

feet wide and a foot and a half or two feet deep; and where there are many cabbages to bury, it may be dug with the aid of a common and a subsoil plow, the loose earth being shoveled out. Place a few inches of coarse brush or small poles in the bottom, and on these coarse straw. Trim the roots and coarser leaves of the cabbages and then place them upside down, compactly, in the trench, three or four in width of the trench. If this is deep enough, three tiers may be placed in them, closely packed, highest in the middle to give the form of a roof. Cover with straw, stiff rye straw is best, and afterwards at first with a few inches of earth. A slight freezing will not hurt them on the occurrence of a cold snap if the thawing is gradual. Ventilation should be provided at the ends and at regular intervals, by piles at the top filled with straw; or if long rye straw is used, the upper ends may be left uncovered to serve for ventilation. Before the final freezing up for winter the earth covering may be increased to nearly a foot—the thickness of earth being less if there is plenty of straw. More straw and less earth is a good rule, and the ventilation will also be more perfect. Warm or open winters will require more care in ventilation than continuous severe winters, and special care must be taken to prevent too close confinement and rotting. The finer the earth is pulverized, the more perfect a non-conductor of heat it becomes when used for covering.

The advantage of this mode of keeping cabbages over boxes in the cellar is the uniform low temperature, nearly down to freezing, from the walls of the trench; at the same time that the earth furnishes enough moisture to supersede any of the moss packing, the cabbages being in close contact with it and with each other. As soon as thawing weather occurs towards spring, the cabbages will be found in excellent fresh condition; and if needed they may be taken out during winter by breaking the earth cover with a crowbar. A modification of this mode of covering may be adopted where plenty of evergreen branches are to be had, by placing six or eight inches of forest leaves on the rye straw, and on these—to prevent the winds scattering them, and to turn the rain—several inches of evergreen branches of the right length, upside down.

The Wheat Crop in England.

Sir J. B. LAWES has communicated to the press his annual letter on the probable wheat yield of the current season in Great Britain, from which we give the following extracts:

The wheat crop of the present year, which has hardly yet been secured over the whole of the British Islands, was at one time supposed by some to promise to be one of the worst of the present century and probably as bad as that of 1879. Very little consideration of the characters of the two seasons is, however, sufficient to show that the year just past was much more favorable to the wheat crop than that of 1878-9. While the mean temperature was below the average in both seasons, both in the winter and the summer, not only was it not so low during the growing months of 1888 as in those in 1879, but there was a very great difference in the rainfall of the two seasons; for while in 1878-9 there was a great excess of rain throughout the winter, spring, summer, and autumn, there was in the season just past a considerable deficiency throughout the winter and spring, and only an excess in June, July, and part of August; September again being, upon the whole, a dry month. The great influence on the subsequent growth of wheat, of the weather before the period of active aboveground growth, was clearly illustrated in our paper on "Our Climate and our Wheat Crops" in the case of the season of 1854. The summer of that year was comparatively cold and sunless; yet the wheat crop was one of the best of

the present century. The early winter had been unusually cold, but the remainder and the early spring were warmer than the average, and the season was extremely dry from seed time to harvest; the mild spring and the dryness obviously compensating for the deficiency of temperature during the summer months.

After reviewing the produce of the experimental plots at Rothamsted the present year Sir John concludes as follows: It will be obvious that, with a season showing such irregularities, it must be difficult to form an accurate estimate of the average yield of the country at large. The average, calculated in the usual manner from the results of the selected experimental plots, amounts to 26½ bushels per acre, at the standard weight of 61 lb. per bushel; that is, only about 1½ bushel below the standard average of 28 bushels. As already said, in adopting the average of the experimental results last year, as indicating the average of the country at large, it was supposed that the crop was under rather than over estimated; and it is possible that the figure for the present year may err somewhat in the contrary direction and rather over rate the crop of the country. There can, at any rate, be no doubt that the average produce of the harvest of 1888 is inferior to that of 1887 both of quantity and quality; but notwithstanding the irregularities and deficiencies which have been referred to, it is certain that in many cases much more than average crops have been obtained. I propose, therefore, to base my estimate of the produce of the United Kingdom this year on the experimental results without modification, leaving it to others and to the future to determine whether any deduction from the estimate so arrived at should be made.

Taking the average population of the United Kingdom for the harvest year 1888-89 at rather over 37½ millions (37,771,175), the estimate requirement for consumption, at 5.65 bushels per head, would be about 26½ million quarters (26,675,892). The area under wheat is reported to have been 2,663,436 acres, or nearly 300,000 acres more than last year. This area at 26½ bushels per acre would yield nearly 9 million quarters (8,947,480); and deducting 2 bushels per acre for seed, there would remain rather over 8½ million quarters (8,281,621); available for consumption, and there would accordingly be required about 18½ million quarters (18,394,271) to be provided from stocks and imports. It is admitted that the wheat crop, not only of America, but of some other countries whence we derive supplies, will be below the average. But during the last two months of the past harvest-year, our imports were at the rate of about 21 million quarters per annum, whilst with our late harvest, and the rise in prices, the supplies have been very liberal since, and there seems no reason to fear that there will be any difficulty in obtaining sufficient supplies to meet such requirements as the foregoing estimates show to be probable.

Rothamsted, Oct. 24.

A correspondent writing to the *Field and Farm*, says:

"Twelve of my thirty cows that were dehorned last winter aborted their calves in the spring, and five out of the thirty died. Those that lived are not worth more than two thirds their former value. With as good and even better feed than they had last year, they do not give more than half their usual flow of milk.

"That's nice, isn't it? Evidently here is a man that tried dehorning expecting some benefit from it, and don't propose to swear that black is white in order to stand justified before his neighbors because he was foolish enough to be caught by the "craze." We don't wonder at the result. Dumb brutes, unlike human beings, will stand a great deal of knocking around without misarrying their offspring, but when they