

In a county court I have seen the seed examined by farmers and handed to the judge, and none could see the difference between them but the expert witnesses who were called. Yet a section of the two seeds presented very different forms, one being quadrangular and the other flat, with a broad back, but both being wrinkled and of the same colour, they were liable to pass unnoticed. The evil was thus introduced, and crops of sainfoin now cultivated in this country are not worth half so much as they were ten years ago owing to the extraordinary prevalence of burnet. The seedsman does not separate it because sainfoin seed would be only worth 10s. without the burnet, while it is worth 6s. with the burnet in it, and, therefore, they do not trouble to separate them, especially as farmers do not see the difference, or as when they do, they say burnet grows a bigger plant than the sainfoin, and therefore they get more for their money.

The lecturer concluded by enforcing the absolute necessity of not allowing weeds to seed on the soil, their growth being extraordinarily rapid.

AGRICULTURAL ADDRESS.

BY MR. CROIL, MORRISBURGH.

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But there are causes—mighty agencies, other than agricultural societies, that have given an impetus to agricultural improvement. Although I may not dwell upon it I shall be guilty of an unpardonable omission did I omit, upon an occasion like this, to bring before your notice the subject of **TILE DRAINING**, the most important of all the improvements that have been introduced into British husbandry.—The system of under-draining was, we know, practised to some extent by the Romans. A kind of draining by open ditches, and large drains covered in with stones, had long been practised in Scotland. An ingenious system of draining, introduced into England toward the close of the last century, created a great deal of excitement at that time, and even gained for Easington a grant of £1000 from Parliament, in acknowledgement of the benefit likely to accrue to the agriculture of the Kingdom from his discovery. The novelty, however, of this system died away. To Smith, of Deanston, a Scotch practical farmer, belongs the honor of having perfected a system "of thorough tile draining," combined with sub-soil ploughing, which has resulted in more benefit to agriculture than all the agricultural societies and all the other means of improvement which science and modern practical skill have effected. Already this system has pervaded every county and every parish in the United Kingdom. Thousands of acres of fertile land have been improved in fertility and have doubled and trebled their products. Thousands of acres of cold, wet, inhospitable lands have been render-

ed warm, mellow and fruitful by the mysterious, hidden agency of the insignificant little drain tile, and tens of thousands of acres of bleak mountain steep and dark morass have, by the same agency, been reclaimed from utter barrenness, and become fit for the use of man. This system has ceased to be an experiment.—It has stood the test of more than a quarter of a century, and is as efficacious to-day as it was in 1835. And let me tell you, my brother farmers, that it will prove as efficacious in the level plains and in the swails and swamps of Canada, as it has been in the moors of Scotland, and in the waste places of England and Ireland. And, moreover, let me tell you, it is a system that has already been introduced by our enterprising neighbors to the South of us—by our proverbially slow-going neighbors to the East of us, and by our wide-awake neighbors to the West of us. If then, the farmers of Grenville, and of Dundas, would not be left behind in the march of improvement; if the descendants of the U. E. Loyalists would lay claim to as much enterprize as others, and gain for this part of the Province of Canada a reputation worthy of their illustrious ancestors—they must be up and doing.—It is possible, nay more, it is CERTAIN that there are difficulties to be met in the way, but they are as can be overcome, and MUST be overcome, if we would win the laurels and wear them. Upon this important subject I would fain dwell, but having already trespassed upon your time and patience, I must hasten to bring my remarks to a close.

Another important agency in the improvement of British husbandry, following closely in the wake of tile draining was the discovery and use of the **GUANO** and other important manures. This substance is known to be nothing more nor less than solid excrements of carnivorous sea birds, found in immense quantities on the coast of South America and other tropical countries. Its use in agriculture has long been familiarly known to the Peruvians.—The first cargo of it, however, was brought to England so recently as 1840. The success attending its use created a furor of excitement; the news spread like wild fire of the marvellous effects of this new fertilizer. From almost every port in England, Scotland and Ireland, ships were dispatched to the Pacific for cargoes of guano. The little desert, and uninhabited—save by the wild seagull— island of Ichaboe was surrounded by three hundred British ships at one time, and hundreds of Irishmen with shovels and wheelbarrows were employed in loading them. Suddenly came the stunning news, "Ichaboe has come to an end—the last shovel full of guano has been shipped." Soon however, plentiful supplies of it were discovered upon other islands and promontories, and private parties bought the right from the Peruvian Government for the consideration of \$40,000. At the end of two years, the trade had increased to such magnitude that the Government cancelled their agreement, and since