I.—On the Preservation of the Seed of the Flax Plant in Ireland.
By George Orme Malley, Esq., Barrister-at-law.

[Read, Tuesday, 18th February, 1868.]

ALTHOUGH many treatises have been written, and many speeches delivered in this country within the last few years by landlords and agriculturists on the cultivation of flax, yet few have thought it worth their while to attract attention to the annual loss of the seed, which has been a continuous and deplorable instance of the reckless extravagance which characterizes the mode of cultivation hitherto universally adopted by the agricultural classes in Ireland. The value of flax seed imported from the Continent during the last three years into Ireland, has been in 1864, £205,929; 1865, £91,648; 1866, £146,700—Thom, page 772. If we could diminish sensibly this drain of capital, we would confer a great advantage on the country. The object of this paper is to show that such is within our power, and by ordinary exertion we can not only save one-half at least of this enormous annual expenditure, but also retrieve from utter and wanton waste a vast quantity of this valuable produce for feeding purposes.

Any person who has traversed, in the months of August and September, the flax growing districts of Ireland, must have been surprised at the quantity of flax boles rotting in the bogholes and steeping places along the highways. I have myself seen the young
flax springing up six and eight inches high on the banks of steeping places before those young and tender plants were cut down by the frosts of winter. The prevailing practice among the tenant farmers of Ireland at the present day is to pull the flax, carry it forthwith to the bog or steeping hole, throw in the sheaves, heap large sods or stones on the mass, and drown in the putrefying waters the rich growth of seed which clusters at the extremity of the fibre. To any reflecting observer, acquainted with the value of the seed thus annually wasted, this custom appears to be actual madness. A farmer anxious to save the straw for some useful purpose might as well destroy the wheat or oats which ripens in the ear. The poorest are often the most improvident, and with us the most impoverished peasant seems most extravagant in this respect, and most persistently addicted to this pernicious practice.

Anxious to ascertain if the recommendations of theorists were capable of practical adoption in our cold and changeable climate, I determined in the year 1865 to put the matter to the proof, and try by actual experiment whether the climate of the west of Ireland was favourable to the ripening and preservation of the seed, a practice which I was assured had been to a small extent successfully adopted in parts of the north of Ireland, and was prevalent on the Continent. In the month of August, 1865, I had a statute acre of flax growing "branchy," as it is termed, on a medium dry soil in the county Mayo, which on the recommendation of the useful flax instructor, a Mr. Neilson, I treated in the following manner—I pulled the flax a little later than I should otherwise have done, so as to allow the seed to ripen. I had it tied in ordinary sized sheaves, and set it up in long stooks with the heads of the sheaves uppermost, and inclining inwards like the letter A, or V inverted, so as to allow the air to pass unobstructed through its entire length. I did not cap the stooks—the object being to ripen the seed effectually. After the lapse of a week or ten days, I removed the entire crop into the haggard, and stacked it on ordinary bearers of timber three feet high, surmounted by rough boards and brambles, to preserve the seed from vermin, which particularly appreciate it as a valuable article of food, and then thatched the stack as you would an ordinary oat stack, and left it thus protected during the entire winter. In the following month of March, and immediately after the spring circuit, I had it removed into the barn, and employed six girls to thrash out the seed with a mallet, having a handle about three feet in length. Each girl was supplied with a mallet of this description, the handle being inserted at an acute angle. Standing on the butt of each sheaf the girls beat out the seed on the floor, holding the handle of the mallet very loose, so as to allow the flat part of the instrument to fall evenly and effectually upon the seed. By these means the seed was separated from the flax fibre as well as thrashed out of the boles, and gathered in heaps until the entire quantity was completed, which occupied a couple of days. I then had it cleaned through the ordinary winnowing machine, using the finest of the accustomed sieves, and afterwards "gave it the wind" on a win-
nowing sheet, in order to cleanse it effectually from the smallest seeds of weeds. I carefully gathered the shellings or broken boles and smaller seeds, the refuse of the machine, which, when mixed with bran and potatoes, and steamed, formed excellent feeding for pigs and cows in the months of March, April, and May, when provender is particularly scarce and dear.

Apprehensive that my seed might prove a failure, and that I might "lose caste" among the neighbours as an experimental agriculturist, I planted an equal number of home-grown and foreign extra picked Riga seeds in fresh earth in two small flower pots, and placed them on the mantel shelf, anxiously watching their respective progress in vegetation. To my great satisfaction (as Robinson Crusoe once said) I observed the home-grown seed springing up more rapidly and evenly than its foreign neighbour, and this immediately determined me as to the course I should pursue. I sowed three statute acres with the produce, and sold 109 quarts to my tenants independently of the quantity of light seed saved for feeding purposes. I agreed with those tenants to give them the seed at ordinary market price—payment after they saved their crop in the next subsequent October, if the produce turned out satisfactorily. Some of the cautious ones purchased half their seed in the shops, and sowed mine in juxtaposition with the foreign seed. I had thus a favourable opportunity of testing its quality by comparison in different localities, and in every instance it far surpassed the foreign seed, so much so that every one of the tenants expressed their regret that they had not purchased all from me, and paid the price with thankfulness. After I had thrashed the flax seed in March, I restacked the straw until the warm weather in May, when I steeped it in the ordinary way, sent it to the scutching mill, and sold it in Belfast at 7s. 4d. a stone, by which I realized £6 5s. clear profit, after deducting scutching expenses, transmission, commission, &c. Other flax steeped in the usual way in the same locality, and of ordinary sample, and which was forwarded by the same train to the same commission agent, fetched in the market of Belfast only 6s. 4d. a stone. I sold the produce of three acres at 8s. a stone, but as I despatched it at intervals, and as I was otherwise engaged, I neglected to keep an account of the return of profits. But the value of the seed alone was eleven pounds, exclusive of the feeding portion, and from this return, which was by no means a large one, you may easily calculate the quantity of seed annually lost to this country.

The quantity of statute acres of flax grown in Ireland in 1864 was 301,693; the quantity grown in 1865 was 251,433, and the quantity grown in 1866, was 263,207 and in 1867, 253,105. Allowing that one-fourth of that quantity was rippled, and the seed saved, you have the produce of nearly 200,000 statute acres annually lost. Computing the value of the seed at ten pounds per acre, which is below what my experiment produced, you have two millions of moneys worth annually rotted in the bog holes of Ireland. Can anything be more startling or deplorable? These statistics are not
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exaggerated. On the contrary, they are much below the actual loss. The bases on which they are calculated are few and simple, and incapable of error or deception.

In the foregoing observations, I have confined myself exclusively to the process necessary for agricultural purposes. By this method the fructifying powers of the seed are preserved, by allowing it to ripen effectually between the months of August and March, and it is more easily separated from the boles, after having been stacked and kept dry for that period. The ordinary rippling process, which is performed in the field, during the pulling of the crop, and when the boles are green, is not less important, as being calculated to preserve a vast quantity of valuable feeding material; but as the seed has not then arrived at maturity, I should hesitate to recommend it for sowing purposes in the following year, even though it may have been saved with the greatest care and circumspection. Although rippled seed may not be suited for sowing again, yet the process is so easy and the produce so valuable for feeding purposes, that it is a reproach to the landlords of this country that they do not urge their tenantry to adopt it universally. Instructions for the rippling of flax have been printed and circulated by the Royal Agricultural Society by the aid of their district instructors, and it would be a waste of time for me to dilate upon a subject which has been so ably discussed and explained in the valuable little treatises to which I refer. It may be said that the fibre is injured by the rippling process. This I deny. I have tested it, and “experto crede.” If the seed is allowed to ripen a little more than usual, the ripple will take off the boles without injuring the firm part of the fibre, and the additional ripening, provided it is not too great, will not prejudicially affect the general sample of flax. Then why, it may be asked, is this waste annually committed? The answer is obvious to those who have observed the customs and are acquainted with the condition of the tenantry of Ireland. The flax crop comes in when the turf is saving or getting home, and before the oat crop is ripe. The peasant has no rippling combs, and even if he had, he has no inclination to devote his time voluntarily to the rippling process, neither has he barns or large winnowing sheets to collect the seed. If the weather be wet the process must be performed under cover, as the fibre will not pass through the rippling comb when damp, but will break short off, and the seed will moulder and heat if heaped up in a damp condition. But these difficulties are easily provided against if the resident landlords would go eagerly about it, and induce their tenants to steep only half their crop to meet their immediate wants, and stack the rest until March. I despair of inducing the poor tenantry to stack the whole crop until March, as they cannot “lie out of their money,” as they term it. But ready money is as valuable to them in March, if not more so than any other time, and half their crop of flax would be a valuable resource at that time. The importance of the food supply derived from the boles would be another advantage; as no rippling is necessary for the latter process, the separation of the seed from the fibre is more easily effected, and the fibre itself less injured.
If tenant farmers would try the process once, they would be sure to repeat it; and I shall be fully rewarded if the reading of this paper will have the effect of inducing a few of those who hear me to turn their attention to the subject, and to induce those who have the means and the opportunity, to try a practice which has been so lucrative elsewhere, and which we have so long and so foolishly neglected.


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The laws affecting the relations between landlord and tenant have so frequently been discussed by the members of the Statistical Society, that some curiosity may naturally be excited by the subject being again brought forward, as to whether anything novel can now be advanced upon it. It is therefore not without some hesitation that I now venture to introduce it, more especially as much that I have to say has again and again been enunciated from this place with a degree of authority to which I cannot lay claim. The subject is, however, of so much importance, and so great have been the difficulties interposed in the way of properly dealing with it by extravagant and unreasonable demands, that any attempt at simplifying the matter is, at all events, deserving of consideration.

It is not my intention to discuss in detail the several apparently plausible demands now attracting public attention in connection with the subject—such as fixity of tenure, the compulsory sale of property with the view of creating a peasant proprietary, or schemes of compensation for improvements in consonance with the inflexible rules provided by an act of parliament. The first of these has been dealt with by one of our Vice-Presidents in an able and exhaustive address, which left nothing further to be said upon it. As regards the desirability of making provision for the creation of a peasant proprietary, the subject is deprived of much of the interest which it might otherwise possess, by the practice, so many years in operation in the Landed Estates Court, of selling property in small lots; and if it had been found that further subdivision led to increased competition, there can be little doubt that the practice would have been still further extended, the object, of course, being to secure the largest amount possible by the sale of the property. And in reference to schemes of compensation for improvements, no one will be found to maintain that the improving tenant is not entitled to the fullest compensation for his outlay; yet any attempt on the part of the legislature to provide the requisite machinery to secure this being done, must, from the very nature of the transaction, prove abortive;