

## Notes by the Way.

**COOKED-FOOD.**—We have always held, as our readers know, that except in places where "fuel and labour" are very cheap indeed, cooking food for cattle cannot possibly pay. Therefore, we were highly pleased to find so good an authority as "Hoard's Dairyman" taking precisely the same view of the case as we do. The, we may say, universal practice of English farmers and dairymen is with us. There are who recommend boiling uncrushed linseed for a couple of hours or so! To them we beg to recommend, as we have done a score of times, to crack the linseed and steep it in plenty of cold water. If there is no crusher handy, a mixture of about 2 bushels of oats to one of linseed will not clog the millstones, which linseed alone will assuredly do.

"Unless fuel and labor are very, very cheap, we do not believe there will be any economy in either boiling unground barley or scalding "chopped" barley. The digestive apparatus of the cow seems to be constructed with special reference to taking her food uncooked, and we cannot find any authentic record of experiments which show that cooked food produces better results than uncooked food, provided the latter is in a condition to be properly masticated. It would not be economical to feed a cow unground barley, and if it costs less to cook it than to grind it, and not too much of the cooked grain passes off undigested, boiling may take the place of grinding."

**SEED-GRAIN.**—Some 40 odd years ago, we were in the habit of attending the Cambridge (Eng.) market two or three times a month during the spring for the purpose of buying barley and oats for seed. The first time we went there we were astonished to find the Webbs, Jonases, Claydens, and others of the leading farmers of Essex and Hertfordshire, buying barley for seed that seemed to us—and was—little better than "Chickens' victuals." Upon enquiry, we found that this was the growth of the fenny soils of Huntingdonshire and Cambridgeshire, and though queer to look at was pure Chevalier barley the indisputable descendant of the original five ears of barley found accidentally and carefully perpetuated by Dr. Chevalier, near Framlingham in Suffolk. This used to be bought by the great farmers of the Chalk soils in the aforesaid counties for seed, and when transferred to their land, the thin, impoverished looking grain, that cost some 24s or 25s a quarter, became the parent of the finest malting barley in the world, for which we have known more than twice as much paid as the seed originally cost. Now, we have heard this that we have stated doubted, so our readers will understand that we were rather pleased at reading the following from the Principal of the Agricultural College at Downton, near Salisbury, England:

## SEED.

There can be no doubt of the importance of good seed, and that money is well laid out upon selected pedigree barley. It is a question whether the heaviest and plumpseed is always to be recommended, but the "sort" is of the utmost importance. First-class barley can be grown from the screenings of really good malting samples, and, rightly or wrongly, many good farmers maintain that seed, although a little thin, is capable of

growing a crop possessed of all the requisite qualities. On the contrary, big and plump seed may produce a thin progeny if the season is not propitious. (1) The well-known fact that like produces like must not be lost sight of, but in the screenings from a bulk of first-rate barley the qualities exist. If the quality of pedigree barley is only derived from repeated passages over the screen, there appears to be but little guarantee that the produce will all be of the same character. Breeders of animals know that the accidental condition of cattle or sheep is not the element which stamps excellence on the offspring. It is the "sort", not the fatness, which tells, and this would lead to the opinion that the thinner barley from good stock may be as likely to produce good quality as the fattest grains which cannot pass through the screen. It would seem, then, a pity to hold back high-priced barley for seed, when samples which have suffered a little in colour from rain, or are derived from the under side of the screen, can be bought or reserved at much advantage in price. These views are not advanced positively, and if they invite remark so much the better. They are worthy of consideration, for profits are not large enough to be diminished by sowing corn for which good money can now be obtained. The best sample of barley I ever grew was from screenings from Hallett's pedigree, from a well-known and reliable firm, at moderate market prices.

**RED-CLOVER.**—As we have often remarked in this periodical, if red-clover, "trifolium pratense," is sown too often on the same land, it will eventually refuse to grow. Mr. Hall, of Shebrooke and others doubt this, but the testimony of hundreds, nay of thousands, of the best and most experienced farmers in England prove the truth of the assertion. Throughout the Eastern counties of England, whereas the original practice of those following the four-course rotation was to sow clover every fourth year, no one dare sow it more than every eighth year, many postponing its recurrence to the twelfth year, as thus:

Original four-course rotation: roots, barley, clover, wheat;

Then, four-course rotation: roots, barley, clover, wheat; roots barley, beans or pease, wheat;

Now, in many cases: roots, barley, clover, wheat; roots, barley, beans or pease, wheat; roots, barley, trefoil, wheat.

Beans on heavy, pease on light, land. And this last is the course now generally adopted on almost all the farms in Essex, Cambridgeshire, etc., and its adoption is entirely owing to the prevalence of what we call clover-sickness. We beg our readers to weigh the answer given to the question we annex, from the English Agricultural Gazette, and to consider if it is likely that such an opinion would be held if there was no such thing as the "clover-sickness," the cause of which is, according to Sir John Lawes and all English farmers, the too frequent recurrence of the plant on the same land.

(1) In 1863, and again in 1865, we imported, from England some of the finest Chevalier barley we ever saw, and distributed it for seed among the Chambly farmers—gratis—on condition that they would sell us the produce for our brewery. The yield at harvest was very poor in quality, in both seasons, and it took two or three years before the grain at all resembled its parent.—Ed.

"Clover Dying off."—Will you advise me what to do with a field of clover that is dying off in spots, and daily getting worse? It was seeded down last April. It died off in the same way when last seeded out, four years ago. It is a light sandy soil. Your information will oblige.—C. T. (It looks very like clover sickness, and this view is strengthened by the description given of the soil. Four years is too short an interval, and the fact that the clover died off last time is suspicious of the land being unable to support clover at present. My recommendation is to plough up as soon as possible, and sow peas. You must judge by the condition of the soil, for if good it might grow barley. You might also bring it into roots or vetches, but the difference between a crop which brings in money and one which absorbs money is always a point to be considered.—J. W.)

The frequent repetition of this subject is doubtless a bore to many of our readers, but the matter is an important one, and that must be our apology for insisting upon it.

## CULTIVATORS OR GRUBBERS.

Mr. Wrightson, a thorough farmer in Wiltshire, Eng., does not seem to care much about the ordinary cultivators made in that country, but speaks very highly of the "Spring-tooth," introduced by an American firm; "it is," says he, "destined to alter the opinion of our farmers on this point; it is a wonderful implement, elegant in construction, immensely strong, and absolutely irresistible. A spring-tooth cultivator will tear up a road, and two or three operations will produce a tilth fit for anything. The tines are of the finest steel, tempered in oil, and true as the metal from which they are formed. It is a formidable rival of steam, and is wonderfully light in draught. Besides, being fitted with a seed-box, it can be used for at once preparing a seed-bed and depositing the seed in times of pressure. Another innovation which must soon become general is the two-horse drill, also of American or Canadian origin. Who would continue to use a four-horse drill requiring two men and a driver when one man and two horses can do the work? Steerage has been rendered unnecessary, for with a pair of horses and pole, and driver seated as on a horse rake, a larger area can be drilled in the day at one half the expense." But, while we fully agree with Prof. Wrightson's opinion of the cultivator, we cannot go so far as he does in praise of a grain-drill without a steerage, as without that appendage, no use can be made of the horse-hoe, which is commonly used to hoe grain in the spring on all the best South of England farms, and very pretty, and very cheap work it does.

**ARTICHOKES.**—The tuber commonly called the "Jerusalem Artichoke," has one peculiar merit; whereas the potato requires to be boiled in order to break up the starch-cells, the starch in the artichoke is in a special form, known to science as "inuline," and is assimilable by stock in its uncooked state.

Another peculiarity of the plant is its name: it is not an "artichoke" at all and "Jerusalem" is only a vulgar adaptation of "Gire-sol" (sun-turner), from an old superstition that the bud of this plant continually follows the sun in its (apparent) revolution round the world.

Breconat's analysis of the tubers of this plant is as follows:

Starch—inulin...	30
Albumen .....	10
Sugar .....	148
Gum.....	12
Oil.....	1
Woody fibre...	12
Ash.....	17
Water.....	770
	1000

It contains about the same quantity of water of the potato, but is rich in carbohydrates and flesh-formers as will be seen by the following table, from "Hoard":

	Flesh formers.	Fat formers.
Carrots... ..	6	66
Sugar beets .....	9	136
Mangels... ..	4	102
White-turnip... ..	1	40
Artichoke... ..	10	188

The "fat-formers" are, of course the carbohydrates, and the "flesh-formers" the nitrogenous matters.

As the yield of the artichoke, if treated like the potato, is very large, we cannot see why it is not more generally cultivated, particularly as, if set in any out of the way corner, it may be left to itself for several years, there being always enough small tubers left behind in the ground after digging to afford plenty of seed for the next crop; a sufficient reason for not planting the artichoke in any land under a rotation, as it is mighty difficult to get rid of it, the frost having no more effect upon the tubers than it has upon a polar bear. As for turning hogs into the piece "to clear up the last remains a little late in the spring," as a writer in "Hoard" advises, we prefer leaving land alone at that season, for a lot of pigs rooting about before seed-time will not facilitate the obtaining of a fine tilth. Did any of our friends ever dig a bed of parsnips in April or early May? A nice mess it makes, particularly if the land is a little heavy.

**BRITISH AGRICULTURE.**—The following extract from the "Country Gentleman" is a puzzle. What it can mean we have not the least idea. We presume the figures 1, 693, 947, represent the number of acres of wheat in England, but to say that this "average" represents an increase is absurd. The figures due to England are given to Wales, (1) that grows but little wheat; and as for Scotland, with its 122, 148, 628 bushels of wheat in 1896, that country does not grow that quantity in ten years. Why "Product" of 1895 and "yield" of 1896? It is all dark.

"British Agriculture".—The official preliminary statement of yield of cereals makes the average yield of wheat of 1896 33.68 bushels per acre. In 1895 it was 26.23. Average 1,693,947, also an increase. The yield of wheat is 4.87 bushels more than the average of ten years, that of barley 0.95 bushels more, and of oats 1.4 less. The estimates are as follows.

	1895—Product.	1896—Product.
England.....	57,052,952 bu.	37,176,257 bu.
Wales.....	70,774,778	68,600,945
Scotland.....	111,015,907	122,143,628

The estimated yield of barley is 33.63 bushels, and of oats 36.83."

(1) Curious to think, nowadays, that Palestine, which country one used to picture to oneself as so large, was very little larger than Wales, viz., 7,000 square miles! Jerusalem would go into Hyde-Park, London.—Ed.