

crop being consumed, where it grows, by sheep receiving, in addition, cake, horse-beans, pease-haulm, and clover-chaff.

The Sparrow Pest.—The Chester, England, Farmers' Club has recently paid for the destruction of 7192 sparrows, at the rate of 6d. for every dozen killed, and yet the number of birds is said not to have been appreciably affected. I am afraid if we do not try to stop the increase of these interesting immigrants soon, we shall find them pretty nearly as bad as are the rabbits in Australia. I think I mentioned before that Mr. Irving, of Logan's farm, has been obliged to give up sowing fall-wheat, as that grain ripening before barley and oats, the little robbers utterly destroy it.

Importation of Store Cattle.—The attempt to make a trade for the importation of Canadian store cattle into the north of Scotland has been watched with interest, and few will be surprised to hear that it has collapsed. A meeting of shareholders is called, when the directors will recommend that the company be wound up by voluntary liquidation. The company was registered in July last, when 899 shares, on each of which £1 had been paid, were allotted. Three cargoes have been imported. On the first there was a loss of £215, on the second a profit of £48, and on the third a profit of £50. Only 12 cattle were lost, for which the company received £98. The total loss, including all the working, &c., has been £356, and it is anticipated that the shareholders will receive 12s. per share.—*Gloucester Chronicle.* (1)

Warm water vs. Music—So cows will give ten per cent more milk if given warm water to drink, will they? Pooh! that's nothing: "Cows are sensible to the charms of music. In Switzerland, a man-milker or milk maid gets better wages if gifted with a good voice, because it is found that a cow will yield one fifth more milk if soothed during the milking by a pleasing melody"!!!

Brewer's grains.—Well, I always thought that, during my brewing time, I did not leave much stuff worth preserving in the grains. I also found that my cows fed upon these grains at the rate of a bushel a day with plenty of hay gave a lot of very poor milk, and such, I believe, is the experience of every farmer who has tried them.

This is the analysis of the great German agricultural chemist, Dr. Wolff, and is, I have no doubt, perfectly correct:

Water.	Ash.	Digestible			Nutritive ratio.	Value per 100 lbs				
		Albuminoids.	Carbohydrates Fibre.	Fat.						
75.2	0.3	5.9	3.9	13.2	1.5	4.8	11.3	1.2	3.0	0.30 ct.

No doubt, a nutritive ratio of 1:3 is a very strong point in any food, but how about the 75.2% of water. Mr. E. W. Stewart, in a recent number of the Country Gentleman, says, in answer to a question: "Brewers' grains in a sweet condition, if fed on cut hay, would be a rich nutritious food for breeding ewes. But as it is a very concentrated food, it probably would not be safe to feed it alone." The Brewer, whose grains Mr. Stuart fed his sheep on, could not have un-

(1) I have since heard that the company intends to try on for two years more.
A. R. J. F.

derstood the business of extraction. A bushel of grains weighs about 70 pounds, whereof 52.50 lbs. are water. At 30 cents per 100 lbs. a bushel of grains ought to be worth 21 cents, but Mr. Stewart's correspondent pays only 10 cents a bushel for what he uses, and in England the price is about 7 cents. At Dawes' brewery, Lachine, they fetch 10 cents in winter and 4 cents in summer, and so in Montreal. I take it, in such a thoroughly practical business as milk-dealing and brewing, we may trust the cowfeeders for knowing the value of what they are buying, and the brewers for knowing the value of what they are selling.

New-England farms.—The Country Gentleman, of February 16th, begins an article thus: "The great number of abandoned Dairy-farms in New-England, &c., &c." Are these the farms that are liberally offered as allurements to the English tenant-farmers to settle in the States at less than the original cost of the buildings on them? After saying that "the relative amount of plant-food derived from the atmosphere by different growing plants is not yet fully agreed upon among scientific and practical men; and in selling butter, cheese, milk, and meat, from a dairy-farm, more material is carried off than when the whole product of the crops remains and rots down on the land," the editor concludes by the very sensible observation that "after all, while we may be assisted in our investigations by the teachings of science, we must at last turn to practical results for reliable conclusions." Which is precisely the reason why the writings of Lawes and Gilbert are of such extreme value: they are all based upon practical experiment conducted on the most exhaustive scale.

Early Sown Oats.—Sowing oats on frozen ground is a very important question. I have always been a great advocate of early sowing in the spring, and I intend to sow about ten acres on the frozen ground, and the rest of the field, ten acres more, when I can work it and give it a fair trial. I wish some of your correspondents would answer the following question: Does the ground have to be smoothed down and furrows filled in in the fall where you sow on the frozen ground? What time does the frost break up in the spring in the different States? It breaks up here about the last of March or first of April. What kind of oats would be suitable to sow on frozen ground?
W. F.

North Norwich, Ont.

The above is an extract from the Country Gentleman of February 16th. I have seen something of the sort once or twice before. The Editor does not answer the question, for what reason I cannot tell. If the object of W. F. is to feed the crows, oats, mice, squirrels, and other vermin, I should say he was going the easiest way about it. If this is the proper way to treat land, why not give up the idea of *cultivation* being beneficial to the soil? Fancy filling in the furrows before winter! How is the snow-water to get away in the spring?

Roots, &c.—The first thing most of my readers will set about in the spring, is the preparation of the land for potatoes, roots, and corn. These all should follow a grain-crop, the last in the rotation, for sowing them after grass is, in my opinion, wasting the wealth of the soil. There is no crop that so delights in the food left in the soil by the accumulations of the three or four years during which it has been lying down, as oats, and however well corn or potatoes may thrive after turf, the preparation of a three year-old ley for either of these crops must be troublesome and, generally speaking, imperfect. Clods, unbroken lumps of turf, will occur, and in horse-hoeing, or harrowing, the implement run-