

Communications.

ON THE MODERN SYSTEM OF DRAINAGE, AND ITS APPLICATION IN CANADA.

(For the Canadian Agriculturist.)

As in every other productive art, so in Agriculture, its progress, from primitive simplicity, to scientific cultivation, is the inevitable consequence of enlarged demand on the one hand, and increased competition on the other. The earlier or later development of the result may of course be affected by various circumstances—social, political, or geographical—but it is sure to follow: in Holland and the Low Countries, for example, these causes combined to render them at a comparatively early period, the best cultivated districts of Europe; whilst Great Britain, so long in a transition state, has at length entered in earnest on the great work of Agricultural improvement. France, Russia, and other parts of the Continent are still content to toil on in the apathy of pastoral primitiveness; although, in the former country, there have of late been indications of a conscious necessity for Agricultural progression, and it is more than probable that the recent internal changes, coupled with the effect of passing events, will stimulate a rapid advance in its rural economy.

Now as introducing to our subject, and as affording matter for reflection, as well as examples to be profitably followed and avoided, it may not be altogether uninteresting to trace briefly the progressive condition of Agriculture in the Mother Country, during the past half of the century. And if, in so doing, we should recall to mind those halcyon days when, with wheat at 15s. per bushel, the toast of "better times" was the cherished sentiment of the market tables, it will be assuredly with no longings after the evils happily passed, and of which, even to this hour, we, in common no doubt with many, retain familiar recollections; for it was our lot to be born under a Vicar's Root, in a midland county, and so in early life to witness and to feel those exemplary contrivances, for the elongation of incomes, which the necessities of the times established as fashionable, in order to their being admissible. The great feature of advance which characterised the first quarter of the century, was the inclosure of open commons, and uncultivated lands; than which nothing could more distinctively mark the desire to reap the more easily producible and abundant crops of a virgin soil, than attempt a systematic increase of the comparatively costly and precarious yield of the old-going lands. From the year 1800 to 1825, there were no fewer than 181 Acts of Parliament passed for Inclosures, comprising a total area of 3,400,000 acres, which were either fully or in part brought into increased productiveness. And yet it may be questioned how far the general amount of available produce was augmented by these means; and whether, in fact, they did not actually promote the neglect of the old inclosed lands, as well as conduce to a

considerable extent of the inferior soils being laid down most imperfectly and unprofitably in grass.

As an element which is supposed to materially affect the advance of cultivation, let us at this stage take a glance at the statistics of the price of Agricultural produce, during the period under review, in order to form some definite idea of the influence which from time to time they practically exercised.

From 1800 to 1810 the average price of wheat was	81s 8d per q
do 1810 to 1820	do do 91s 4d do
do 1820 to 1830	do do 66s 9d do
do 1830 to 1840	do do 66s 8d do
do 1840 to 1850	do do 55s 11d do

The 1st period, the highest price was, in 1801—119s 6d
do do do lowest do do 1803—68s 10d

Difference..... 60s 8d

The 2nd period, the highest price was in 1812—120s 8d
do do do lowest do do 1816—63s 7d

Difference..... 60s 11d

The 3rd period, the highest price was in 1825—68s 4d
do do do lowest do do 1822—41s 7d

Difference..... 25s 11d

The 4th period, the highest price was, in 1829—70s 6d
do do do lowest do do 1830—39s 4d

Difference..... 31s 1d

The 5th period, the highest price was in 1847—69s 8d
do do do lowest do do 1849—44s 3d

Difference..... 25s 6d

The first noticeable feature is the ruinous depression of 1803, and again in 1815, both occasioned by the transition from war to peace, and both alike producing serious consequences. It is curious to observe how very nearly the percentage of depression was the same in both instances. In the three successive years of 1822 and '23, comparatively low prices prevailed; so also in 1834, '35 and '36, the result for most part of favorable harvests. In 1835, the price of wheat was as low in England as ever has been since. If the higher range of prices was conducive, as some have contended, to improved cultivation, its manifestation was of indefinite and partial a character, as hardly assume any perceptible form. Isolated instances certainly were not wanting of tracts of land rendered productive by improved management which heretofore had been of little or no value the Counties of York, Lincoln and Norfolk afforded some memorable examples—nevertheless there was not, prior to 1821 (when lower prices set in) such an aggregated desire for advancement would undeniably have left behind it some undeniable evidence, had the opinion been correct, that high prices ensure improved cultivation. In some justification, however, of what at first sight seems paradoxical, it must be borne in mind that in Great Britain, there were, till recently, other causes which interposed barriers to improvement, that no prices of produce, however high, could counterbalance; and, as the chief of these, may be mentioned the law of entail—settlement, whereby life owners and life tenants—some from prudential considerations, and others from necessity—were ever discouraged from investing money in improving property which descended perhaps to an already wealthy heir, to the prejudice of all the junior members of the family. In Scotland, where more