roving distance. I find it quite advantageous, in the summer, to open my gates occasionally, and give my fowls a run in the garden and field adjoining their yard, for a few hours in the day, when grasshoppers and other insects are plenty. I had two objects in view; one to benefit the fowls, the other to destroy the insects It will be found, that the fecundity of the hen will be increased or diminished according to the supply of animal food furnished.

Hens moult and cast their feathers once every year, which generally commences in August, and lasts till late in November. It is the approach, the duration and consequences of this period, which put a stop to their laying. It is a critical time for all birds. All the period while it lasts, even to the time that the last feathers are replaced by new ones, till these are full grown, the wasting of the nutritive juices, prepared from the blood for the very purpose of promoting this growth, is considerable; and hence it is no wonder there should not remain enough in the body of the hen to cause her egg to grow.

Old hens cannot always be depended on for eggs in the winter, they scarcely being in full feather before the last of December; and then, probably, may not begin to lay till March or April, producing not more than twenty or thirty eggs; and this is probably the cause of the disappointment of those who have supplied themselves at the markets for their stock to commence with, and get but few or no eggs. As pullets do not moult the first year, they commence laying before the older hens, and by attending to the period of hatching, eggs may be procured during the year. An early brood of chickens, therefore, by being carefully sheltered from cold and wet, and fed once a day on boiled potatoes, *warm*, with plenty of grain, in the feeding hoppers, (which will be hereafter described), and occasionally a little animal food, will begin to lay in the fall, or early in the winter.

"When," says Bose, "it is wished to have eggs during the cold season, even in the dead of winter, it is necessary to make the fowls roost over an oven, in a stable, or to erect a stove in the poultry-house on purpose. By such methods the farmers of Auge have chickens fit for the table in the month of April, a period when they are only beginning to be hatched on the farms around Paris, although farther to the south. It would be desirable to have stoves more common in poultry-houses near cities, where luxury grudges no expense for the convenience of having fresh eggs."

A writer in the Cultivator under the signature of B., says, "I never allow my cocks to run with my hens, except when I want to raise chickens." He recommends giving them fresh meat chopped fine, once a day; never allowing any eggs to remain in the nest, for nest eggs. "My hens," continues the writer, "always lay all winter, and from 75 to 100 eggs each, in succession. There being nothing to excite the animal passions, they never attempt to sit. I have for several years reduced my theory to practice, and proved its entire correctness.

It must be obvious that the presence of the male is *not* necessary for the production of eggs, as they are formed whether the male be present or not. Of course such eggs will not produce chickens."

In contradiction to the foregoing, Boswell says, "To promote fecundity and great laying in the hen, nothing more is necessary than the best corn and fair water; but malted or sprouted barley has a good effect, whilst the hens are kept on solid corn, but if continued too long they are apt to scour. It must be noted, that nothing is more necessary towards success in the particular of obtaining plenty of eggs than a good attendance of cocks, especially in the cold season; and it is also especially to be observed, that a cock whilst moulting is generally useless."

"Man," says Parmentier, "who thinks of nothing but his own interest, has attempted several means of rousing hens from their torpidity, when they cease at the naturual period of the year to lay, inasmuch as it seems very hard to pass through the winter without the luxury of eating new laid eggs."

The method of the ancients was, rich and stimulant food, such as toasted bread soaked in ale or wine, barley half sodden, tares and millet.

M. Reaumur made several experiments with a view to the object in question. A certain class of food, and of seeds, he says, are much extolled in many places, as tending to promote the laying of eggs, but nothing has yet been determined by our choice; for in this way, the sum of eggs laid by the hens of a poultry-yard, might be distributed in a far more equable manner, over the several months of the year; and if, as is probable, each hen can only produce a certain number of eggs, we should be glad to have a portion of them yearly produced in winter, The necessity we are under of keeping great quantities of eggs in the season when they are laid, causes an uncommon quantity to be spoiled every year, from too long keeping or want of proper caution in preserving them; and hence the importance of the question—"Whether it may not be possible to make hens lay in winter?"

TO CORRESPONDENTS.

J. W., St. George, Nov. 22, rec'd. Port Robinson, 29th do., papers sent.

W. K., Paris, request attended to.

J. S. do. always mention the amount of money you enclose.

J. T. Otterville, received.

J. T. Selborne. One of your queries is answered on the 178th page. The other we can answer very shortly by saying that a Lawyer should make out his bill or the party may refuse to pay it. When made out the party may take it to the proper officer and get it taxed. A lawyer is not obliged to write to a deft. but may issue a writ at once. The items seem to be right enough if the amounts were so. We can't tell what the amount should be, not knowing exactly what was done. Not over £1, exclusive of Shff. fees. Every thing that is charged for must not only have been necessary or rather legal, but also proved to have been done or the taxing officer will not allow it. Yours of 2nd Dec., just received. You have our thanks for your efforts.

D. C., Nov. 23nd and Dec. 1st received. We are sorry for your misfortunes and have no objection to your doing as you propose.

CANADA FARMER.

December 4, 1847.

THE WIRE WORM.

Our correspondent, Mr. Stephens, assures us of the appearance of this enemy of the farmer in some of the Townships in the western part of this District; we have also heard it complained of in this neighbourhood. Its ravages occasionally destroy whole crops, or render them of so little value as not to be worth the trouble of harvesting. It is generally confined to a particular description of soil, and we have no apprehension that its appearance will be general. Unlike the weevil there are certain soils where it never makes its appearance. To prevent the partial ravages which it may make, every proved remedy should be made known. In addition to the plan mentioned by our correspondent, we will state some of the methods which are resorted to to effect its destruction. Mr. Tarrant, in the *British Farmers' Magazine*, recommends the cleansing of infested fields of all weeds, and drilling white mustard seed, by which, he says, all the wire-worms will be banished by the end of the season. This, however, is a very inconvenient remedy: the difficulty of ridding the land of the mustard proves to the farmer that he has only exchanged one evil for another. The use of a heavy roller, when the worm is near the surface, early in the morning, is sometimes tried with good effect. If it does not entirely eradicate the worm, it destroys many of them, and prevents the development of those it does not kill, so as to render their power of mischef pretty nearly innocuous. We have occasionally known a solution of vitriol applied to lands infested with the wire-worm; but the costliness of *his remedy renders it nearly or altogether* impracticable. Lime, as a remedy, has been tried without success In some instances paring and burning the land has been resorted to, in England, to destroy the worm. This, of course, is an effectual remedy, but quite impracticable in this country. Salt, at the rate of four to eight bushels an acre, has lately been tried in England with entire success. In desperate cases this is a remedy which might be necessary and advisable for our farmers to adopt: for, independant of its effect upon the wire-worm, salt, on certain soils, serves a valuable purpose as a manure and thus a double advantage is gained by its application.

FLAX CULTURE.

The following remarks on the subject of Flax, are by Mr. Skinner, the veteran Editor of the Farmer's Library, published at New York. We believe that having a due regard to all the wants, exigencies, and circumstances of our country, the culture and manufacture of Flax *must* engage a large share of the attention of our farmers in a very few years Wheat, our chief export, is threatened with serious loss, and it becomes us to be prepared for contingencies that are very plainly foreshadowed. The remarks of this American writer are just as applicable to Canada as to his own country. Let us be on the alert; read, mark, learn, and inwardly digest:—

ON THE CULTIVATION AND MANAGEMENT OF FLAX.

Among other objects to which we apprehend the agriculturists of the United States might have recourse, to diversify their staples, and so, by diminishing the production, augment the profits of each, *Flax* is one that we are inclined to think would reward the labour applied to it, if that labour were enlightened by a knowledge of the most approved methods of cultivation, and preparation for market. Professing not to be ourselves by any means well versed in the details of this branch of industry, it is our intention to seek the best lights to be had; not only on this, but in regard, also, to *Hemp* and to all other articles, which, though of less importance in amount, serve yet to make up the aggregate of National wealth. May it not be assumed that the extension of the growth of flax is restrained not only by the substitution of cotton, as a cheaper article of clothing, by the dearness of labour in our country, but also by ignorance of the best kind of land, and mode of preparing it; and especially by an impression that *its cultivation is attended with great exhaustion of the soil!*

We have just received from England a work lately published there, which appears to go fully into all other views of the subject, besides "*the improved mode of the cultivation and management of flax.*"

From much more that is said on the point of its being a great exhauster, and in contradiction of that impression, we have only room now for what follows in the next page.

We have on other occasions, intimated how much better it would be to form associations for the promotion of knowledge and the growth of *particular branches* of industry, than to attempt, vainly as we do, to achieve great improvements, by means of a single society to embrace a great number of objects. Aiming to do too much, we end by accomplishing next to nothing.

In Ireland, a society was lately formed, called the "*Flax Improvement Society.*" Under its auspices behold the steady increase which has taken place! In the spring of 1844 the quantity of flax sown was 40,896 hogsheads of seven bushels each, while in 1843 it was 37,400. On the estimate that each hogshead would sow three acres, the quantity of land in 1843 was 112,200; and in 1844, 122,688—increase 10,488 acres. Suppose each acre, according to their estimate, to give an average produce of 600 of scutched flax, the entire produce of Irish flax, in 1843 was 36,465 tons, and in 1844 39,611, being an additional *value* of £141,507 or more than half a million of dollars. In three years, since the formation of the society, the *increase* in the value of flax was estimated at £675,000 or $3,275,000, a sum, says the writer, which would formerly have been paid in bullion to foreigners, but is now circulated among the farmers and laborers of Ireland.

May we not bring about the same proportionate results for our country, with silk and flax, wool and hemp, and grapes and wine, and other things? Help us, good readers, help us in these inquiries!

James McAdam, secretary to the Belfast Agricultural Society, says, "As a proof of the great demand for flax at present, I may mention that from *this* port alone, orders are now out for 300 tons of flax from Egypt, and for 2000 to 3000 tons, value £70,000 to £100,000 ($500,000) from the Baltic; and this in spite of the largest home-grown crop for several years. There have lately been erected in this neighbourhood 60,000 additional spindles, which will be at full work, during the ensuing year, and which it is calculated will consume 3000 tons *additional* flax, of the value of half a million dollars yearly." There are in Leeds sixteen extensive firms engaged in spinning flax, who keep in constant employment at least 10,000 hands.*

Why cannot America rival them in this, as it has done in the manufacture of cotton and wool! Are not all the mountain valleys, in the neighbourhood of our immeasurable but unused water power in the south and southwest exceedingly well adapted to the growth of flax! But as to the exhausting nature of the crop, says the writer in hand:

"The main point upon which we rest our assertion that flax is not necessarily an exhauster of the soil, as far as its composition is instructive on this point is this: Exhaustion of the soil, as the word implies, is the removal out of it of those elements of vegetable food which it contains, and in the abundance of which its fertility consists. Now plants derive all their mineral portions from the soil—all those portions, in fact, of which, when they are burnt, their ashes consist—and upon the quantity and quality of them their power of exhausting the soil depends.

"Taking the whole flax plant, when harvested, *Dr. Kane found it to contain 5 per cent. of ashes;* which, compering it with other plants, is a large proportion; but the whole of the plant need not be carried off the farm. The fact is, NOTHING BUT THE FLAX SHOULD BE CARRIED OFF THE FARM; the seed SHOULD BE CONSUMED UPON IT; the STEEPING WATER SHOULD BE USED as liquid manure—and none better can be applied, the bone or stalk on which the fibre grew, when separated from the flax by the operation of breaking and scutching, SHOULD BE BURNT—as it will not rot for years as manure—and carried to the dung-heap. The fibre is THE ONLY THING CARRIED TO MARKET; and the point to be ascertained by one who cultivates flax as he ought, in order to make up his mind as to the exhaustion of his farm consequent on its cultivation, is the mineral matter carried off in the fibre; and this, on Dr. Kane's authority, and for the satisfaction of all who wish to cultivate the crop, we proclaim to be most insignificant in quantity; in fact, you may take a bundle of flax fibre, and burn it, and it will leave SO ASHES.

"I shall conclude these remarks by adding, from the columns of the *Agricultural Gazette*, a report of the speech of Dr. Kane, on this subject, at Markethill Agricultural Society. The chairman, W. Blacker, Esquire, said:—'Gentlemen, I beg now to request your particular attention to such observations as D. Kane may be kind enough to make.'

"'Dr. Kane said that he felt great pleasure in according to Mr Blacker's request that he should endeavour to explain to the farmers present the principles upon which the employment of the refuse of the flax crops, as manure, is proposed. *It is really very simple; and he felt satisfied that,* in that neighbourhood, where so much activity and intelligence were applied to the improvement of Agriculture, it only required that the reasonableness of any practice should be shown, in order that its adoption in practice might be secured. Every farmer present was aware that crops exhaust the soil; that the plants take out of the ground a number of materials, and that it was necessary to restore a similar material to the ground, in order to keep up its fertility; therefore, the manure which the farmer puts in with or before his seed is, in a degree, the raw material of which the grown crop is to be made. It is just as much a part of the plant as the seed itself. When the farmer sells and sends away his grown crop, to be used for food, as in the case of wheat, or oats, or potatoes, he hereby sends away and sells the essence of manure which he had put into the ground; and, as he thus gets paid for the manure, when it is exhausted, he must put in a much more for the next crop, which is to be dealt with in the same way. Now, in the case of flax, there is the important peculiarity that it is not eaten; and hence does not return to the land any manure in the ordinary way, while it takes out of the soil just the same material as oats or potatoes; so that it is really a very exhausting crop, if we only look to the growth of it. But the flax crop differs from other crops in this—that the value of oats or potatoes, and all food crops, depends on what they take out of the ground; while the valuable part of the flax is the fine fibre, or thread, which has taken out of the ground. If you burn away a bundle of flax-straw, it will leave behind a large quantity of white ashes, which consists of the different substances which the plant took out of the ground; but if you burn away a bundle of well-dressed flax, it will leave no ashes. Now, what has become of the ashes? They have evidently been carried off with the waste parts of the plant in the steeping and dressing. They are thrown away; and yet they are materials of which the plant had robbed the soil, and which should be

* According to the census of 1840, there were in the United States but 1,628 persons employed in flax husbandry altogether, and the whole capital invested, is put down at $208,067; eighteen States are put down ——!