

In furtherance of their views, your Committee would desire to see disseminated more generally the great advantages arising from a better knowledge of the improved systems of farming, derived from a practical knowledge of Agricultural Chemistry—a science which has enlisted under its banners the talents of such men as Sir Humphrey Davy, Hunter, Liebig, Johnson, and many others of like eminence; who have pointed out to us that vegetables, grass, corn, potatoes, and all other plants, are, like animals, *alive*; that, like them, they *drink up nourishment*; that each class of plants requires certain ingredients in its nutriment *peculiar to itself*; and that if such proper proportions of these *peculiar elements* are not furnished, the vegetable will die, or, at all events, either degenerate or decay; all tending to show that one of the greatest errors in farming consists in trying to nourish all kinds of plants with the same manure.

By such men as those quoted above, plants have been analysed, with a view to discover their composition; also soils to discover their nature, and whether or not they contained the requisite food—organic and inorganic—for the nutriment of the plants intended to be sown upon them, with the most perfect success; so much so, in fact, that a really good practical Agricultural Chemist will tell you to a nicety the exact proportion of the different kinds of manure which, if put upon an exhausted soil, will bring any of the cultivated grain or roots to maturity; nay, they will do more than this; they will tell you the nature and composition of the blood, fat, muscles, bones, &c. &c., of the different domestic animals, and the kinds of food necessary to be given to the animal at the different stages of its growth to bring it to successful maturity; what to give to the young animal to promote the growth of bone and muscle, and what kind of food to give to the grown animal to produce fat, and fit it for the butcher. The composition and value of the different kinds of manure have they also investigated, showing the necessity of protecting many of them from the influence of the atmosphere and heavy rains, to prevent the escape and partial loss by exhalation and washing away of the valuable gaseous matters and fertilizing influences forming their chief excellence.

Any one who has travelled through this Island, and has seen the mere *playing* at farming which generally prevails—the main parts of the farm lying in weeds and worn-out hay fields and starved pastures, with small patches of green crop badly cultivated; the scratching of the earth which serves as an excuse for ploughing; the starved mongrel race of cattle,