

this preliminary examination, because we know that the plants obtain it entirely from the soil.— There must be in the soil all the organic ingredients which we find in the plants, and the plants must derive all their inorganic matter which they contain from the soil. Hence, we must find in the acre of soil, after the crop is removed, 480 lbs. less of inorganic matter than it contained before the plants were grown upon it. If this acre be cropped with the same plant for a series of twenty years, without any organic matter being added, there will be removed 9,600 lbs. Hence, the soil will contain 9,600 lbs. less of inorganic matter than it did previous to the cropping; being an actual, though gradual, decrease of 480 lbs of inorganic matter annually. If we add, however, 480 lbs. annually to the soil, then it is plain it will not decrease, because we return yearly the amount taken away. But, in adding this inorganic matter, we may not furnish the precise ingredients to the soil which the plants have withdrawn, since we have not determined yet what these ingredients are. Our next step is, then, to determine accurately the composition of this inorganic matter. This will give us the amount of each ingredient removed. If we crop our soil for a series of years, and wish the cropping not to impoverish or exhaust its store of inorganic constituents, and consequently render it less productive we must add yearly that which will furnish it with the amount of each ingredient removed. This can be done, by adding in a soluble form, so as to be taken up by the plant, the fertilizing materials which will restore the exhaustion suffered. It is not intended to convey the idea, that inorganic matter is more important to the growth of a plant than organic, or vice versa. The fact is, both are necessary, and may be considered equally important. The inorganic matter is derived entirely from the soil, whilst the organic matter, so far as is known, is derived both from the soil and air. Therefore, the reason why we add a given quantity of each of the ingredients of the inorganic bodies before referred to, to the soil annually, is, that they are the bodies, the aforesaid quantities of which are removed by a single crop: and we add them simply for the purpose of restoring what has been borrowed. Hence, the inorganic analysis of a plant is made to throw light upon the proper mode of its cultivation, whilst the proximate and ultimate organic analysis is not made so much for this purpose, as it is for arriving at its nutritive properties, and

the bodies which it may contain, applicable to the arts and medicine, and to give us a better idea of its physiology. What has been said of maize, is merely to illustrate briefly the practical value of the analysis of plants in agriculture.

THE MONTHS--MARCH.

Sturdy March, with brows full sternly bent,
And armed strongly, rode upon a rain;
The same which over Hellespontus swam;
Yet in his hand a spade he also bent,
And in a bag all sorts of seeds ysame,
Which on the earth he strewed as he went.

SPENSER.

Among the ancients this month was regarded as the commencement of the year. The Romans called it MARCH, in honour of Mars, the God of War, who was considered the father of Romulus, their immortal founder. The natural characteristics of the month—fierce and blustering winds, with alternate storm and sunshine—are in these northern latitudes, at least, in striking accordance with its Roman designation. It was called by our Saxon ancestors *Klydmonath*, from *Klyd*, meaning 'stormy'; also *Lenct-monat*, or Length-month, from the circumstance of the lengthening of the days at this period. After our ancestors had embraced Christianity it was usually known as the *Lenct-monat*, indicating the ancient practice of fasting—hence our modern term of *Lent*.

ST. DAVID'S DAY opens the month, commemorative of the Patron Saint of Wales, who flourished at an early period of the Christian era, and is said to have attained the extraordinary age of a hundred and forty years.

The ancient practice of wearing the Leek on this day has its origin and significance involved in some obscurity. The probability, however, is that the custom was commemorative of some signal victory achieved by the ancient Britons over their numerous and powerful enemies.—Welshmen, we are informed, wore leeks as their chosen ensigns after the great fight of the Black Prince of Wales. Others suppose that the custom arose from the *Cynhortha*, which was somewhat analogous to our Canadian "*Bee*,"—a neighbourly way of rendering assistance to such farmers as, from sickness or other causes, were unable of themselves to perform the pressing operations of agriculture at their proper seasons. The practice has been thus described:—"At an appointed time they all met to assist a sick or