a year or so at an Agricultural College would be of incalculable benefit. Imagine his wonder at his first lesson in chemistry when told that a clean glass bottle is full of Oxygen gas. He does not believe it, he is sure the bottle is empty, and the brilliant light from the inserted match scarcely convinces him. A few weeks of such surprises entirely changes his whole manner of thinking and puts him on the right track for acquiring knowledge and drawing correct practical conclusions therefrom. Let us follow this man after an Agricultural College career. He has now learned many of the underlying principles of the soil, the seed and cultivation, and has solved some of their problems. The soil, the seed and the tillage are not as formerly, three merciless fates whose haphazardous fingers held destiny of his harvest—but rather three wilful coursers to be, manipulated and controlled by brain and hand. From the problem of Agricultural variation he eliminates factors of non-success.

By drainage, judicious cropping, and rotation, he avoids unfavorable conditions of soil. The seed, of which he will have only the best, is freed from all weed impurities, and if necessary is treated to destroy weeds and fungi.

By correct tillage he overcomes unfavorable conditions of flood or drought till old dame nature out of admiration is almost forced to yield him a crop in spite of herself. Indeed nature's best gifts to the farmer are given to the mind, trained to understand them and the strong hand to receive them; or, in other words, success in farming depends on the ability to investigate local conditions and the knowledge to intelligently control them. Southend, May 24th.