

make a silo by lining it with these materials. Bad hay often produced disease, but he had never known injury to follow from the use of ensilage of doubtful quality. In Germany, beet tops were largely used for ensilage for feeding dairy cows, with the wash from the sugar refineries.

Mr. HULBERT said he believed he was the only tenant farmer in the county who had made a silo at his own expense. Perhaps, therefore, a few details from him would not be unacceptable. He had cemented a barn round with cheap cement, and had run up a stone wall at the end. The whole expense of the silo, which held 40 tons, was £12. In making another silo from another barn, he intended to dispense with cement, as the walls would be sufficiently sound if they were pointed with cement. Where stone was on the estate the cost of a silo was nominal. The top part of his barn over the ensilage he used for the storage of corn, &c. He considered that ensilage was better than middling hay. He had never been able to make any prime hay for the last ten years. At the first he thought ensilage might produce scour, but he found it had the contrary effect. Of course the better the material of which the silage was made the better it would be. They must use the materials they had at hand. They must expect that the ensilage for three inches at the top of the silo would be waste. Salt was wholly unnecessary. They might of course allow their animals to have rock salt. The principal thing was to chaff the silage, so that it could be thoroughly trodden down. He had weighted his with only 70lb. to the square foot.

Major PROBYN asked if an uncemented wall would be suitable? If so, many old barns might be utilised.

Mr. TREPLIN gave further details, and he had used old horses for tramping down the silage. As to chaffing, if a small amount of silage was made it could be done, but not with a large quantity.

Mr. W. FRIDAY thought the conference were going into details before it had quite been decided that ensilage was desirable. Hitherto it had been purely experimental. As to ensilage dispensing with roots that would be undesirable. The great object of growing roots was to keep the land clean. He had had great difficulty in arriving at a decision as to ensilage, because he found its advocates so varying in their testimony. He criticised some of the figures given as the cost, which he considered was excessive. The question altogether was made too much of. Some went so far as to assume that the provision of silos by landlords would render the lowering of rents unnecessary. It was important that farmers should be cautious in the adoption of each new practice as this, and on the whole he should advise them to make hay while the sun shines.

Mr. HULBERT justified the figures he had mentioned, and contended that it cost no more to make silage than to make hay—[From the dairy conference at Gloster, Eng.]

#### Lord Tollemache's experiments with Ensilage!

##### IMPORTANT SCHEME AFFECTING AGRICULTURE.

An important and highly-interesting scheme for the development of the dairy interests of Cheshire was inaugurated on Monday by Lord Tollemache among his Cheshire tenantry. Lord Tollemache recently constructed several large silos at Peckforton Castle for the storage and preservation of grass, and, having discovered that cattle ate and thrived upon the ensilage, his lordship, with characteristic foresight and energy, determined to extend the system for the benefit of the tenantry on his extensive Cheshire estates, feeling that anything which tended to save the harassing and costly labour bill incidental to hay harvests, and the still heavier losses constantly arising

from damage to hay from rain storms, would prove of immense service to agriculturists in a great dairy county like Cheshire. Lord Tollemache accordingly issued a circular giving in a comprehensive and concise form the results of his personal experiments with ensilage, and followed this with a letter of invitation to discuss the whole question. Lord Tollemache presided on Monday, and in the course of his remarks said they had heard a great deal of nonsense asserted, such as that, if freedom of contract and all restrictions were done away with, tenants would carry out vast improvements independently of their landlord; and also that labourers ought to be the actual owners of their cottages. They knew full well that all great improvements could not and ought not to be carried out by farmers without the assistance of landlords. The offer which he had to make was that he should construct the silos on the farms of his tenants himself, on condition that if the making of the ensilage proved an advantage they would pay 5 per cent. interest on the outlay, while if it proved a failure it should cost them nothing whatever. Any difference of opinion arising could be left to arbitration. He made the offer for the purpose of extending a scheme which, he was persuaded, would benefit, not only those engaged in agriculture in the dairy districts of Cheshire, but throughout the United Kingdom. Lord Tollemache's offer was received with applause. The tenants present unanimously agreed that the terms offered were most liberally conceived, and passed a cordial vote of thanks to his lordship for the consistent interest which he took in everything affecting the welfare of tenant-farmers and the success of the agricultural interest. (1)

#### Messrs. F. W. Reynolds and Co's Silos.

After Lord Tollemache had concluded his speech a long and interesting discussion took place as to the construction of his silos, which was minutely explained by a representative of the firm of Messrs. F. W. Reynolds and Co., Edward-street, Blackfriars road, London, S. E., by the aid of models. The system adopted on the Peckforton estate, and most generally favoured, is somewhat as follows:—The buildings consist of a central barn with a bay at either end, and it is proposed to divide one bay with a strong brick portion into two silos opening into the barn, the walls to be covered with a coating of cement. The chaff cutting machines—driven by steam or horse power, as the case may be—are placed on an upper floor of the barn, on a level or thereabouts with the tops of the silos, the green chaff being thus conveniently delivered into the latter; and when these are filled, the whole is covered with nicely fitting shutters and weighted to the extent of about seventy-two pounds to the square foot. At least, this has been the practice at Peckforton up to the present, but the Messrs. Reynolds have adopted and patented an ingenious and efficient process of putting on a very much larger pressure, at the same time obviating the necessity for providing and lifting so much dead weight every time it is wished to remove the shutter for the purpose of re-filling the silos. Messrs. Reynolds's system—which was also demonstrated by the help of a model—is as follows:—A chain is attached to the lower part of the wall of the silo in any suitable manner, either by taking it through the wall with a plate and bolt on the outside, or by weighting it in the ground with concrete or attaching it to a beam. Exactly opposite, on the other side of the silo, is a similar chain attached in the same manner. While the silo is being filled, the ends of the chains are thrown over the walls. After the

(1) Having, on the Lincoln College farm, about seven acres of luxuriant couch-grass, I propose to ensile it—if it spoils, there will not be much loss.