

ENSILAGED FODDER.

THE *Irish Times* gives the following description of some experiments which are now being made on the Model Farm, Glasnevin:—

On Saturday last, at the Model Farm, Glasnevin, some gentlemen interested in all questions relating to agriculture were afforded an opportunity of becoming acquainted with the system known as "ensilage"—a system by which green fodder is preserved for use in the winter. In all ages agriculturists had to recognise that no products of the field intended as fodder for cattle could be produced in winter comparable to the grass grown during the early part of the year, hence the efforts at various times made in foreign countries and at home to preserve green fodder for winter use. The system known as "ensilage" is a revival in an improved form of efforts that in past times had been made to preserve green fodder. This system of burying fodder in a green state in the summer months has long been practised in Hungary, and to a large extent in Russia. In remote parts of Kerry it was quite a common practice to store threshed oats in pits sunk in a dry portion of the soil. It appears from a report addressed by Mr. Carroll, Superintendent of the Agricultural Department, to the Secretaries of National Education in Ireland, that for some years past English papers specially relating to agriculture contained communications upon "ensilage," and some years since Dr. Cameron read a paper on the subject at a scientific meeting of the Royal Dublin Society. These communications were more or less speculative rather than a practical character. The subject was regarded with little interest in those countries until a communication appeared in the *Times*, but since then many agriculturists have attached much more importance to it. The system of ensilage, it was stated, had been carried out with great success at the farm of M. Arthur Vicomte de Chasselles, Liancourt, St. Pierre, in the Department of the Oise, France. Eminent English agricultural scientists applied themselves to the subject, and they gave to the public Press the results of their investigations. There were, however, differences of opinion as to the adaptability and value of the system to the British Isles. The suggestions adverse to its adoption were—first, that the plants usually grown in these countries for fodder were not suited to the system. The success of the system in France, Holland, and America was due, it was said, to the fact that maize was the provender generally ensilaged. Secondly, it was said that a considerable quantity of forage might be spoiled in attempting to preserve it by this system, and that, although fully preserved and relished by cattle, a quantity of valuable food constituents might be so altered as to leave ensilaged fodder in a condition inferior as food to what it might be if saved by other means. Sir John Bennet Lawes expressed his opinion that our system of growing roots for winter provender was also a reason why, without due consideration, the practice should not be adopted in those countries. Mr. Carroll in his report said:—"We have not had sufficient experience of the system in the British Isles to determine whether it is worthy of general adoption here. I am, however, of opinion that the successes of the Continental and American farmers are sufficient to warrant our trying it on an extensive scale in those countries, and the measure of success of our experiments at the Albert Farm strengthens my opinion on this point." The system as carried on at the Model Farm may here be described. Two pits, each 22 feet long by 6 feet wide and 12 deep, have been constructed each large enough to contain nearly 35 tons of green fodder, consisting of ryegrass. The walls are plastered over with cement, for the "silo" or pit "must be perfectly airtight and watertight, and the forage must be tightly compressed therein." This was shown by the failure of an experiment in the following form:—"Italian ryegrass packed tightly on the surface of the ground and covered with about 18 inches of earth in a manner similar to a potato pit." It also appeared that "whenever a small bulk of straw or dry matter got amongst the ryegrass the fodder around this substance was quite spoiled by the air therein contained." On Saturday a hay-cutter worked by a three horse power engine was in operation, and as fast as the grass was cut it was thrown into the pit and levelled by farm servants skilled in the use of the hay-fork. One of the pits already contained about 26 tons of Italian ryegrass. That quantity, before it was subjected to pressure, filled the pit to the top, but, yielding to the weight imposed on it, became compressed to an extent that the planks by which it was covered had descended nearly four feet. The planks, which are about 2½ inches thick, are placed across the pit lying close to each other, and on them were placed casks filled with concrete, each weighing about 4cwt., and exerting a pressure on the ensilage of 110lbs. per square foot. The filling of the pits commenced on Thursday last, and after two days pressure the fodder occupied only about two-thirds of the space which it did fresh from the field. The other of two pits constructed on the American principle, half above and half below the surface of the earth, was about half full on Saturday afternoon. Two other silos constructed at less expense, and more likely to be adopted, are built above the ground, but with as much care to render them air and water-tight as in the case of the others. Professor Thorold Rogers, who is a great advocate of the system of ensilage, went to America to investigate it, and when he returned to England he explained the system in lectures delivered in various farming clubs and scientific institutions. The experiments by Lord Walsingham and other noblemen and gentlemen who farm on a large scale in England were such as to prove that "the system had a great future before it," and as far as it has been tried at the Albert Institution, Mr. Carroll, who is himself a skilled agriculturist of the largest experience, is in favour of it. The experiments made at the institution last year were not carried out on a large scale, but the results were such as afforded confirmation to the statements made in England as to the value of the system, and every farmer will appreciate a system by which fodder can be saved in any weather. There need in fact be no great concern as to the character of the weather in haymaking time, where ensilage is used. In fact there were some who urged that the grass should in a

wet condition be placed in a pit. It has been found by experience that when the grass is some time in the pit a certain amount of fermentation has taken place, and the advocates of that system say that fermentation improves the fodder. The stage which the fermentation reaches is about that at which the fodder arrives in the first stomach of the ruminant animal—in other words, it ceases before it reaches the acid state, and for this reason the oxygen contained in the fodder becomes used up during the slight fermentation that takes place, and a further supply of oxygen cannot have access to the silos. Carbonic acid gas becomes generated in the silos, and it becomes impossible for oxygen to reach the ensilaged fodder. Farmers who may wish to try the system are recommended to study economy in the matter, for, as has been well said, "Many a good thing has been killed by extravagant outlay in the first instance." The temperature of the silos may from time to time be tested in this way—A gas tube about an inch and a-half is inserted vertically in the ensilage, so that at any time a thermometer may be placed in it, and the temperature ascertained.

A PATRONISING REPORTER.

THE feats of the explorers of bygone times are quite thrown into the shade by the achievements and resource of the modern "interviewer," especially of the Transatlantic species. The representative of a New York paper has lately succeeded in "interviewing" the King of Italy, and has had the privilege of receiving from his august lips the assurance that "he himself, if he were not a king, would like to be a reporter." Such generosity to one's persecutors is indeed royal. But even this fortunate reporter is outdone by a rival of the *New York World*, who "has managed," it is said, "in spite of incredible difficulties, to secure an interview" "with the Queen of England," and has thus "triumphed over obstacles beyond the most daring conception of the American mind."

The nature of the triumph may be judged from the following passages of the alleged conversation between Her Majesty and the narrator:—"The Queen (with animation): 'I have seen the *World*. It is, they tell me, the English newspaper of America. I find it a very intelligent newspaper, and in many respects most amusing, like nearly all your American newspapers.' The Correspondent: 'Your Majesty's most gracious approval will be most gladly and respectfully appreciated by the gentleman who at present controls it. It may be news to your Majesty for me to say that we are under a new regime.' The Queen (with evident interest): 'You have had another revolution, then, in America. I was not aware of it.' The Correspondent: 'May it please your Majesty, the *World* has revolved once more round its own axis.' The Queen: 'I believe the Marquis of Lorne and the Princess Louise have received a good deal of kindness and attention at the hands of the Americans. I shall be glad if you would be good enough to express my proper appreciation of their loyalty.' The Correspondent: 'I venture to take the liberty of assuring your Majesty that your Majesty personally and your Majesty's Government may confidently depend upon enjoying in the future the same cordial and unstinted support which the late conductors of the *World* had the extreme honour of humbly extending to your Majesty and your Majesty's Government in the past. And may it please your Majesty, the *World*, under its new management, will lose no opportunity to reiterate over and over again, with unflagging vigour, the immortal truth that we are one people, speaking the same language, worshipping the same Deity, inheriting the same traditions, and developing the same interests of an identical civilisation.'"—Exchange.

THE LAND QUESTION IN SCOTLAND.

(Glasgow correspondence of the *Nation*.)

MR. THOMAS SELLAR, son of the famous Sutherlandshire landlord, after a series of awful threatenings and complaints and imprecations against Professor Blackie and others, endeavours to vindicate his father from the charges made against him by his unfortunate victims. Eminent lawyers as many of his lineal descendants are, they shrink from their originally expressed determination of appealing to the courts. The publishing of a little book is substituted for a legal inquiry. The *Scotsman* is in ecstasies over this turn of affairs. It assures the pro-landlord readers that Donald Macleod, who left some exceedingly awkward statements behind him, was "an unmitigated liar"; that Hugh Miller wrote under the influence of "sectarian spleen"; Sismondi was a monomaniac; and that Dean of Guild Mackenzie, Professor Blackie, and Professor Wallace "were not gentlemen."

The Royal Commission made an important discovery in Orkney recently. Just think of it! "A separate self-contained community" of peasant proprietors not only living but thriving these hundreds of years within this isolated island! The small parish of Harray, where the discovery was made, is situated in the centre of the island, and has a population of 745; it is in the unique position of having upwards of 120 resident peasant proprietors able to trace their ancestors back for centuries, every one of whom was "his own landlord." As "facts are chiefs that winna ding and daurna (dare not) be disputed," the significance of the discovery becomes apparent, for it sets at rest for ever the gloomy prophecies of the landlord Press. Of their social condition the brief testimony of the unfriendly *Glasgow Herald* is, "They are happy and contented." One of those peasant proprietors—Peter Smith—who came (to quote his own words) "simply out of curiosity" to see the commissioners, made, at the chairman's request, a very interesting statement as to the influence of this novel system of land tenure upon the condition of the population and the cultivation of the soil. He possessed 36 acres and a piece of commony besides. Sub-division was unknown, mortgaged farms were unheard of, their titles were all registered, and their eldest sons generally succeeded to the estates. They had