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OF

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FARMERS OF THE UNITED KINGDOM.

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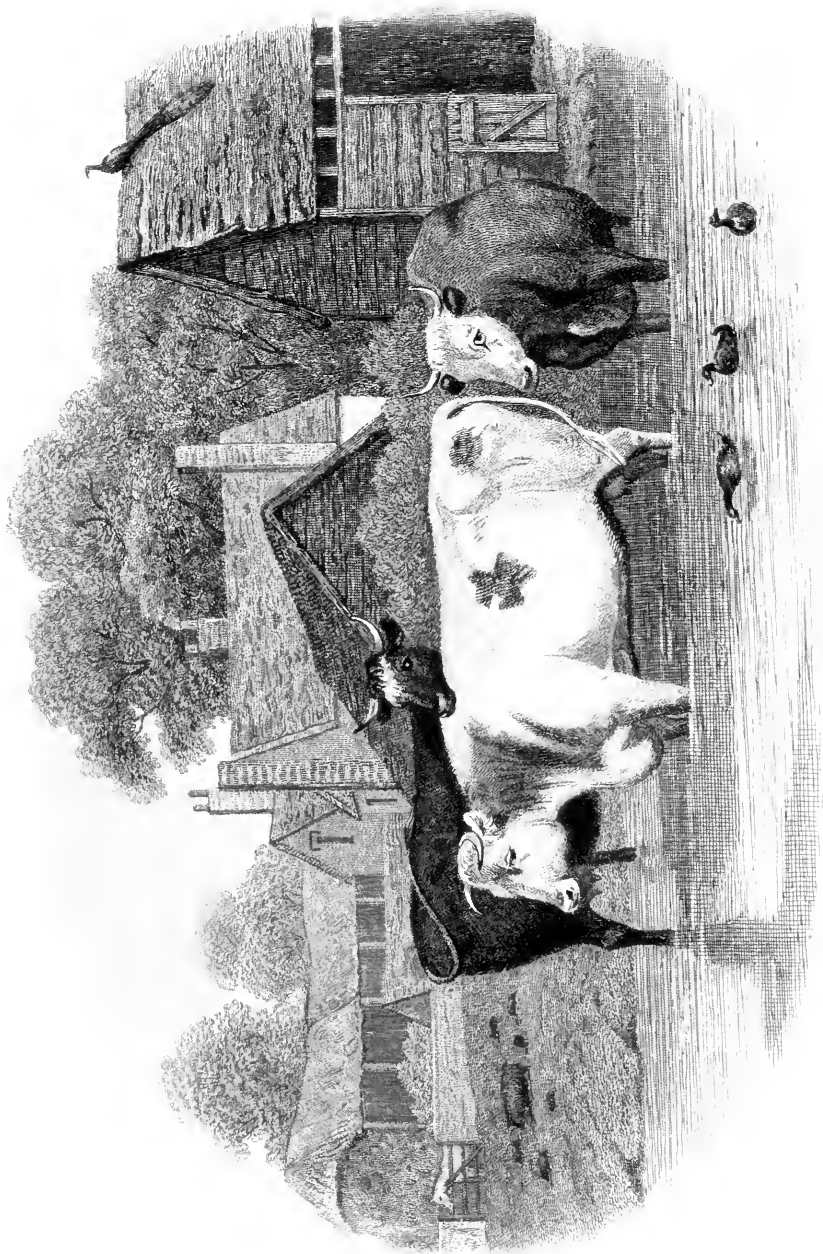
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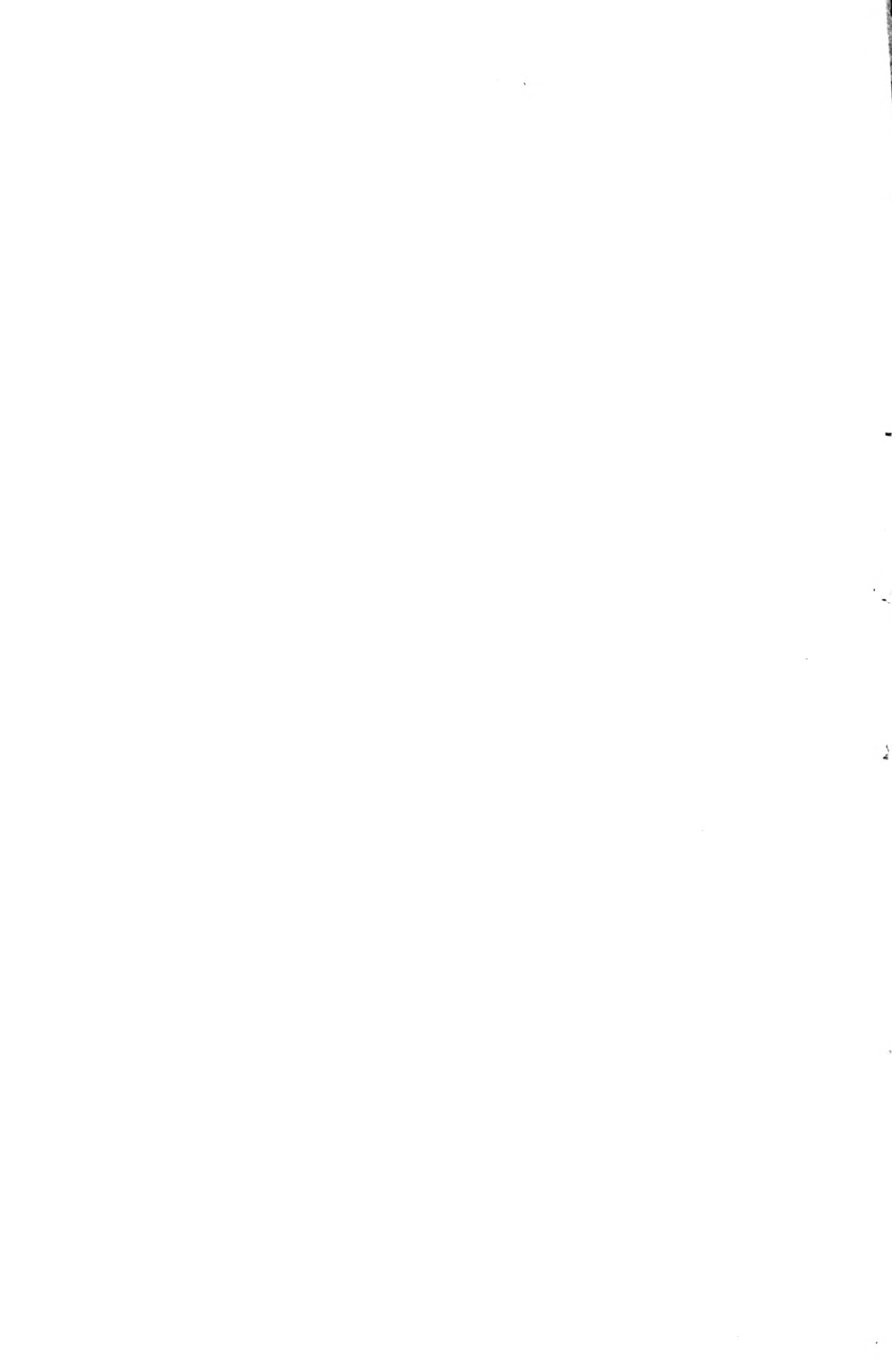
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The Household

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THE FARMER'S MAGAZINE.

JULY, 1871.

PLATE I.

THE HOMESTEAD.

Here, in the old farm-pond, we have three representatives of the dairy, not remarkable for touch, form, or beauty, but for their bags of genuine pure, unadulterated milk. And who can say of what these old ladies are thinking of as they chew the cud, and lash away the flies while the brewing is going on? Is it of the number of people that the genuine flow keeps hammering away in the tin trade? Or the host of stout Irish lasses in white stockings and hobnailed boots on the trot, in daily house-to-house visitation? or of the whole army of decorators and faucy-writers posting up Aylesbury Dairies and the like over London shop-fronts? or do they

ruminant about "Simpson" or *pumpaginis aqua*, calculating the number of babies or tabbies that are nourished daily on a genuine ha'porth of "the mixture as before"? Maybe it is of none of these things over which the old dames are cogitating, as most likely they are not of a commercial turn of mind, but are far more likely listening for the welcome "Come along, coop," of Hannah with the pails, or to the plaintive notes which reach them from yonder pen of calves, and are echoed by the buildings around the old farm-pond, or it may be to the more sonorous strai of old John Bull himself.

PLATE II.

A DAY ON THE DART.

Now try that run below the bridge, friend, carefully. The range at the turn beyond is ruffled by this balmy breeze, and two or three goodly trout lie underneath the

high bank opposite—especially at the mouth of the tributary there. Well done! a lively one and good. There! basket him at once.—PULMAN.

ARTIFICIAL FERTILIZERS.

BY CUTHBERT W. JOHNSON, F.R.S.

Several facts with regard to artificial manures which have been recently published well deserve the agriculturist's attention. The exhaustion of the best beds of Peruvian guano—the introduction of varieties of guano from other than the Chincha Islands—and these of very differing quality, renders still greater caution necessary on the part of the purchaser. Then again, the nitrate of soda of commerce varies very considerably in its value, and the same remark applies to bone-dust, superphosphate of lime, and to some modern preparations, which have been extensively advertised. One or two of these advertisements have appended to them the analysis and certificate of an

eminent chemist, which, though cautiously worded, are very likely to deceive the non-scientific reader. The gradual increase of the trade in imported fertilizers is not generally known. In the last three years there were imported:

	1868.	1869.	1870.
Guano (tons)	182,343	210,010	280,311
Bones (ditto)	75,851	95,979	94,923
Cubic petre (cwt) ...	1,029,055	906,694	1,132,647

As a matter of course, certain portions of these imports are secured by fraudulent dealers. By these the guano is adulterated with loam, sand, and other matters. The bones are mixed with crushed sulphate of lime, oyster-

shells, and other worthless additions. Cubic petre receives common salt and the sulphates of soda and magnesia, and these enable the adulterator to vend his articles so much below the price at which the genuine article can be sold by the importer that no one ought to be deceived, but unfortunately such is not the fact. Thus a lot of guano was lately sold by auction at a market town in Sussex (as Peruvian) at less than seven pounds a ton, when the simple-minded purchasers well knew that the *only importers* were charging almost double that price!

As a guard against these frauds, a system has been introduced of requiring a guaranteed quality by the vendors, subject to an analysis by some competent chemist; and this has been found to be a very considerable check upon the unprincipled. Of late, however, very serious well-founded objections have arisen on the part of dealers of undoubted honour, which threaten to be seriously injurious to those whose interests I am advocating, viz., the agriculturists. These objections are to the different modes in which these analyses are conducted, and the varying results obtained. These objections have taken a form which will render necessary a far greater labour on the part of the analyst than has hitherto been bestowed; for if the honest merchant or manufacturer purchases, or makes, a manure which he knows, by the result obtained by his own chemist, *does contain* a certain percentage of the pure article, and then is told by the chemist employed by the purchaser that it contains several per cent. less, and is called upon to make a corresponding reduction in price, why what must be the result? Either that he will cease to be bound by such a hasty analysis, or he must prepare for this taxation by demanding a higher price than he would have otherwise done. It is, therefore, of the first importance to the farmers of England that every analysis should be perfectly accurate, and that such a sum should be paid for the analysis as would fairly entitle him to demand that accuracy. It was at the last meeting of the Framlingham Farmers' Club that Mr. George Ling, of Bedford, on this subject addressed the members. I can hardly repeat in better language than his own the very many facts with which my readers should be made aware. He remarked, when speaking of the new Peruvian guano. "The guano from the Guanape Island (not far from the old Chinchas) varies much in quality; some of it is very good, and some is very indifferent. It contains less ammonia than the Chinchas Island guano, which is accounted for by the fact of there being more moisture in the latitude of the Guanape Island. However, we must take it as it comes, for the Peruvian Government guarantee nothing—they say here is the guano at so much a ton, take it or leave it, and we go on taking it." However, with all its faults, genuine guano will always be a valuable and favourite manure; but care must be taken to see it is genuine as imported, and that it is the importation of the agents of the Peruvian Government. Nitrate of soda, another valuable fertilizer, is often shamefully adulterated with salt, which it somewhat resembles, or with sulphate of magnesia and other substances, but it may be very easily tested. I have heard as much as 45 per cent. of foreign matter has been recently found in a sample sold at £17 a ton, and that foreign matter was common salt. The analysis of nitrate of soda is a simple matter, easily determined, and the results indisputable. I wish the same could be said of analysis of phosphatic manures. The trade in these as super-phosphate—nitro-phosphate—the various forms of bone manures, &c., is enormous, and analyses are constantly being made, but there appear to be so many processes adopted, and they vary so much in the results that we have as yet no reliable system. But even if the analysis be correct, it is not a complete one, for many special manures, such as those

prepared for maugold, potatoes, cereals, &c., are exceedingly rich in elements that are often not looked for, and consequently not determined and valued in what I suppose to be the "simple analysis," and there is no remedy for this, unless the analyses are far more elaborate and costly than those ordinarily made—nevertheless, however simple the analysis might be in the hands of a skilful chemist, it would inevitably lead to the detection of any serious fraud. The simplest form of manufactured manure is superphosphate of lime. It is the custom in some parts to buy and sell this article at so much per cent. of soluble phosphate. Now this seems right enough, and so it would be, if chemists were agreed upon a plan, and the superphosphate, when once made, retained its original form, and did not alter almost daily in its chemical combinations. I will do my best to explain this, and to do so, I must say a few words about soluble phosphate. Phosphate of lime, as it exists in nature, in bones, or in coprolites, is insoluble, and consists of three parts of lime and one part of phosphoric acid. And, to make it soluble, it is usual to remove a part of the lime by sulphuric acid. This is the process adopted by manufacturers of artificial manures; they thus get a *super-phosphate*: that is, a substance with a superabundance, or greater proportion of phosphoric acid than it originally had; it has lost part of its lime, and, if newly made, the analyst could find every particle of it soluble; but it has this strange peculiarity, it soon begins to go back, as it is called, and a part of it becomes not soluble in water, but it is now in a very different state to the original insoluble phosphate. Now, if an old sample be examined, we shall find, in all probability, four or five per cent. has become reduced, or precipitated, or has gone back, and while the chemist would find so many per cent. less soluble, and value it accordingly, the manure is intrinsically better than when first made. So if this be correct, and I have good authorities on the matter, you will clearly understand that buying, or rather selling superphosphate by analysis, is not so simple a matter as we supposed, and is rather a one-sided affair. Some of the leading chemists are now coming round to this opinion, and are making their analysis (if a little more costly) much more satisfactory to all parties, and instead of ignoring this precipitated phosphate, or estimating it as insoluble, now give it its true value. And now we are considering this soluble phosphate, we will see what becomes of it when we apply it to our fields; it at once goes back, is precipitated, or becomes insoluble again, just as it does by long keeping. This being conceded, is it not very clear that we farmers have something else to require besides a guaranteed analysis? I have myself long felt it to be very important to have manure in condition, and for my own use prefer a dry well-seasoned manure, even if it shows a poorer analysis in soluble; indeed, I have frequently used year-old turnip manure, and have never had reason to complain of the result. Dr. Voelcker, the chemist to the Royal Agricultural Society, has given the result of his extensive experience as follows: "I have long been familiar with the fact that a newly-made superphosphate, though richer in soluble phosphate of lime than will usually be found after keeping three or four months, does not act as beneficially in the field as the latter; it is, therefore, plain that a superphosphate which in keeping has gone back, has not really become depreciated in value." Azain, the Doctor writes: "A newly-made superphosphate, when rich in soluble phosphates, however, is very apt to become pasty, and cannot be uniformly incorporated with the soil, nor applied to it so economically as a well-made powdery article such as is produced when superphosphate is kept for a period of three or four months, or longer, and then passed through a disintegrator or sifting apparatus. Such a manure,

when made of mineral phosphate, usually contains from four to five per cent. less soluble phosphate than it did when newly made; nevertheless it is *practically better and practically worth more money* than in its newly-made state." He goes on to say: "My impression is farmers will find out, in course of time, that the quality of even mineral superphosphate cannot be *solely* determined by the amount of soluble which the sample contains." Professor Sibson, writing on this sample, says: "It should be added that the agricultural value of the phosphate so precipitated is but little, if at all, inferior to soluble phosphate itself, since it occurs in a state of chemical division, and is doubtless of a similar character to that which the soluble phosphate assumes after remaining a short time in the soil, and, doubtless, has as good an effect on the crops to which it is applied." With such testimony, I think, we may rest satisfied that manures are not depreciated in value by keeping, but rather the reverse; therefore, allow me strongly to recommend you to get your manures some little time before they are wanted, and thereby ensure condition (if they are properly manufactured), and not wait, as is too often the case, till it is actually wanted for use, and so run the risk of receiving it in bad condition from being newly made, or, perhaps, greatly inconvenienced by its non-arrival when wanted. There are many difficulties attending analyses. I will mention a few of them, and the causes of their occasionally being unreliable. First, the mode of selecting the sample to be sent. This is of the first importance. Professor Sibson writes: "In taking samples from bulks every care should be taken to obtain an average sample; this is best effected by taking several (the more the better) portions from different parts of the surface and interior of the mass, and thoroughly intermixing the whole. The operation should then be repeated proportionately till a manageable sample is obtained. Of this, three to four ounces is sufficient to send for analysis." The portion actually examined by the chemist will only weigh a few grains—say as much as will lie on a shilling, so you will readily see that there must be some care used in taking a fair sample. I have here some analyses of a cargo of bone ash that came in last year. The samples were drawn from different parts of the cargo and sent to Professor Newland, Messrs. Evans and Jones, and Dr. Voelcker: the lowest gave 73 $\frac{1}{2}$ per cent. phosphate of lime, the highest 75 $\frac{1}{2}$. The cargo was sold by analysis, that is, so much for each unit, so the difference would be a matter of great importance to both buyer and seller. Again: I understand that there are various methods of estimating the amount of phosphate and other component parts of manures, and it seems that the results of these processes vary very much. By a letter in the *Mark Lane Express* (April 10th), from Mr. E. Purser, we find that a sample of ordinary superphosphate of lime was taken and reduced to a fine state of division, and, to ensure greater uniformity, was passed several times through a fine sieve. Seven small tins were then filled from the sifted sample and sealed up, in the presence of a disinterested witness. The tins were then forwarded to seven different chemists, and in due course the following results were obtained:

AMOUNT OF SOLUBLE PHOSPHATE IN A SAMPLE MANURE.						
No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.
25.46	19.48	24.43	20.33	22.47	19.81	24.52

From the above, you will see there is a difference of nearly 6 per cent. in the amount of soluble phosphate in the different analyses, representing a value of *at least* 18s. *per ton*. The chemists were all well-known men, three of them respectively chemists to the Agricultural Societies of England, Scotland, and Ireland; three of the others, men whose analyses are always taken in commercial transactions. I also have a letter from Mr. Francis

Sutton, a well-known analytical chemist, of Norwich, who, writing to the *Chemical News*, says: "I would again urge upon those concerned to do away, if possible, with the disgraceful distinction of *buyers'* and *seller's'* analysts. A case occurred to myself a few days ago, in which a sample was well prepared, and divided into two parts, then sealed up in tins, and sent to two well-known men. One reported 21.39 per cent. soluble phosphate, the other 26.36. The low report I proved most conclusively to be the correct one. The manure, however, was sold by the analysis, which gave 5 per cent. more, and consequently the buyer was requested to pay 15s. per ton more for it than it was worth." Professor Sibson, in one of his circulars, observes, "Chemists should not depute to their pupils a determination or analysis that may perhaps affect seriously the standing of an honest firm." The fact is the work has so increased, and there are so many societies cropping up, and so few really first-rate analysts whose opinions would be taken as final, that they must be somewhat overdone with work, and have far more than they can possibly do themselves. The increase in the number of analyses made is something enormous. Dr. Voelcker reports to the Royal Agricultural Society, that during the year 1870, no less than 580 samples were sent to him by its members alone, 115 over 1869, to say nothing of those sent by others from all parts of the world. However, I believe it is admitted that there does not exist a more conscientious body of professional men, and as a rule, their work is well and carefully done; but when such exceptions as have been mentioned do occur, they are indeed serious. I think you will now readily agree with me that the exact value of a manure cannot be told by judging solely of its composition as revealed by analysis, as so much depends on its mechanical texture. So on the other hand, we cannot arrive at its real value without the aid of chemists, and the amount of good they have done in exposing frauds is incalculable. The difficulties here alluded to may be overcome, and I am satisfied that manufacturers, dealers, and farmers will be benefited by the fullest investigation chemical science can devise." See also a letter from Mr. R. Warrington.

The facts to which I have been endeavouring to draw the farmers' attention have not escaped the notice of the agriculturists of Scotland. In a recent meeting of the Haddington Farmers' Club, Mr. S. D. Shireff, in speaking of special manures, remarked "Experiments were made by the Club some time ago, with the view to find the best substitute for guano, and also to try the possibility of growing good crops of Swedish turnips with artificial manure alone. A committee was formed, of which Mr. Hope, Pentonbarus, was convener." Mr. Shireff then submitted a table of results of the experiments, from which, he said, one thing is distinctly proved—the superiority of farmyard manure and guano, which gives the largest produce over the rotation. 8 cwt. per acre of Peruvian stands second, 3 cwt. Peruvian guano and 5 cwt. bone-meal third. This is an argument in favour of bone-meal in preference to the best bone-ash superphosphate. But the difficulty lies in this—one manure may be said comparatively to exhaust itself by doing a great deal the first year. The experiment with guano and dissolved bone-ash stood first with turnip crop, even when turnips are all eaten on the ground. Perhaps an immediate return in the shape of a better turnip crop is most advantageous to the farm. The difficulty now is to get good real superphosphate. A mineral superphosphate, on many soils, will grow quite as large a crop as a bone one, when the two are mixed. No chemist can detect the proportions, and I think the best plan is to purchase a well manufactured mineral superphosphate, which can be sold at about £4 or £4 10s. per ton, and bone-meal at £8 10s., and mix the two at

home. I do not think it is profitable for farmers to buy mixtures. But to turn more particularly to the best special manures to be used as auxiliaries in raising cereal and green crops in East Lothian. There is no doubt Peruvian guano is the best, and should be the basis of the mixture for every farm. To grow potatoes on the generality of soils in the county, I would prescribe from not less than 25 to 20 tons per acre of farmyard manure, and 5 cwt. Peruvian and 2 cwt. kainit salt. Without farmyard manure, 5 cwt. Peruvian, 5 cwt. bone-meal, 5 cwt. rape dust, 5 cwt. coprolite superphosphate, 2 cwt. kainit. Unless after grass which has been particularly well pastured, less manure will not do. I find it, by experience, far more profitable to manure a small portion thoroughly well, than attempt a large acreage with moderate quantity. You will grow more potatoes in the small piece. Turnips will grow a large crop with half the manure required for potatoes—*i.e.*, if the season is favourable. A doubt existed regarding the possibility of growing swedes without farmyard manure, but this has been proved a fallacy long ago. On land in good condition 11 cwt. per acre of the mixture I proposed for potatoes will grow a fine crop. For the cereal crops—for oats—Peruvian guano, 2 or 3 cwt. per acre, with the seed is most profitable, although a top-dressing with nitrate of soda, or sulphate of ammonia, is very beneficial, but it is often difficult to get a favourable shower to wash it in. For autumn wheat—2 or 3 cwt. per acre guano, and 1 cwt. of salt. I have found Lawson's phospho-guano a most admirable mixture for winter wheat. The best spring top-dressing is a mixture, in equal proportions, of sulphate of ammonia, common salt, and Peruvian guano—4 cwt. per acre. For barley, Peruvian guano and salt; 3 cwt. Peruvian and 1 cwt. salt. For hay, 1½ cwt. nitrate of soda, 1½ cwt. of Peruvian. For the last two seasons we have scarcely been able to trace any effects from the top-dressing; but it has been remarked that the second crop is generally better after Peruvian guano than nitrate of soda applied alone.

When alluding to the analyses of manures, Mr. Shireff read the following extract from a letter which he had received from Professor Anderson: "I agree with you in the opinion that a more systematic occasion should be had to analyse than is at present customary; but I think that some means should be adopted to diminish the number of analyses. To the small farmer who buys a ton or two or manure the cost of an analysis made with proper care is a serious addition to his expenditure, while to the large farmer who buys £500 or £1,000 worth the cost of even half-a-dozen analyses is a

cheap insurance, which he acts unwisely if he omits. I have frequently, when occasion offered, urged on farmers the importance of combining for their own advantage, so that ten or twenty individuals around the same railway station should agree to take their manures from the same manufacturer, so that one or two analyses would serve for all; and if to this were added a record of the produce obtained from each manure, the result would, after some years had passed, far more than repay the labour expended on the experiments, and form a most valuable contribution to practical agriculture. A few co-operative associations of this kind have been formed, but none of them have fully carried out my plan, which would no doubt involve some trouble; but I think it well deserves a trial. There is another point on which I think farmers ought to agree, and that is, a fair and definite system for valuing manures. Hitherto this has been left to the chemist, to whom it does not properly belong, and it is extremely unsatisfactory, because no sooner has a system been established which receives the support of some manufacturers, than others describe it as totally fallacious, and even absurd, and it can never have the influence that a system originating with the farmers would have. I am satisfied that such a plan, having once been established, would soon annihilate half the manufacturers of inferior manures."

The facts which I have given in this paper I earnestly commend to the careful attention of the reader. The only safe advice which I can offer to the agriculturist is, 1st, to purchase his artificial manures of only the first-class dealers and manufacturers. Now, one or two of these great merchants (for the reasons I have given) long since absolutely refused to either give a guarantee or to be bound by any analysis; and I learn that one or two other leading houses have determined to follow their example in all their future dealings. 2nd, I would advise my readers, when they do have an analysis made for them, to insist upon that being a complete analysis. To entitle them to such they must be content to pay a reasonable price for the labour and science required. The manufacturers, when they have an analysis made, are used to pay two guineas for it. It is an examination which takes several hours, or even days, to complete, and ought to be in duplicate. How, then, can anyone expect that a fee of six or twelve shillings is a fair reward for such valuable labours? Such a fee can hardly be sufficient when it is merely to determine the amount of one constituent, such as that of the soluble phosphat. Even this superficial examination, however, is certainly a guard against very serious adulterations.

AFTER DINNER DISCUSSIONS.

The Royal Agricultural Society of England and the Bath and West of England Society and Southern Counties Association—we love to give the name in full, as the good vicar does that of Miss Carolina Wilhelmina Amelia Skeggs—these two leading institutions have come gradually to discountenance public dinners, and to honour such occasions rather in the breach than the observance. There have, however, been three or four somewhat important if more local expositions where this familiar item in any programme of proceedings has not been disregarded. Thus the Royal Cornwall show at Truro, the Warwickshire meeting at Rugby, and the Essex anniversary at Romford, have each Society offered its members the opportunity of dining together. We fear

that this concluding ceremony has in no instance enjoyed anything like proportionate success with the earlier business of the day. Nothing at any rate could read much tamer than the reports of these after-dinner discussions. At Truro all the speakers seem to have been so satisfied with the strength of the show as to deal in nothing but mutual gratulations. At Rugby, under a very cheerful chairman, the presence of the ladies naturally afforded a still more inviting theme to which the orator might address himself; and at Romford, as very few people went to the dinner and fewer still could hear what was said, the effect of the thing was perhaps in some measure impaired.

Nevertheless, under all such difficulties there would ap-

pear to have been a very creditable endeavour in Essex to pitch the tune to the proper key. Of course it is only too easy a task to put a man up to talk about the Purchase System, or the French Revolution, or of some distinguished nobleman in the neighbourhood, who takes particularly good care to keep out of the way. But this, after all, is scarcely the business of an agricultural dinner. And at Romford, on the contrary, the president of the day, Mr. M'Intosh, so soon as he well could, began to talk about Shorthorns, Mr. John Bennett about the breeding of "nag" horses, and Mr. Fookes on the necessity of the Essex farmers paying more attention to their breeds of sheep. Nothing could come better than this. The several addresses, to be sure, were not very long, but they were very much to the point, which on either consideration should imply something of a compliment. And when they got from farming to politics Mr. John Clayden still kept the meeting very happily to its special object—the breeding of stock. He had to propose the healths of the County Members, and in doing so had naturally enough to express his wonder as to where the County members happened to be "when his friend Mr. Clare Sewell Read, the member for Norfolk, brought forward a very important motion with reference to the importation of infected cattle;" and this brought about explanations which cannot be but serviceable hereafter. Mr. Johnston was actually in the House at the time of the count-out; when of the nineteen members present, independent of the Government, he "was glad to say that a very good proportion were members for the eastern counties." Sir Selwyn Ibbetson, however, was not one of this little band, though he "candidly and honestly confessed that he ought to have been in his place;" while Colonel Brise, who generally speaks with effect on agricultural topics, had unfortunately exhausted his energies earlier in the evening over the Army and the Navy, and had thus no opportunity of replying to Mr. Clayden, or of explaining the misconception through which he had on that occasion deserted his post as a Farmers' Friend.

But if so important an inquiry as this took place at Romford, why should not the opportunity have been seized of making some similar investigation at Rugby or at Truro? Warwickshire fairly abounds with Farmers' Friends, like Mr. Newdegate, Mr. Davenport, Mr. Wise, Mr. Hardy, and so on; while some of the tenantry of the county are particularly prominent from the interest they take in the politics of Agriculture. So far, however, as we can see not a word was said by any one of them on the subject which should have been the nearest to their hearts—that is the proper advocacy of their interests in Parliament. Mr. Newdegate was complimentary when comparing the Conservative feeling in England with the revolutionary reaction in France, and Mr. Hardy protested against the high condition in which some of the stock was exhibited. But nobody protested against the low condition in which Mr. Sewell Read was exhibited in the House. Mr. Newdegate, Mr. Davenport, and Mr. Hardy, all spoke, in turn, but not one of them, so far as we can see, had a word to say as to whether they were or were not amongst the glorious nineteen, simply as it seems because no one had touched upon the matter. In the presence of ladies it might, perhaps, have been scarcely "genteel" to do so. Then, again, in Cornwall, renowned at certain seasons for vigorous expression, the people really seemed to have nothing to say; when this very Essex member, Sir Selwyn Ibbetson, has been framing a Game Bill that should be very much such a measure as they would desire; when the Tenant Right principle is gradually creeping down westward, when there are woods and mines to be rated, and a dozen or more such topics

which might be profitably discussed at an agricultural dinner if the farmer himself will only start the hare.

The show season has set in. There will be meetings and dinners again and again in the course of a few days, in Norfolk, Hampshire, and elsewhere. To render these attractive, or more really useful, such gatherings must not be swamped in the outset by conventional or merely complimentary considerations. By some curious dispensation of Providence, nearly all the more valuable or pertinent matters at an agricultural dinner generally comes at the fag-end of the proceedings, when the company is weary, or the train is due. Surely it is possible to clear away the mere lumber of these occasions, and to get more directly to "business." We do not wish to hear people talk nothing but politics, even farmers' politics, at such a time, but if an M.P. identifies himself so far with Agriculture as to attend such a meeting, let him keep as closely as he can to the point. Beyond this, the merits of the show, its weak places, and the wants of the district, the comparative value of the breeds of stock, and so forth, might afford an acceptable variety, upon which good men should be invited, or more directly encouraged, to speak. As it is, the practical element is too often kept in the background, while some reverend man, like a Laocoon, is suffered to gradually strangle himself in a coil of sentences, or some gallant officer of volunteers to treat the company to a second and enlarged edition of his Battle of Dorking. And yet stewards wonder why people will run away from the dinner, or chairmen complain of being badly supported!

HOME-MADE CHEESE.—At the last meeting of the American Institute Farmers' Club, Mrs. S. Hastings, Flemington, N. J., said: Forty years ago my mother, who was a country clergyman's wife, and raised eleven children to be all over forty before death broke in on the circle, was obliged to manufacture most of what was consumed by the family, as my father's salary never exceeded four hundred dollars, and fifteen years out of the thirty it was but three hundred. He had, however, a small farm of ten acres of tillable land and thirty acres of pasture and stones. Her method of making cheese, which I have followed, and always found to be excellent, was this: She took the stomach of a calf—say, one about five or six weeks old (of course the calf was killed for food), and filled it with salt, and fastened it together, this was done in the spring; the cheese season was not till July, when the weather was too warm for butter-making. Then when she wished to make cheese she took this rennet, as it was called, took out the salt, and put it to a pint of new milk; she strained the milk for cheese at night into tin pans or pails, in the morning she heated the night's milk to the warmth of the morning's milk, and added the milk from the rennet, and let it stand till it became a thick curd; then, cutting it through with a long knife, the curd would separate from the whey; then spread a linen strainer over the top, dip all the whey off into a clean brass kettle, heat it to a boiling point, and turn it back through the strainer into the curd; let it stand till it is cold; have ready a dry cloth and mould for your cheese; spread the cloth over a cheese basket, and dip your curd into the basket; let it drain two hours; put it into the cheese-mould or hoop; have a round board that will go easily into the hoop, and, after making it all as smoothly as possible in the hoop, put on the board, with the cloth between it and the cheese, and put it in the press. The description of the cheese press is useless. Press it sufficiently hard enough that when it is taken from the mould it will retain its shape. In three hours change it into a dry cloth, and let it stay in the press over-night. In the morning cover it with thin cloth to exactly fit the cheese, a straight band, with two round pieces the size of the cheese. Grease this twice a day with fresh butter. Don't forget to salt the cheese before pressing it; the quantity of salt according to the size of the cheese. A smart farmer's wife can tell by the taste of the curd, and anyone that cannot tell by the taste had better not try, for she will spoil the cheese.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

MONTHLY COUNCIL: Wednesday, June 7.—Present: Lord Vernon, President, in the chair; the Duke of Devonshire, K.G.; Earl Cathcart, Lord Chesham, Lord Kesteven, Lord Tredegar, the Hon. H. G. Liddell, M.P.; Sir Massey Lopes, Bart, M.P.; Mr. Amos, Mr. Baldwin, Mr. Barnett, Mr. Barthropp, Mr. Booth, Mr. Bowly, Mr. Cantrell, Mr. Clive, Mr. Davies, Mr. Dent, M.P.; Mr. Druce, Mr. Brandreth Gibbs, Mr. Hoskyns, M.P.; Mr. Hornsby, Colonel Kingscote, M.P.; Mr. Leeds, Mr. Masfen, Mr. Milward, Mr. Randell, Mr. Ransome, Mr. Ridley, M.P.; Mr. Statter, Mr. Stone, Mr. Thompson, Mr. Torr, Mr. Welby, M.P.; Mr. Webb, Mr. Wells, M.P.; Mr. John Wells, Mr. Whitehead, Colonel Wilson, Mr. Jacob Wilson, and Dr. Voelcker.

The following new members were elected:

Arnold, Ralph, Shackerstone, Atherstone, Leicester
Austin, Harry, Colley, Allscott, Wellington, Salop
Barrs, Maria, Oldstote Hall, Atherstone, Leicester
Beckett, Richard, Hartford, Northwick, Cheshire
Bentley, Timothy, Davenham, Northwick, Cheshire
Bond, Peter, Draycot, Chedale, Stafford
Booker, Joseph, Wilbrighton Hall, Newport, Salop
Bowen, Thomas, Wooton, Bridgenorth, Salop
Bridgeman, Jno., Ascott Hall, Shrewsbury, Salop
Broughall, George, Beekbury, Shifnal, Salop
Brown, Richard, Walton Bank, Stone, Stafford
Butcher, Thomas, Selling, Faversham, Kent
Byford, William, The Court, Glemsford, Suffolk
Byron, Jno., Kirby Green, Sleaford, Lincoln
Cartwright, Robert, Wergs, Wolverhampton, Stafford
Chaplin, Jno. Richard, Three Chimneys, Ridgewell, Halstead
Clift, Samuel, Fordhouse Mill, Wolverhampton
Cobbold, John Patterson, Ipswich, Suffolk
Cocking, William Farrow, Curlew House, Crowle, Doncaster
Collins, Charles, Busbage, Hineckley, Leicester
Craddock, Robert, Lyneham, Chipping Norton, Oxford
Daintree, George, Ekins, Fenton, Warboys, Huntingdon
Davies, James, Isle Park, Shrewsbury, Shropshire
Davis, John, Wykin Hall, Hineckley, Leicester
Dickens, Robert A., Woodford Grange, Wolverhampton
Downing, J. Marshall, Dowles, Bewdley, Salop
Dudding, William, Lamcroft, Louth, Lincoln
Edwards, Edward, Boreton, Shrewsbury, Shropshire
Evans, John, Hadnall Wood, Hadnall, Salop
Fenton, John, Kidderminster, Worcester
Fenton, Ferrar, Wakefield Road, Dewsbury, York
Fowler, William, Acton Reynold, Shrewsbury, Salop
Gardom, John William, Butterton Hall, Newcastle, Stafford
Gibbins, Henry, Bedhampton Manor, Havant, Hants
Gillott, Thomas Lambert, Coventry, Warwick
Griffith, William, Glyn, Dolgelly, Merioneth
Goodall, William H., Sutton, Market Drayton, Salop
Groves, Robert Vincent Corbet, Berrington, Shrewsbury, Shropshire
Greetham, John, Stainfield Hall, Wragby, Lincoln
Hall, Captain Angus W., Claremont, Millbrook, Hants
Hardy, Arthur, Maelkey House, Sudbury, Derbyshire
Hardy, Benjamin, Green House Farm, Ashover, Chesterfield
Harris, Thomas, Moston, Stanton, Shropshire
Hewer, Robert, Fair Green, Chipping Norton, Oxon
Hewett, William Henry, Norton Court, Taunton, Somerset
Hodgkinson, George, Kirby-in-Ashfield, Nottingham
Hoole, Arthur, Hinnington House, Shifnal, Shropshire
Hunter, Leigh Rigby, Bedstow House, Aston-on-Clun, Shropshire
Hunter, Patriek, Roden, Wellington, Salop
Ireland, William, Forthampton, Tewkesbury, Gloucester
James, John, Sandon Hall Farm, Stone, Stafford
Jenks, Thomas, Orton, Tysull, Wolverhampton
Johnson, Robert, Kirk Ireton, Wirksworth, Derby
Jones, John, Pantygoitre, Abergavenny, Monmouth

Knight, John Leedham, Barton-nder-Needwood, Burton-on-Trent
Landon, Walter J., Lee Hall, Rugeley, Stafford
Lees, Richard, Waterloo Road, Wolverhampton
Macadam, Charles Thomas, 109, Fenchurch Street, E.C.
Marten, John, Chilham, Canterbury, Kent
Masfen, William, Norton Caines, Stafford
Middleton, William Wiley, Flitcham Abbey, King's Lynn
Mousley, Thomas Turnor, Wellfield, Carmarthen
Moore, William Winwood, Tewkesbury, Gloucester
Nickoles, James, Tuck Hill, Bridgnorth, Stafford
Palmer, Robert, Nagington, Market Drayton, Salop
Palmer, Roger W. H., Cefor Park, Wrexham, Denbigh
Parke, William, Stragglethorpe, Newark, Lincoln
Parkin, John, Goldthorpe, Worksop, Notts
Parr, Captain R. W., 78, High Street, Bridgnorth, Salop
Perkins, James, Manesty, Penkridge, Stafford
Perry, Graddon, Acton Pigott, Condover, Salop
Pickering, William, Poulton Pulford, Wrexham, Denbigh
Podmore, Robert, Sealand, Queen's Ferry, Flint
Powis, Charles, Millwall Pier, and 60, Gracechurch-street, E.C.
Pugh, David, Manoravon, Llandels, Carmarthen
Quelch, J., Bewick, Bowburn House, Ferry Hill, Durham
Roberts, Frederick L., Queen's Ferry, Flint
Robinson, Isaac, 1, Victoria Road, Wisbeach, Cambridge
Robinson, Stephen, Tynhale's, Kington, Hereford
Rogers, William Henry, J.P., Wolverhampton, Stafford
Saxton, Dr. W. W., Market Drayton, Salop
Scott, Thomas Robert, Portchester Farm, Portchester, Hants
Shakshaft, Thomas, Havenstone, Newport-Pagnell, Bucks
Sharpley, Charles, Fulstone Hall, South Lincoln
Sharpley, Isaac, Boswell House, South Lincoln
Shaw-Hellier, Captain Thomas Bradney, The Wood-house, Wombourne, Stafford
Sladden, Captain J. B., Donington, Newport, Salop
Smith, George, Ailston, Stratford-on-Avon, Warwick
Smithell, Richard Hudson, Hengrove House, Margate
Stubbs, Samuel, Bridgford, Stafford
Summer, Richard, Cranmer House, Bridgnorth, Salop
Swift, George, Hauchurch, Newcastle, Stafford
Taylor, Henry, Pittingham, Wolverhampton
Thompson, William, Moresdale Hall, Kendal, Westmoreland
Twentyman, Alfred Charles, Castlecroft, Wolverhampton
Walker, Samuel, Chapel House, Tutbury, Stafford
Wardle, Henry, Burton-on-Trent, Stafford
Watling, Robert S., Scraby Hall, Yarmouth, Norfolk
Watson, Rev. Joshua R., Le Bocage, Guernsey
Webster, Frederick Taylor, Bishton Hall, Shifnal, Salop
Wilde, Henry John, Hopstone, Bridgnorth, Salop
Wilson, John, Aston Hall, Claverley, Bridgnorth
Wolton, Horace, Newbourn Hall, Newbourn, Woodbridge
Wood, Edmund Burke, Moreton Hall, Chirk, Ruabon, Salop
Woodfin, John, Aston, Wem, Salop
Wright, Charles, Stretham, Ely, Cambridge
Wright, George Thomas, Stoke Farm, Wokingham, Berks
Wright, Richard Merry, Coppenthal, Stafford

FINANCES.—Mr. Davies presented the report, from which it appeared that the secretary's receipts during the past month had been duly examined by the committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and found correct. The balance at the banker's on May 31 was £3,848 14s. 11d., while £2,000 remains at deposit. The committee also reported that, by a letter received from the Society's solicitors, the action of Braddon *versus* the Society stands for trial on Tuesday next, at 10 a.m., at the Court of Exchequer, Westminster Hall.

Mr. Thompson (chairman) reported that, after considering a letter referred to them by the Council, in which Mr. Sidney advocated an agricultural survey of England by the Society, the committee were of opinion that the

information which Mr. Sidney thinks it desirable to collect by means of a general and very expensive survey, has been to a great extent obtained in a more interesting and useful shape by means of the reports which have been published in the *Journal* within the last few years, viz., in—

1867. Reports on steam cultivation, giving the details of management of 176 farms cultivated by steam, and situated in 29 different English counties.

1869. Reports of a few eminent farms selected for the known excellence of the results obtained by the skill of the occupiers.

1870. Reports on the farms which competed for the prizes offered at the time of the Oxford Show.

These reports have been drawn up by very able writers at a considerable cost to the Society, and will, with the consent of the Council, be continued from time to time; and the committee submit that an exact account of a limited number of noted farms in different districts is more likely to be useful than the indiscriminate collection of details referring to good and bad alike, and which, if faithfully collected, would be too bulky to be fit for general perusal.—This report was adopted.

CHEMICAL.—Mr. J. Dent Dent, M.P., reported that a letter having been read from the secretary of the Oswestry District Agricultural Society, applying for information as to how far members of the Royal Agricultural Society, being also members of the committee of a local agricultural society, may apply to Professor Voelcker for analyses of manures, and may make such use of these reports as they think proper at the meetings of the local society—the committee were of opinion that reports of analyses by Professor Voelcker, being made for the *bona fide* use of members of the Society, such reports ought not to be used as public property by the committees of local agricultural societies.

In presenting Professor Voelcker's quarterly report, the committee regret that they have to call the attention of the Council to the great number of inferior and adulterated manures and feeding stuffs sold to agriculturists; but they hope that the determination of the Council to publish these reports will eventually do much to check such fraudulent transactions. The number of applications for advice received by the Professor is continually increasing, and members of the Society seem fully alive to the advantage and necessity of chemical inquiry. In many of the cases presented there is a difficulty in obtaining the names of the vendors of manures or cakes, and the committee find that very frequently vendors make compensation, and compromise the matter to avoid exposure.

The following is the report of the Consulting Chemist:

I. Last March I reported the following analysis of an artificial manure, which was sent to me by Mr. Catchpool, Feering Bury, Kelvedon, Essex:

Moisture	...	...	...	9.65
*Organic matter	...	...	...	13.54
Phosphate of lime	...	...	...	4.99
Carbonate and sulphate of lime	...	...	...	48.77
Alkaline salts and magnesia (chiefly common salt)	...	...	...	3.22
Insoluble siliceous matter (sand)	...	...	...	19.53
				<hr/>
				100.00
*Containing nitrogen	...	...	...	1.12
Equal to ammonia	...	...	...	1.36

In comparison with the price at which Peruvian guano is sold, this manure would be dear at £2 a ton.

Mr. Catchpool has since informed me that he bought this artificial manure from Messrs. H. Marshall and Co., Quay, Wivenhoe, Essex, as fish and bone manure, at £5 5s. per ton, and sent me the accompanying letter and copies of analyses, which he received from Messrs. H. Marshall and Co.

Quay, Wivenhoe, February 27, 1870.

Edw. Catchpool, Feering Bury.

Dear Sir,—In accordance with your request, enclosed you have copies of analyses of our fish and bone manure.

We are exceedingly busy with it, and sending out from 20 to 30 tons per day. Sir John Tyrrell, of Bireham House, had a ton of our fish and bone manure, and tested it for barley and oats in a forcing-house, and Mr. Lewin, his land steward, stated in Chelmsford market on Friday that the fish and bone manure beat all the others, and the only thing near it was Peruvian guano.

Your order shall have our best attention.

Yours, faithfully, H. MARSHALL AND CO.

Copy.

Result of Analysis of Fish and Bone Manure by Professor Voelcker, Analytical Professor to the Royal Agricultural Society.

Laboratory, 11, Salisbury Square, Fleet Street, London, October 21, 1870.

Moisture	...	...	...	14.74
*Organic matters and salts of ammonia	...	...	...	21.29
Phosphates of lime and magnesia	...	...	...	10.07
Sulphates and carbonates of lime	...	...	...	35.29
Alkaline salts	...	...	...	10.64
Insoluble matters	...	...	...	7.97
				<hr/>
				100.00
*Containing nitrogen	...	...	...	3.62
Equal to ammonia	...	...	...	4.39
Fee received, £5 5s.	(Signed) AUGUSTUS VOELCKER.			

Copy.

Result of Analysis of Soluble Fish and Bone Manure by Professor Sibson, F.C.S., Professor of Chemistry in the Royal Agricultural College.

Laboratory, 11, Eaton Terrace, St. John's Wood, October 20, 1870.

Moisture	...	...	...	15.13
*Nitrogenised organic matter and salts of ammonia	...	...	...	22.58
Precipitated phosphates	...	...	...	14.02
Insoluble phosphates	...	...	...	7.93
Sulphate of lime	...	...	...	27.63
Alkaline salts and magnesia	...	...	...	6.44
Insoluble siliceous matters	...	...	...	7.17
				<hr/>
				100.00
*Containing nitrogen	...	...	...	3.90
Equal to ammonia	...	...	...	4.70
	(Signed) ALFRED SIBSON, F.C.S.			

Feering Bury, Kelvedon, March 16, 1871.

My dear Sir,—Thank you for your letter, received this morning, also for the trouble you have taken. This same post also brought a letter from Marshall and Co., in which they write, "There is no necessity for you to correspond with Dr. Voelcker, as we are in communication with him." Is this statement correct? as I do not gather from your letter that you have heard from them. I shall be glad to hear.—Believe me to remain, yours faithfully, EDWARD CATCHPOOL.

Dr. Augustus Voelcker.

A sample of boiled bones, sent to Mr. Barbour, of Bolesworth Castle, Chester, on analysis, was found to have the following composition:

Moisture	...	...	...	5.76
*Organic matter	...	...	...	11.64
Phosphate of lime	...	...	...	40.47
Carbonate of lime, magnesia, and alkaline salts	...	...	...	12.53
Insoluble siliceous matter (sand)	...	...	...	29.60
				<hr/>
				100.00
*Containing nitrogen	...	...	...	.94
Equal to ammonia	...	...	...	1.14

This sample, it will be seen, was largely adulterated with sand. I have not been able to learn whether it was sold as pure boiled bone dust, and at what price per ton.

3. In another sample, sold as pure and unadulterated bone dust to Mr. Henry Straker, Riding Mill on-Tyne, I found 28.66 per cent. of sand. This sample was taken out of the middle of one bag. Having reported the bone dust to be adulterated, Mr. H. Straker sent me a fresh sample taken from several bags, and then mixed before taking the sample, and requested me to make a full quantitative analysis, which yielded the following results:

Bone Dust sent by Mr. H. Straker, Riding Mill-on-Tyne, March 8.

Moisture	7.20
*Organic matter	19.17
Phosphates	41.56
Carbonate of lime	11.06
Alkaline salts and magnesia	5.92
Sand	15.09
	<hr/>
	100.00

*Containing nitrogen	2.47
Equal to ammonia	2.09

Like the preceding sample, it was not pure and genuine bone dust, although it was bought at £8 7s. 6d. a ton, as will be seen by the invoice of Messrs. Oliver & Snowden, seed and cake merchants, and dealers in Peruvian Government guano, nitrate of soda, tar, grease, and oils, Haltwistle.

H. Straker, Esq., Riding Mill. Haltwistle.
Bought of Oliver & Snowden, Seed and Cake
Merchants, &c.

Feb. 25, 1871.—67 bags bone dust, 5 c. 2 qr. 0 lb.
0 oz., at £8 7s. 6d. £42 14 2
67 bags 1 19 1

Stocksfield.—Carriage not paid. £44 13 4

Mr. Straker sent me a copy of a letter, in which occurs the following passage:—

You will probably remember having also had a sample of bone dust which I had bought as "pure and unadulterated," and which, on getting your analysis, I sent back. I heard in the train to-day that it was afterwards sent to a neighbour of mine (he told it to me himself), who also had it analysed, not liking the look of it, and the report was worse than yours; he, too, refused it, and they actually sent him a copy of your analysis to me, which I had given them in justification for my refusing it—this they sent to my friend to show how wrong his chemist was. They offered to deduct 10s. a ton if he would keep it.

4. *German Potash Silts: Kainite.*—Mr. H. Straker also sent me a sample of kainite, which he had bought from Messrs. Keighley & Maxsted, of Hull, on a guarantee that the kainite should not contain less than 23 per cent. of sulphate of potash. I find, however, only 18 per cent. of sulphate of potash in the sample sent to me by Mr. Straker on February 23, 1871.

The sample was taken from a burst bag, and as it might not have fairly represented the percentage of potash in the whole delivery, Mr. Straker sent me another sample, which was a mixture taken from the middle of ten bags. The second sample of kainite, received March 8, yielded:

Potash	10.35
Equal to sulphate of potash	19.15

Both the bone dust and the kainite were returned by Mr. Straker, as not being according to the guarantee.

5. *British Economical Manure.*—A sample of so-called artificial manure was sent to me by Mr. W. Levett, Glassenbury, Cranbrook, who informed me that the manure is called the British Economical Manure; that it is manufactured by Mr. B. Covey, 17, Devonshire Square, Bishopsgate Street, London, and sold at £12 per ton. Its composition was as follows:

Moisture	12.89
*Organic matter and water of combination	8.07
Sulphate of iron	14.09
Sulphate of lime	10.78
Alkaline salts (sulphate of soda chiefly)	44.61
Sand	9.56
	<hr/>
	100.00

*Containing nitrogen ... ..	.11
Equal to ammonia	1.13

This economical compound contains a mere trace of ammonia, no phosphates whatever, and is a worthless mixture of green vitriol, crude sulphate of soda (saltcake), gypsum, and sand. It has already been mentioned in the quarterly reports, and its utter worthlessness pointed out to farmers. Mr. Levett states that he bought 1 ton, and some of his neighbours more than this quantity.

6. I would also direct attention to the composition of a sample of British guano, sent for examination by Mr. Joseph Masters, Bengeworth, Evesham:

Moisture	19.26
*Organic matter	26.61
Phosphates	12.83
Sulphate of lime	11.62
Manganese and alkalies	10.74
Sand	15.94
	<hr/>
	100.00

*Containing nitrogen	1.50
Equal to ammonia	1.82

This British guano contained not quite 2 per cent. of ammonia and 13 per cent. of phosphates, and on the other hand a good deal of sand and gypsum. It is scarcely worth £4 a ton.

I have received no particulars of the price at which this manure was supplied, or the parties from whom it was received.

There have been several cases of inferior guano, and also, I regret to say, some that have been also adulterated.

7. *Adulterated Guano.*—A sample of Peruvian guano, sent by Mr. W. Lamin, Bestwood Park, Nottingham, was found to contain in 100 parts:

Moisture	15.22
Carbonate and sulphate of lime	5.54
*Organic matter and ammonia salts	25.43
Phosphates	18.62
Alkaline salts, &c.	8.84
Sand	26.35
	<hr/>
	100.00

*Containing nitrogen	5.79
Equal to ammonia	7.02

It will be seen that this guano was adulterated with a large proportion of sand and earthy matters, which yielded only 7 per cent. of ammonia. It was sold at £12 10s. per ton.

Bestwood Park, May 1, 1871.

Dear Sir,—You wished me to inform you how I bought the guano I sent you for analysis. I enclose you the invoice. Mr. Wood, a friend of mine, assures me that he only gets 5s. per ton for selling it, calls it Peruvian guano, and he believed it to be good. He bought it from W. Shaw and Co., 15, Tithe Barn Street, Liverpool.—Yours, faithfully, W. LAMIN.
Dr. Augustus Voelcker.

P.S.—Mr. Wood did not sell the guano as best Peruvian, but said it was cheap at the price he sold it. W. LAMIN.

A case of adulterated guano, supplied by the same firm at Liverpool, was mentioned in the last quarterly report.

8. Another sample of adulterated guano was sent for analysis by Mr. N. Basket, Braines Hall, Wetheringell, Stonham, Suffolk, who paid for it £12 15s., cash. It had the following composition:

Moisture	17.84
*Organic matter and ammonia salts.....	23.97
Phosphates	23.07
Carbonate and sulphate of lime	12.02
Alkaline salts, &c.....	5.35
Sand	12.75
	<hr/>
	100.00

*Containing nitrogen	4.94
Equal to ammonia	5.96

9. *Fish and Bone Manure.*—One of the most worthless artificial manures examined by me during the last quarter was a sample of so-called fish and bone manure, sold at £5 per ton delivered free, sent by Mr. N. Basket.

This compound, as will be seen from the subjoined analysis, yielded only one-third of a per cent. of ammonia (in round numbers), and only 3½ per cent. of phosphate of lime, and the remainder was not worth the cartage to any distance. Such a manure would scarcely be worth 10s. a ton, delivered free of cost on the farm.

Composition of a sample of Fish and Bone Manure sent by Mr. Nathaniel Bosket, Braines Hall, Wetheringsell, Stunham, Suffolk :

Moisture	11.98
*Organic matter.....	8.85
Phosphate of lime	3.43
Sulphate and carbonate of lime	51.06
Magnesia and alkaline salts.....	2.70
Insoluble siliceous matter (sand).....	21.95
	<hr/>
	100.00

*Containing nitrogen.....	.31
Equal to ammonia .....	.37†

† The Professor has not received the names of the vendors of these manures, but has applied for them.

10. *Concentrated Fish Manure.*—A manure, received from Mr. W. W. Gascoyne, The Lawn, Sittingbourne, was offered to him as concentrated fish manure, at £4 10s. per ton, but according to the subjoined analysis, it was worth only £2 per ton.

Composition of a Manure sent by Mr. W. W. Gascoyne, The Lawn, Sittingbourne, called Concentrated Fish Manure, April 21, 1871:—

Moisture	17.48
*Organic matter	21.37
Biphosphate (equal to bone earth 2.06)	1.31
Insoluble phosphate	5.92
Sulphate of lime	20.64
Alkalies	1.14
Sand	32.14
	<hr/>
	100.00

*Containing nitrogen ... ..	.69
Equal to ammonia ... ..	.83

Mr. Gaseoyne writes:—

The Lawn, Sittingbourne, May 9, 1871.

Dear Sir,—The manure merchants are much dissatisfied with the result of your report, and will seek an analysis on their own account. The price they ask me for this manure is 90s. per ton; they say it consists exclusively of acid, fish, and scutch; they cannot understand the 32.14 “insoluble siliceous matter,” and 20.64 “sulphate of lime,” but these must come with the scutch from the tanpits.—Yours faithfully,

W. W. GASCOYNE.

The names of the dealers have not been furnished.

11. Another very inferior manure was received from Mr. Edward Wadham, Millwood, Dalton-in-Furness. This manure had the following composition:—

Moisture	26.74
*Organic matter	29.90
Phosphate of lime	5.30
Oxide of iron and alumina	4.86
Carbonate and sulphate of lime	4.63
†Alkalies and magnesia	11.52
Sand	17.05
	<hr/>
	100.00

*Containing nitrogen	1.37
Equal to ammonia	1.66
†Containing nitrate of soda ... ..	.72

I estimated its value at about £2 5s. per ton. In reply to my inquiries, Mr. E. Wadham writes as follows:

Millwood, Dalton-in-Furness, May 15, 1871.

Sir,—Absence from home must be my apology for not having sooner attended to your favour of the 6th inst. Your analysis entirely confirms my suspicions. The article was purchased from one William Gradwell, of Barrow-in-Furness, and he charged £3 10s. per ton for it. I shall, of course, only pay him according to your valuation, and if he makes any difficulty about it, he must stand the consequences.

Yours obliged,

Dr. Augustus Voelcker. EDW. WADHAM.

12. *Composition of a Sample of Patent Blood Manure, sent by Mr. F. Minett.*

Moisture	19.24
Water of combination and }	15.60
*Organic matter	
Biphosphate of lime (monobasic phosphate lime	11.10
Equal to bone-phosphate (tribasic phosphate of lime) rendered soluble by acid	(17.40)
Insoluble phosphates	8.14
Sulphate of lime	40.64
Alkaline salts and magnesia	2.01
Insoluble siliceous matter	3.27
	<hr/>
	100.00

*Containing nitrogen	1.82
Equal to ammonia	2.21

Slowley Hall, Arley, near Coventry, April 11, 1871.

Dear Sir,—I have sent you a sample of Patent Blood Manure by rail, to analyse as No. 5, and enclose you a Post-office Order for £1. The price of the manure at my station is £10 per ton; it is bought from a very respectable firm, and I should like to know whether I have value for my money.

Waiting your analysis, I remain, yours truly,

A. Voelcker, Esq. JUNIUS MINETT.

Slowley Hall, Arley, Coventry, May 26, 1871.

Dear Sir,—On receipt of your analysis, I forwarded a copy of it and your letter to the firm the manure was purchased from, and enclose a copy of their reply, which I do not consider at all satisfactory. They enclose a receipt for £2, the difference of their No. 2 and No. 3 manure. If I had not had an analysis, I should not have known their mistake (as they put it). I have not given the name of the firm, but will do so if you require it.—I am, dear sir, yours truly,

Dr. Voelcker. JUNIUS MINETT.

P.S. On looking at the bags I find they are marked No. 3. They have three prices for their Patent Blood Manure: No. 1, £6; No. 2, £8; No. 3, £10. No. 3 I ordered. J. M.

Copy of Reply.

May 17, 1871.

Dear Sir,—Immediately upon receipt of your sample we tested it, and find that it is No. 2 blood manure, and not 3. We exceedingly regret such a mistake should be made, and for the future we shall brand the bags with red instead of black, so that no such mistake can occur. With forwarding towards 200 tons daily, a mistake such as this cannot be wondered at with workmen, as the only distinction on the bag is the letter 2 and 3. The price Dr. Voelcker put upon it is simply absurd. The ammonia is 20s. per cwt., the soluble phosphate 6s. per cwt., which shows at once—

17.40 soluble, at 6s.	£5 4 0
2.21 ammonia, at 20s.	2 4 0
Insoluble, all from Peru guano, 8.14 at 2s. 6d.	1 0 0
Organic matter and sulphate of lime	1 10 0
	£9 18 0

The standard for price is Nesbit's, and the price of ammonia is the market price. We guarantee No. 3, 20 per cent. soluble phosphate, 4 per cent. ammonia—that is, 2 per cent. more than the No. 2.—We are, dear sir, yours truly.

The committee have requested Professor Voelcker to write at once for the name of the firm who supplied this manure.

13. *Adulterated Rice Meal.*—In the next place I have to report a case of adulterated rice meal, sent to me for examination by Mr. W. Stubbs, Bickerscote, near Stafford. This meal had the following composition:

<i>Composition of Adulterated Rice Meal.</i>	
Moisture	8.36
Oil	4.72
*Protein compounds... ..	7.57
Starch, sugar, &c.	43.75
Woody Fibre	11.14
Mineral matter	24.16
	100.00
*Containing nitrogen	1.26
<i>Analysis of Ash.</i>	
Phosphate of lime	3.44
Magnesia and alkalies	2.89
Sulphate of lime	11.73
Silica and sand	6.10
	24.16

It will be noticed that this meal was mixed with gypsum; and as it contained 24 per cent. of mineral matter and 11 per cent. of indigestible woody fibre, it is no wonder that it did not agree with Mr. Stubbs's stock. In answer to my inquiries respecting the name of the vendor of the meal, price, &c, I received the following note:

Dunston Farm, Fenkrudge, March 25, 1871.

Sir,—Mr. W. Stubbs, of Bickerscote, has laid before me your analysis of a sample of rice-meal from a lot purchased by him, also your letter requesting him to give the name and address of the vendor, and as he had some doubts as to how far this would render him liable in case it was published, I have prevailed on him to place in my hands the invoice and correspondence relating to it, to forward to you if I thought fit. I do so, because I believe it is the only way to check the shameful impostures to which we are every day made victims. Mr. Stubbs wishes you to send the paper back to him at once, as he consumed 7 sacks of it before he had any suspicion of its contents, and which he has not yet paid for.—I am, yours truly,

FREDERICK BYRD.

Dr. Augustus Voelcker.

Copy of Invoice.
Corn Exchange, Oldwinsford, Stourbridge.
Charles Harrison.

1870. Terms cash.	
Dec. 31—25 sacks No. 1 rice-meal, 14s.	£18 2 6
25 bags not returned, 1s. each	1 5 0
	£19 7 6

Mr. W. Stubbs.

14. *Linseed-cake, containing castor-oil beans.*—The following letter was received from Professor Varnell:—

Beech House, Belton, Suffolk, April 23, 1871.

My dear Doctor,—I send you two pieces of cake taken from a parcel I am feeding some bullocks with. It has made them ill, and I will thank you to examine it, and inform me what it contains that is injurious to health. Some part of the lot has been damaged, I suppose, from having been heated in bulk; and I observe that a fine crop of Fungi has sprung up on the surface of some of them, which I have thought may have something to do with the illness of the beasts, but of this I am not certain. It may contain in its composition

seeds and other matter which has done the mischief, but of this you will, I have no doubt, be able to inform me. It is possible that you may have had samples to analyse from the same lot of cake, as other farmers besides myself have had reason to complain. A reply as early as convenient will oblige yours truly,

GEORGE VARNELL.

Member of the Royal Agricultural Society.
Dr. A. Voelcker.

Beech House, Belton, Yarmouth, April 29, 1871.

DEAR DR. VOELCKER,—I beg to thank you very much for your kind letter respecting the cake. With regard to the conditions under which it was bought and sold, I am quite ignorant. All I know about it is, that a merchant in Yarmouth imported a cargo of the cake, and sold it to some farmers, who very soon, I believe, complained that it made their bullocks ill. The merchant requested me to try some of this cake with some of my cattle. I therefore had a sack of it taken to my farm, and on the following day I gave three bullocks about 4 lb. each of it, which they readily ate, and on the following day they were all decidedly ill. The symptoms were indicative of considerable irritation of the mucus membrane of the stomach and intestines. They refused all kinds of food for nearly two days afterwards. As the symptoms in each animal were precisely the same, I did not think it necessary to test the cake any further, being satisfied in my own mind that it was unfit for food for cattle. I daresay I shall be able to find out whether it was sold as pure linseed, and also at what price.

Beech House, Belton, near Great Yarmouth, May 25, 1871.

MY DEAR SIR,—About the end of this week a gentleman will send to you, by my advice, three samples of cake for you to analyse. They are from the bulk of some cake I sent you small portions of a short time since, but he (Mr. Wathing), an extensive merchant—fancies the said cake, *i.e.*, the bulk, is composed of two or more kinds, which he would be glad to ascertain. He has lately been feeding two or three lots of sheep upon this cake, and has not detected that it injures them in any way.

I remember that, in your very kind letter to me, you asked "Who was the seller of the above mentioned cake, and the price it was sold at?" I have learned that the price was £10 per ton, but, finding it produced disease in many cattle that were fed with it, he sold the rest of it by auction.

Believe me yours truly,

Dr. A. Voelcker.

GEORGE VARNELL.

A careful microscopic examination showed not merely the presence of Fungi, but also that of the husks of castor-oil beans. The cake, I need hardly say, is totally unfit for feeding purposes.

I have reason to believe that the same cake has done much mischief in Suffolk and Norfolk, inasmuch as I had samples of cake very similar to that sent by Prof. Varnell, sent to me for examination by non-members of the Society, who complained of the mischief done by the cake to their stock.

15. Another cake was sent to me by a gentleman residing in Essex, not a member of the Society, sold at £11 10s., as of best English Linseed, which was composed chiefly of the screenings from pure seed, and which had caused considerable loss amongst sheep. This gentleman not being a member of the Society, the names of the parties concerned cannot be given.

16. The next case on which I have to report is that of a sample of linseed cake, which was sold at £12 5s. to Mr. E. H. Davies, Paltou, Wenlock, Shropshire, as best cake. Its composition was as follows:

Moisture	11.34
Oil	11.60
*Protein compounds	29.25
Gum, mucilage, starch, &c.	30.33
Woody fibre	9.52
†Mineral matters	7.96
	100.00

*Containing nitrogen... .. 4.63
†Containing sand 1.40

Although this cake was not a bad feeding cake, it was nevertheless adulterated with pollard, or similar starchy mill refuse materials, and certainly not best linseed cake, nor worth £12 5s. ton.

Mr. Davies writes to me as follows :

Palton, Wenlock, April 18, 1871.

Dear Sir,—The linseed cake which I sent to you for analysis, and which I have received, was bought from Mr. Burnet, of Broseley (agent). It is a cake made at Hull, but the maker's name I do not know. It was sold as a genuine linseed cake, and is stamped (Best). I have had three different lots from the same maker—one lot stamped (Pure), the other (Genuine), and this which I sent you (Best). It cost me £12 5s. per ton. I have fancied it was a good cake, my cattle eating it well; but a neighbour of mine having bought some from the same person, with which he was not satisfied, I thought I would have it analysed, to satisfy myself if there was anything in it except linseed. Although you state that the cake in question is adulterated with bran, &c., still the composition is very similar, at all events compares favourably with that of a cake sold by Mr. Firmstone, Stourbridge, and which you state is a pure linseed cake, of first-rate quality. To explain what I mean, I enclose you analyses of the two cakes, which, if it is not giving you too much trouble, I shall be glad to have returned.—Yours faithfully,
EVAN H. DAVIES.

17. Another sample, sold as best English linseed cake, was found adulterated with nut cake, and made from dirty Linseed. In contained in 100 parts :

Moisture	...	...	...	11.92
Oil	...	...	...	10.60
*Protein compounds	...	...	...	27.06
Gum, mucilage, &c.	...	...	...	29.20
Fibre (woody)	...	...	...	15.66
†Mineral matters	...	...	...	5.56
				100.00

*Containing nitrogen 4.33

†Containing sand98

Mr. Leggatt, of Bromwich, Titchfield, Hants, says in his letter to me: "I have reason to believe the cake contains some ingredient highly injurious to stock, as I have within the last five weeks lost 30 lambs which have been fed on it." (Signed)

AUGUSTUS VOELCKER, F.R.S.

These reports were adopted.

JOINT JOURNAL AND CHEMICAL.—Mr. J. Dent Dent, M.P. reported that the joint committee recommended that they be authorised to engage a consulting botanist to the Society at a salary of £100 per annum, the engagement to be an annual one. It would be the duty of the botanist to examine plants, seeds, &c., for members of the Society, and to report the principal work performed from time to time for its members, and to undertake the work at fixed rates, to be arranged before his appointment, and to furnish papers to the Journal on special subjects of botanical interest. They also recommended that the question of the appointment of an entomologist be postponed for the present.—This report was adopted.

GENERAL WOLVERHAMPTON.—Lord Kesteven reported the following recommendations of the committee. (1.) That it is desirable that a charge of 1s. each person be made for admission to the trial fields at Barnhurst, near Wolverhampton, except to members of the Society. (2.) That the local committee be bound to provide sufficient police to prevent any impediments to such trials. (3.) That a sufficient staff of police be provided at the cost of the Society, to keep the trial ground at Stafford clear of trespass by the public during the progress of such trials. (4.) That the police at the trial fields be obtained from the Staffordshire county police, that they consist of four mounted and six dismounted men, and that more be granted if required by the stewards. (5.) That applica-

tion be made to the Secretary of State for the services of some members of the A Division of the Metropolitan Police. (6.) That the advertising of the show be on the same scale as last year. (7.) That the arrangements for Divine service in the showyard be left to the Vicar of the parish. (8.) That the arrangements for the issue of combination tickets by the Great Western and London and North-Western Railways and the Society, as proposed by the companies, be adopted. On the motion "That this report be adopted," the following amendment was moved by Mr. Randell, seconded by Mr. Milward, and carried by 19 votes against 7: "That while appreciating the assistance which Mr. Bantock has given to the secretary in endeavouring to effect arrangements with the railway companies for the issue of combined tickets, it does not appear to the Council that the terms on which alone the railway companies propose to issue such tickets would make the acceptance of them desirable." Subject to this amendment the report of the committee was then received and adopted.

IMPLEMENT.—Mr. Milward reported that Mr. Randell and Mr. Masfen had engaged additional land, required for the trial of implements, in the occupation of Mr. John Darlington, near Stafford, viz., 53 acres, at a cost to the Society of £150, with not more than £10 additional for men to keep the ground. The committee therefore recommended that the prizes offered in Classes 1, 2, and 3, and the silver cup given by the President, shall not be awarded without submitting the competing implements to trial upon this land after they have been tested upon the comparatively lighter land at Wolverhampton.—This report was adopted.

VETERINARY.—Mr. Thompson stated that a deputation of the members of this committee had had a conference with a deputation of the governors of the Royal Veterinary College, in accordance with the resolution passed at the last monthly Council. At that interview it was maintained by the governors that the College authorities could not undertake to send a veterinary inspector into the country at the request of the Society or of any of its members, as such an engagement would interfere seriously with the delivery of lectures at the College, and would also bring the professors into competition with their own pupils at the reduced fees claimed in the statement of veterinary privileges of members of the Society; they also could not undertake that professors at the College should collect for publication in the Society's *Journal* information on the treatment of diseases of stock; but they considered that the grant made by the Society was given as an aid to the education of veterinary surgeons in the pathology of cattle, sheep, and pigs. Mr. Thompson, however, expressed his belief that the deputation with whom the Veterinary Committee had conferred, probably did not represent the opinions of the governors as a body, and he therefore moved the following resolution: "That the Veterinary Committee be requested further to consider the existing relations between the Society and the Royal Veterinary College, and to report to the Council, whether, in their opinion, any improvements could be effected therein." This resolution, having been seconded by Mr. Milward, was carried unanimously.

SHOWYARD CONTRACTS.—Mr. Randell (chairman) reported that the showyard at Wolverhampton was nearly completed, and that the contractor was entitled to the sum of £1,500. The committee recommended that the seal of the Society be affixed to the agreement with Mr. Penny. For the purpose of preparing the agreement with the local committee of Cardiff, the surveyor had been directed to make a preliminary plan, which had been approved by the committee, subject to such modifications as the honorary director may find desirable, and the Secretary

had been instructed to embody in the agreement the requirements pointed out.—This report was adopted.

Mr. Torr, in moving the resolution of which he had given notice, viz., "That when the trials of implements at the country meetings of the Society are not held in the showyard, one-half of the expense of providing trial-fields shall in future be borne by the Society," pointed out that the magnitude of the Society's requirements made their visit a heavy tax on the selected locality, and that the town itself did not in any way benefit by the trial-fields.—Mr. Jacob Wilson, in seconding the resolution, expressed his belief that the Society could not spend money in a better way than that proposed by Mr. Torr.—Mr. Amos considered that the Council ought to know in each case what the Society has to pay, and Mr. Thompson suggested the insertion of the word "years" into the resolution after "in future."—Mr. Torr having adopted this suggestion, and the resolution having been further supported by Mr. Randell and Mr. Masfen, it was, as amended, put from the chair, and carried unanimously.

The death of Mr. Samuel Jonas, of Chrishall Grange, a trustee of the Society, was reported.

Mr. Thompson gave notice that at the next monthly Council he would move "That in future the list of questions to be answered by towns competing for the country meetings shall include one calling for a statement of the maximum cost of the land required for the trial of implements, the acreage wanted being furnished by the Society."

Letters were read from Mr. James Easton, Sen., resigning the office of consulting engineer, and from Messrs. Eastons, Amos and Anderson, accepting the office of consulting engineers to the Society, and were ordered to be entered on the minutes.

On the motion of Mr. Jacob Wilson, seconded by Mr. Torr, the judges of stock and implements, who had been selected by the judges' selection committee, and had accepted the office, were duly elected by the Council.

Permission was given to the committee of the South Staffordshire General Hospital to attach two boxes for the receipt of donations to the Society's buildings in the showyard at Wolverhampton.

A letter from the Secretary of the Austro-Hungarian Embassy, communicating the rules of the Agricultural Trial Station at Ungarasz-Altenburg (Hungary) was referred to the Journal Committee.

A letter was read from Mr. Joseph Meadows, the breeder of "Bolivar," and the Secretary was instructed to inform him that the Council could not depart from their usual practice in reference to prizes for stock.

THE STEAM PLOUGH TRIALS AT WOLVERHAMPTON.

THE OPENING DAY.

According to some of our highest authorities, the more money a man has been employing of late years in the practice of agriculture, the more money has he in all probability been losing. It is maintained that capital cannot contend against the seasons; and however startling such a theory may sound, it may have some special point just at this moment. On this very morning a select company of gentlemen enter upon a fortnight's very arduous duties under the auspices of the Royal Agricultural Society. They do so with sundry tabulated conditions or instructions before them, although, as it seems to us, these directions are at best of a merely formal character. They are to be allowed so much time; they are to be carefully award the prize money at their dis-

posal to a particular description of implement; they are to notice nothing which does not come within "the quinquennial rotation;" they are to select such implements as they please for trial; they will decide on the merits of the work; they will deliver their awards to the stewards, and so forth. In fact, an old hand would hardly ever trouble himself to read over his "instructions," that is, if they reach to nothing more than that we have quoted. But in awarding the £100 for "the best combination of machinery for the cultivation of the soil by steam-power," or another £100 for a combination where "the weight of the steam-engine does not exceed ten tons," or £50 for the combination most applicable to "an ordinary agricultural engine," it does look as if some especial feature in the performance might have been at least referred to by the Council. By this time, of course, any man may plough by steam if he so choose, as this is no longer a question of actual possibility, but simply of expense. And it is on this consideration mainly that "the problem," as it is called, must be solved, or, at any rate, any particular progress recorded at Wolverhampton. When, some four or five years since, travelling committees were appointed by this same Society to inquire into the results of steam cultivation, they received marching orders, which it might have been as well perhaps to have registered as standing instructions whenever the subject came up again. Thus the attention of these Royal commissioners was *specially directed*, amongst other matters, to—

The depth and nature of the tillage, and its *cost per acre*, including the various items of expenditure for each kind of work.

The amount paid annually for repairs, and the nature of breakages, and their causes.

The most economical mode of supplying water for steam cultivation.

The best method of arranging and forming roads and headlands for steam cultivation.

And so on. Indeed, it would certainly sound as if the attention of the judges at Wolverhampton might have been with equal advantage *specially directed* to these points. The general regulations, however, include a wholesome condition, which should not be without its influence on the awards, and which runs thus: "The specification must state the selling price of each article *complete* and in good working order; and each exhibitor will be bound to execute all orders given to him in the Show-yard, at the price stated in this specification, and to deliver the implements within six months of the close of the show, on pain, in case of failure in such engagement, of not being again allowed to exhibit at the meetings of the Society." It might be a business of some difficulty to very strictly enforce any such rule as this; but the advantage or absolute necessity for economy in the general application of steam-power to farm purposes is still more emphatically put, by the offer of the President's Cup. Three years since at Leicester, His Highness the Viceroy of Egypt, in commemoration of his visit to Bury St. Edmund's, gave a gold cup, for the best implement for the cultivation of the soil by steam power "for use in foreign countries where skilled labour for repairs is difficult to be procured." And here, at Wolverhampton, Lord Vernon, equally, with an eye to our own people, offers a cup for some system; "the cost of which shall not exceed £700," to be worked by a locomotive engine, "adapted for thrashing and other farm purposes." This, as we take it, must be the prize of honour of the meeting, as it undoubtedly promises to lead to the most useful results.

In drawing his report to a close, Mr. Howard Reed, the secretary to the opening commission,

said "the main objects of the inquiry were twofold; first, to ascertain the actual results of the application of steam-power to tillage operations; second, to discover the hindrances that check its further progress." The first of these considerations will be rather beyond the scope of the judges at Wolverhampton, whereas the second should come well within the range of their duties. The main hindrances to the use of the steam-plough are palpably still its cost and conduct. The Viceroy of Egypt insisted on "simplicity of construction" as one of the main features in his prize plough, and of course the more cumbersome the implement and the more elaborate the arrangement proportionately the dearer will it be in the end to the purchaser. Mr. Coleman, the secretary to another of these commissions, reports as "our general conclusion, that success depends more upon management than the nature of the apparatus—good management will command success under adverse conditions, whereas advantageous circumstances cannot compensate for want of intelligent supervision on the part of the proprietor, which should be based upon a thorough practical knowledge of steam machinery." This naturally opens up a very wide field; nor is the argument very clearly or very closely put. Management *must* surely in a degree depend upon the nature of the apparatus. The thing is something of a truism, just as a good horseman will ride a nice easy-going nag with a deal more comfort than he will one which is hard to hold or sit. So it is with the steam-plough. Everybody is not, as a matter of course, a fine horseman or a practical machinist; and hence the more easily managed, the more generally will the animal or the implement be employed.

At the general meeting of the Highland Society, two companion reports, as given in another column, were presented on certain steam-plough trials which took place during the spring. In both of these papers it will be noticed that special stress is laid upon original outlay, wear-and-tear, and current expenses. In fact, it would seem as if almost any system would now work well enough if it would only work profitably. The Highland Society's deputation clearly kept this point prominently before them, as when reporting that "the main advantages claimed for the system, simplicity and economy of working arrangements and of first outlay, and general adaptability to fields of varying size and shape, appear to be substantially borne out by the practical success achieved on Mr. M'Laren's farm. Until, however, it has been ascertained by direct and careful testing what amount of power is consumed by friction, &c., and what amount of time is consumed by the arrangement of the tackle, it is impossible to give any judgment as to the practical efficiency of the system, or its comparative economical application." This is very guardedly put; while on a longer or more thorough trial, any such practical efficiency and economical application might no doubt have been ascertained. The judges at Wolverhampton will, weather permitting, have this extended opportunity, when their main design should be to keep the tenant-farmer free from the costly visits of a white elephant.

"At one time there was a doubt as to whether, considering the excessive hardness of the soil, and other difficulties that had arisen, it would not be well to defer the trials until the autumn. But the judges felt that they could make their awards; the exhibitors were consulted, and expressed their willingness to submit to the trials without delay; and a special meeting of the Council concurred in the opinion, to which the stewards cordially assented, that the trials should be held then and there. I venture to think that this decision was right, and that the result of the trials could not have been dif-

ferent nor more satisfactory. The one prominent moral of the show may be said to be this—that in a few years every operation of field tillage will be performed by steam." So said the senior steward of implements in his official report on the "Royal" steam plough trials at Leicester in 1868; while until within the past two or three days it looked as if the senior steward at Wolverhampton might write in a very different strain, and the excessive softness rather than any excessive hardness of the soil be the chief cause of complaint. However, the weather promises to have taken up just in time, and with some weeks' work before them, the judges will consequently be enabled to examine and cross-examine, deliberate and adjourn, from Barnhurst to Stafford, nobly sacrificing their own time and home duties with all the heroic resignation of a Tichborne jury.

"The progress of steam cultivation since the trials at Newcastle, in 1864, has been eminently satisfactory, not so much on account of novelties introduced or striking improvements adopted—for, with the exception of a strengthening and perfecting of details, there is in reality little that is new—but because the merits of steam cultivation have become largely understood and appreciated; because tenant-farmers occupying areas sufficient for the employment of steam have adopted it, and have not only not been disappointed, but, on the contrary, have found great benefit from its use; because those occupying smaller farms have gladly availed themselves of the opportunities of making use of steam power by hire; and because the cereal produce on strong land has manifestly increased under the influence of steam cultivation. For all and each of these reasons we may safely assert that a great work has been done. The elaborate reports of the Inspection Committees appointed by the Society, in which are recorded the results of steam cultivation on 135 selected farms, have undoubtedly gone far to open the eyes of the less sanguine and adventurous to the advantages to be reaped from steam culture. It is a gratifying fact suggestive of the influence of the reports, that our principal makers of steam cultivating machinery have been unusually busy during the last ten months, and that the home trade has never hitherto been so active. We may fairly assume that steam cultivation is now a well-established fact, and may reasonably conclude that in process of time the steam engine for cultivating purposes will be commonly used upon every farm, and be as thoroughly appreciated as the thrashing machine." So said the judges of steam cultivation at Leicester in 1868, and to say more here, or thus early, would go far to anticipate the report of the judges of steam cultivation at Wolverhampton in 1871. No doubt the agricultural world is becoming more and more alive to the profitable use of steam-power on the farm; while only the other evening, in the Upper House, Lord Dunmore told his brother peers that "traction engines had been much improved since the existing Acts were passed, and great benefit would accrue to traders and the public from their becoming a substitute for horse-labour, which was very expensive;" as Earl Grey "looked forward to ploughs, as well as carts and waggons, being drawn by these locomotive steamers, and if the Bill, after reference to a select committee, did not pass this session, he hoped the House would refuse to renew the existing Act." A very apt prologue is this little debate of the Lords to the business of the national Agricultural Society at Wolverhampton, where, rather than anticipating the awards, let us repeat the chief decisions arrived at when steam cultivation was last put upon public trial in 1868: John Fowler and Co., Leeds, the gold cup, offered by the Viceroy of Egypt; John Fowler and Co., the first prize of £100, for their 10-horse power double set of hauling apparatus; James and Frederick Howard, Bed-

ford, the first prize of £50, for their set of patent steam cultivating apparatus. The judges of steam cultivators at Leicester were: Messrs. F. J. Bramwell, C.E., E.A. Cowper, C.E., John Coleman, John Rooke, and John Hemsley. At Newcastle-upon-Tyne in 1864, at which meeting the periodical trials may be said to have been first organised, John Fowler also took all the chief honours: the judges here being Messrs. D. K. Clark, C.E., H. B. Caldwell, Clare Sewell Read, Francis Sherborn, and John Coleman, who came to the conclusion that: "the great feature of the Newcastle steam trials, as indicating progress since the Worcester meeting, consists in the use of two engines working simultaneously. The double-engine system appears now to be fairly started, and likely for many purposes to supersede the anchor arrangements. Nor must we forget that the clip drum is the parent of this system, for with no other windlass used for steam-cultivation could it have been possible."

The following is a complete list of the officials engaged in the conduct of the Implement trials at Wolverhampton.

JUDGES.

STEAM CULTIVATING MACHINERY, &c.

F. J. Bramwell, C.E., 37, Great George-street, London, S.W.
W. Menelans, C.E., Dowlais, Merthyr Tydfil.
Major H. V. Grantham, West Keal Hall, Spillisbury.
John Hemsley, Shelton, Newark.
John Hieken, Dunchurch, Rugby.
Richard Kay, Forect Valley, Darlington.
J. W. Kimber, Tubney Warren, Abingdon.
F. Sherborn, Brilfont, Middlesex.

HOP MACHINERY AND MISCELLANEOUS.

H. B. Caldwell, Monkton Farleigh, Bradford-on-Avon.
C. Whitehead, Barming House, Maidstone.

STEWARDS.

Colonel F. M. Wilson, Suffolk.
Chandos Wren Hoskyns, M.P., Hereford.
W. J. Edmunds, Lechlade.
T. C. Booth, Warlaby.

Fortunately for the exhibitors the rain, which had come down daily during the previous week, ceased on the Friday night, and with the assistance of a brisk north-east wind on Saturday the ground was in very fair condition for most operations, a few slight showers only having fallen on Sunday. The land selected for the preliminary trials consists of about 130 acres, known as "Barnhurst," in the occupation of Mr. Taylor, situate about three miles from Wolverhampton, adjoining the road from Tettenhall to Codsall, and forming part of the farm upon which the sewage of Wolverhampton is being utilised. The best means of approach is by the Great Western Railway, which passes through the trial-fields, where the Company have constructed temporary platforms, to which special trains are announced to run at intervals of about an hour to and from Wolverhampton, for the convenience of visitors. The inclement weather had somewhat retarded the delivery of a portion of the implements to the show-yard, and consequently it was considerably after the appointed time (five on Saturday evening) before those for trial were arranged in complete order. The land for the most part is a light gravelly loam on a sandy subsoil, the crops being old seeds grazed, first seeds just mown and carted off green, and vetches also cleared off.

A course has been staked out for the trials of the traction engines, $1\frac{3}{4}$ mile in length, traversing nearly all the trial fields, and forming also the portion from which the public will view the other trials. Various undulations, in the shape of old pitholes and sharp turns, are to be met with in the course, which is thereby rendered capable of thoroughly testing the powers of the engines for ordinary farm purposes.

Mr. T. C. Booth, the Steward elect of implements, with Mr. Brandreth Gibbs, and Mr. Easton the engineer,

were engaged the Saturday in allotting the ground for the various classes, in which the entries are as follow:

PRIZES.

STEAM CULTIVATION.

Class 1.—*Eight entries*, of which three only are double sets, two being made by Messrs. Fowler and Co., and one by Messrs. Howard, for the best combination of machinery for the cultivation of the soil by steam-power, first prize £100, second £50.

Class 2.—*Five entries*, for the best combination of machinery for the cultivation of the soil by steam-power, the weight of the steam-engine not to exceed 10 tons, first prize £50, second £25.

Class 3.—*Nine entries*, for the best combination of machinery for the cultivation of the soil by an ordinary agricultural engine, whether self-propelling or portable, first prize £50, second £25. Sixteen sets of tackle only for the three above classes.

Class 4.—*Seven entries*, for the best windlass, detached, prize £20.

Class 5.—*Six entries*, for the best snatch-block, or substitute thereof, prize £10.

Class 6.—*Seventeen entries*, for the best plough, suitable for steam cultivation, prize £25.

Class 7.—*Three entries*, for the best subsoiler, suitable for steam cultivation, prize £20.

Classes 8 and 9.—*Nineteen entries*, for the best digger, suitable for steam cultivation, prize £25; for the best cultivator, ditto, prize £25.

Class 10.—*Two entries*, for the best skim-plough or scarifier, suitable for steam cultivation, prize £20.

Class 11.—*Seven entries*, for the best roller, suitable for steam cultivation, prize £10.

Class 12.—*Eight entries*, for the best harrow, suitable for steam cultivation, prize £10.

Class 13.—*Ten entries*, for the best drill, suitable for steam cultivation, prize £20.

Class 14.—*One entry*, for the best root or stone extractor, suitable for steam cultivation, prize £10.

Class 15.—*Three entries*, for the best combination of any of the above implements not qualified to compete in classes 1, 2, or 3, prize £20.

Class 16.—*Thirteen entries*, for the best implement, or part of tackle, suitable for steam cultivation, of any other description, not qualified to compete in the preceding classes, prize £20.

Class 17.—*Thirteen entries*, for the best agricultural locomotive engine applicable to the ordinary requirements of farming, prize £50.

Class 18.—*Four entries*, for the best waggon for agricultural purposes to be drawn by an agricultural locomotive engine, prize £20.

Two entries for a silver cup, value £100, offered by the Right Hon. Lord Vernon, President, for the best combination of machinery for the cultivation of the soil by steam-power, the cost of which shall not exceed £700. The engine to be locomotive, and adapted for thrashing and other farm purposes. Messrs. Fowler and Howard the only competitors.

HOP MACHINERY.

25 Entries.

Class 1.—For the best machine for the cultivation of hop gardens, to supersede manual labour, prize £20.

Class 2.—For the best machine for washing the hop plant to remove the aphid blight, prize £10.

Class 3.—For the best hop-presser, prize £10.

Class 4.—For any other improved implement or implements used in the cultivation or management of hops, prize £10.

Miscellaneous awards to agricultural articles and essential improvements therein, 10 silver medals.

In the classes for which one prize only is offered, the

judges will be empowered to divide it equally between two competing implements, if they consider them equal in merit.

Messrs Fowler and Howard are by far the largest exhibitors throughout; while the following is a general list of exhibitors of steam cultivators, &c.: Amies, Barford, and Co., Peterborough; Ashby, Jeffery, and Linke, Lincoln; W. Ashton, Lincoln; The Atmospheric Churn Co., London; Aveling and Porter, Rochester, Kent; Barrows and Stewart, Bambury; H. Bare, Newton Abbot, Devonshire; C. Burrell, Norfolk; Cambridge and Parhan, Prestley; Coleman and Morton, Chelmsford; J. Coultas, Grantham; Jas. Davy, Eynsham, Oxfordshire; W. C. Eytton, Warrington, Lancashire; J. Fowler and Co., Leeds; J. Freer and Co., Loughborough; E. Hayes, Stony-Stratford, Berkshire; Hayes and Son, Stamford, Lincolnshire; Haynes and Son, London; Heywood, Tyler, and Co., London; J. Heusman, Amphill, Bedfordshire; J. and F. Howard, Bedford; W. Huddofurth, Altwhistle, Northumberland; James and Son, Cheltenham; J. Le Butt, Bury St. Edmunds; Mander and Walker, Shrewsbury; Mellard, Trent Foundry, Rugeley; Milburn and Co., London; J. R. McKenzie, Birmingham; H. Pooley and Son, the Albion Foundry, Lincoln; Priest, Woolnough, and Mitchell, Kingston-on-Thames; J. Sainy and Co., Peterborough; Ransomes, Sims, and Head, Ipswich; The Ravensthorp Co., Mirfield, Yorkshire; Robey and Co., Lincoln; Reed, Regent's-circus, London; Tangye Brothers and Holman, London; J. Fenwick, Grantham;

Tuxford and Sons, Boston; W. Walker and Son, Bingham; J. Warner and Son, London; W. Weeks and Son, Maidstone; J. A. Williams, Baydon, Hungerford.

The heavy storms of Sunday night caused the water to lie about the entrance to the trial fields; but on Monday it was fine again, and if no more rain comes, the land will mostly be, in moderately fair working condition. Little more than preliminary arrangements were undertaken, owing to the non-arrival of many implements from the Show-yard until late in the morning. Messrs. Menelans, Hemsley, and F. Sherborn will judge classes one, two, three, and Lord Vernon's prize; Major Grantham with Messrs. Hitchen and Kinder take classes four to sixteen, and Mr. Bramwell, engineer, judges classes seventeen and eighteen, as well as having the general superintendence of the trials. Fowlers compete in all the classes for cultivators, as, also, do the Howards and the Ravensthorpe Engineering Company with Fiske's patent. Amies and Barford compete in class three; and, it is said, for Lord Vernon's prize. Barrows and Stewart have entered the same set in the three first classes, and Hayes, of Stony Stratford, is the only other exhibitor whose steam tackle is on the ground for the three first classes. Ransomes, Sims, and Head have only entered a traction engine for competition.

The "deciding courses" in classes one, two, and three, as well as for the President's Cup, will take place on Mr. Darlington's farm, near Stafford, after the preliminary business has here been got through.

BRADBURN v. THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

This case came on for hearing in the Court of Exchequer, Westminster, on Tuesday, June 13, before Mr. Baron Bramwell and a special jury; and subjoined is a verbatim report of what occurred.

Mr. H. JAMES, Q.C., and Mr. MORGAN LLOYD, were counsel for the plaintiff, and Sir JOHN KARSLAKE, Q.C., and Sir GEORGE HONEYMAN, Q.C., for the defendants.

Mr. Morgan Lloyd having opened the proceedings,

Mr. H. James said: May it please your Lordship and gentlemen of the jury. This, as you have heard from my friend, is an action for libel; but I am happy to say that in consequence of the course which has been taken, and I venture to say most properly taken on the part of the defendants, you will only be troubled for a very few minutes by hearing a short statement from my friend Sir John Karslake and myself. The defendants on the record are the Royal Agricultural Society of England, and the plaintiff, Mr. Bradburn, is a gentleman who for some years has carried on a very extensive business as a manufacturer of artificial manure at Wolverhampton. At the commencement of the year 1870 the plaintiff had an application from a Mr. Whittingham—a person who had been an agent of his, but who had ceased to be his agent—to supply a certain quantity of manure called ground bones at a somewhat low price, which he named. Mr. Bradburn replied, in a letter which has been published, that he could not supply that manure at that price without mixing with it an article called bone waste, which is produced by a mixture of phosphorus with bone ash. The manure, so prepared, was sold upon the order of Mr. Whittingham, by whom it was resold to his landlord, Mr. Broughton—a gentleman residing near Nantwich in Cheshire. That gentleman thought it right to have it analysed, and when it was submitted to Dr. Voelcker, the eminent analytical chemist, it was found not to be that which Mr. Whittingham had represented it to be, namely, the highest class of manure. Under these circumstances a statement was made to the Chemical Committee of the Royal Agricultural Society. An explanation took place, and Mr. Bradburn, the plaintiff, by means of a printed document, set forth most clearly and distinctly the circumstances under which he had sold the manure—that he had invoiced it as bone and bone-waste, and had placed marks upon the bags showing that it was bone and bone-waste, and

therefore that it was not the highest class of manure. He placed the correspondence which had passed between himself and Mr. Broughton, who had purchased the manure from Mr. Whittingham, before the Council of the Royal Agricultural Society. I will say no more than that, probably through some inadvertence, or possibly from a little oversight on the part of some gentlemen connected with the Chemical Committee of the Society, after that full and detailed information had been given by Mr. Bradburn, in the month of August last year the statement was substantially repeated in the *Journal* of the Society, that a sale had taken place of an inferior article which had been represented as a superior one. Mr. Bradburn having to live upon the good opinion of those who purchase from him, it became, of course, a serious matter to him that such a statement should be in the hands of his opponents in trade. It has injured him considerably in his business up to this time; and if the thing had been allowed by him to pass unnoticed it would probably have injured him still more. Under these circumstances it was absolutely necessary for him to bring this action. When the action was brought a plea of justification was put upon the record, alleging that the statement in the article was true. It must be obvious to every one who has had an opportunity of reading the correspondence, and who is aware of the circumstances that were brought to the notice of the Council before the article was published, that the statement contained in it could not be justified, and that if it were taken to be true it must result in the almost ruin of Mr. Bradburn. After consideration, my friends, who have had an opportunity of consulting my colleagues, have taken a course which Mr. Bradburn feels he ought at once to acknowledge to be the right and proper course towards him. He has no wish or desire in dealing with such a Society as the Royal Agricultural Society of England, to which he subscribes largely himself, and which can have no object but that of doing good to the agricultural interest of this country, to press litigation unduly against it; and the result is that my learned friend, Sir John Karslake, will state the circumstances under which the Royal Agricultural Society have taken this course, and when you have heard his statement the only thing that will remain for you to do will be to return such a verdict as will give Mr. Bradburn his costs.

Sir John Karslake: May it please your Lordship and

gentlemen of the jury—My friend, Mr. James, has truly stated to you that so far as the Royal Agricultural Society were concerned in making this publication there was not the slightest malice on their part. The circumstances have been shortly and accurately stated to you by my friend. Mr. Bradburn being a manufacturer of manure, Mr. Whittingham, a person who represented himself to be an agent of his, procured from him some manure, which he bought of him as bone and bone-waste, and which he, Mr. Whittingham, resold to Mr. Broughton as pure bone-dust, Mr. Broughton, as a member of the Royal Agricultural Society, of which Mr. Bradburn is a member, knew that one of the great objects of the Society is to have manure analysed, so that the agricultural interest may not suffer by having from time to time spurious instead of genuine manure delivered to them; and may not be disappointed by having crops come up which are of an inferior character. Mr. Broughton sent a specimen of this manure to Dr. Voelcker, the analytical chemist of the Society, and it was represented to him that, instead of being pure bone-dust, it was bone-dust with an admixture of waste, and that, under those circumstances, a great deal of its value was lost. The report of Dr. Voelcker was laid before the Council of the Society; and at the time when it was originally laid before them and published, and before any explanation was given by Mr. Bradburn, there was no doubt in the minds of the Royal Agricultural Society a belief that Mr. Bradburn had, through an agent, or as it was supposed by himself, sold as bone-dust that which was really bone-dust and waste. After considerable correspondence between Mr. Broughton and Mr. Bradburn, and after an explanation by Mr. Bradburn as to the part which he had taken in the sale, it turned out that Mr. Whittingham, who had been Mr. Bradburn's agent, and who might for some purposes be still deemed to be an agent for Mr. Bradburn, had been told with reference to this transaction that he was not to sell this article as pure bone-dust, but as bone-dust and waste. The correspondence was afterwards laid before the Committee of the Royal Agricultural Society, and they, taking the view that what was done by an agent was in fact done by the principal, in the month of August, when this work (holding up a copy of the *Journal*) was sent round to the different members of the Society, published on the part of Dr. Voelcker, a report in which it was stated that in analysing a sample of bone-dust which had been sold to Mr. Broughton, who had bought it from Messrs. Bradburn & Co. through Mr. Whittingham, their agent, Dr. Voelcker found that it was not bone-dust but bone-dust and waste. But, gentlemen, this matter has now been sifted. I have had the honour of seeing some of the members of the Council of the Royal Agricultural Society, and I may say that they are satisfied that the statement of which the plaintiff complains, and which was made without any qualification in the *Journal* of the Society, is a statement which when read might be deemed by many persons to impute to Mr. Bradburn that he had been active in the sale of that which, though represented to be bone-dust, was not pure bone-dust but an inferior article. Feeling as the Council do, after Mr. Bradburn's explanation, that he only intended to have this manure sold as bone-dust and bone-waste, they think that they ought not still to adhere to the statement which has been made, and which if interpreted in that way would be an unfair statement as against Mr. Bradburn. Under these circumstances I am quite willing, on behalf of the Council, to say that the Council feel that they have gone too far in making the statement that they have made. They feel that they ought to have this stated publicly, and to allow a verdict for nominal damages to pass against them, it being understood that his Lordship will give a certificate for costs, and so the matter will be ended. The Royal Agricultural Society have, of course, no interest in this matter, except that of doing good to the agricultural interest of this country. It is perfectly well known that it does sometimes happen that when people are led to believe that they are getting valuable artificial manure an article of very inferior quality is palmed off upon them. This statement was published under the circumstances I have mentioned, and inasmuch as it imputes to Mr. Bradburn that which could not be justly imputed to him, he personally having had nothing to do with the sale, the Council feel that in justice to Mr. Bradburn the statement ought not to go uncontradicted by them in open court; and

on their behalf I now admit that they were not justified in stating what they did in the Society's *Journal* in August last.

Mr. Baron Bramwell: Gentlemen of the jury: Of course there can be no notion here that there has been any ill-written or improper motive on the part of the defendants, who are far too respectable and too distinguished a body to be influenced by any such feelings. I think the public ought to feel very much obliged to them, and to others who do as they do. We have no public prosecutor whose business it is to protect us against frauds and adulterations; and therefore we ought to feel very grateful to this Society for what they do. But as Sir John Karslake has admitted, however distinguished and useful they may be, as soon as they find that they have done a man a wrong they ought to come forward and say so, and that is what they have done. You will, therefore, give a nominal verdict to the plaintiff in this case; and I will give the necessary certificate for costs.

Mr. H. James: It is a special jury. Mr. Baron Bramwell: 40s.

Mr. H. James: Five guineas, my lord; it is a special jury.

Mr. Baron Bramwell: Then it will be a verdict for five gs. The jury returned a verdict accordingly.

OLD OATS.—In a case before the Surrey County Court, the judge after hearing the evidence, left to the jury two questions—1st, whether the word "old" had been used in the conversation; and 2nd, whether the plaintiff believed that the defendant believed and supposed that he was contracting for old oats, in either of which case he directed the jury to find for the defendant. The jury without answering these questions, found generally for the defendant. On an appeal to the superior court whether this verdict could be maintained, the arguments were heard before the Lord Chief Justice, Mr. Justice Blackburn, and Mr. Justice Hannen, during the present term. The Lord Chief Justice said: "It was to be regretted that the jury had not given specific answers to the questions put before them by the judge, because, if their verdict had been given on the first question, it must as a matter of course be sustained. As, however, it was possible that the verdict was on the second, it was necessary to consider it on that ground; and for that purpose it must be assumed that nothing had been said as to the age of the oats. The question then was whether, under such circumstances, the passive acquiescence of the seller in the self-deception of the buyer would entitle the latter to defeat the contract. He was of opinion that it would not. The rule of law was that when a specific article was offered for sale without express warranty, or circumstances from which it was to be implied (as where there is a sale for a specific purpose), if the buyer has opportunity of inspecting and forming his own judgment, and he chooses to do so, the maxim *caveat emptor* applies, for he gets what he contracted for, and cannot complain. Here the defendant agreed to buy a specific parcel of oats, and the oats were what they were sold for—that is, good oats, according to the sample. The buyer persuaded himself, indeed, that they were old oats, but the seller (a farmer) neither said nor did anything to contribute to the deception. The buyer had only himself to blame. Suppose a person to buy a horse without a warranty, believing him to be sound, and the horse turned out to be unsound, could it be contended that it would be open to the buyer to say that, as he had intended to buy a sound horse and the seller to sell an unsound one, therefore the sale was void? The case thus put was exactly parallel to the present, and, therefore the County Court judge was wrong in leaving the question as he had done to the jury, and the verdict could not be supported." Mr. Justice Blackburn agreed on the main point, and on that part of the case had nothing to add to what the Lord Chief Justice had stated; but he had more difficulty about the second point—whether the parties were *ad idem*; but he doubted whether on that point the direction of the judge would bring to the minds of the jury the distinction between agreeing to take the oats under the belief that the plaintiff contracted that they were old; and he did not see evidence to justify a finding for the defendant on this ground; so he considered the verdict unsatisfactory, and, therefore, concurred in the judgment. Mr. Justice Hannen also agreed in the judgment, but rather on the ground that it did not appear that the jury were satisfied the defendant believed the plaintiff was selling old oats. The decision in the County Court was therefore reversed, and judgment given for the plaintiff, who had brought his action for the amount.

ON THE UTILIZATION OF FURZE.

BY THE NORTHERN FARMER.

Public attention having been so much drawn to the great utility of this plant as a forage crop, in the columns of this Journal, in consequence of the recent scarcity and high price of fodder, I am induced at the request of the editor of the *Farmer's Magazine* to follow up this subject; giving somewhat more fully my experience of its cultivation and mode of preparation for the cattle than was done in the previous article. On all light, and more particularly those lands that are high, dry and undulating, *Furze*, or *Whins*, or *Gorse*, as it is variously termed, grows with considerable luxuriance; and that soil must be very poor and miserable indeed on which it will not grow and thrive. Most farms having a bit of waste land attached, it is evident that such a plant becomes a great boon to the farmer, and there is no crop he can put in a piece of worthless craggy land that will give him such a rich return in the shape of food as the whin; and that too without the slightest expenditure further than what is required to soften and otherwise prepare the land. Clear it of large stones, and cleanse from weeds. The cultivation and use of furze, therefore, has manifest and invaluable advantages—supplying the animals of the farm with a very large amount of food during the months of winter and spring, enabling the farmer to do with much less breadth of the more expensively-grown root-crops, or, if it suits him to grow them, he can keep a larger and more valuable stock when the store animals are principally sustained by furze. It must not be overlooked that there are difficulties and extra expenses attendant on the extensive use of furze, these being greater or less according to the local facility afforded by the situation of the farm for cutting and bruising the plant when grown. Both sides of the question will be plainly stated in this short article, as I will state nothing but my own every-day experience in sowing, cutting, crushing and placing before the cattle; so that those readers who are interested in the question, and who intend to grow a portion of furze, may be as nearly as possible able to judge and act for themselves, as if at much trouble they paid me a visit and personally inspected the meadow from which the crop was cut, the machinery which prepared it, and the cattle and horses which were fed on it from 1st November to 15th April. It is of no use to sow furze on wet or moory land; whatever care or trouble may be taken with it on such soils it will not succeed. On dry slopes, however poor, it does well, and on rich dry land it grows with extraordinary luxuriance. The preparation required for it is exactly the same as for clover, and it suits equally well to sow down with a corn crop. Like the clover and grasses, the hit will be more certain if sown at the same time as the corn, the soil being so much more friable and mellow when recently stirred than it is after having become caked by exposure to sun and rain. The last fortnight of March and the whole of April becomes therefore the most convenient seed-time, and when thus early sown the young plants have acquired strength before the close of the growing season, and are able to stand the frosts of winter. May, however, is not too late, as with excellent prospect of success it can be sown amongst the growing corn in the same manner as clover, freshening the surface as much as possible with a sharp-biting harrow, and covering in exactly the mode usually pursued with grass-seeds. The

quantity of seed required for the statute acre is 35 lbs. Less of course would do, as it would branch out and cover the ground eventually; but it is of immense advantage to have it thick, every shoot growing straight up without a single branch or offset. In the first place such furze is much more tender and easier to masticate, however well the stronger-grown branches may be bruised; and, secondly, it is much handier to cut and collect, and being softer is easier prepared, the strain on the machine being not nearly so great. It is utterly impossible to form an idea of the value of this plant for feeding purposes until actually seen in its cultivated state. In its wild state it is hard and sapless; when cultivated it is rich, soft, and juicy, and is eaten with unmistakable relish by horses and cattle. It is my firm and decided opinion that there is no food that can be put before a horse which he will take to so heartily and eat with more evident enjoyment than whins when properly prepared. It is very important that the land when seeded should be thoroughly clean, so that the embryo plants may not be choked, or at best have to maintain a struggle for existence. Couch and other rank weeds that have strong roots and luxuriant foliage are highly detrimental to young furze plants, as however tenacious of life they may be, they are rather delicate in the early stages of their growth, and easily stunted. Premising that proper care has been taken in preparing the seed-bed, the plants will show thick on the ground when the corn is removed in autumn, each being a little tiny object possessed of three small glistening leaves. When exposed to the air and light they grow rapidly in a very short time, covering the ground so much as to clothe it with verdure of the deepest green. No attention of any kind is necessary during the following summer, further than to draw out any weeds that may show themselves. About the beginning of November in the year following that on which it was sown the furze is fit for use, and will afford an immense amount of valuable food, rich and succulent, and if properly prepared will be greedily eaten by both horses and cattle, even when placed before them for the first time. When prepared by the chaff-cutter only, two bushels will be required for a feed to each horse; if crushed, half a bushel less will do, as the bulk is considerably reduced by crushing. For cattle the quantities are much the same; indeed, it may be laid down as a very safe rule that every animal will eat much more than it has any likelihood of getting, few people having the requisite supply for the long period of five months. To extend the time and to afford somewhat of a variety, I prefer chopping up a portion of straw or hay along with the furze, this mixture being quite capable of sustaining store cattle all through the winter in fair condition. Cows in-milk will require a portion of roots along with this mixture, and horses the usual supply of oats when performing the ordinary work of the farm. I have never given it to fattening stock, although knowing that they would eat it greedily, considering that roots, hay, and oilcake is the best food that could be presented to them for laying on flesh quickly, and time saved in reaching maturity is money gained. Having now stated the advantages accruing to the farmer by the use of this plant as food for stock during winter, I proceed to notice the difficulties inseparable from its extended use. The advantages,

as I have endeavoured to show, are a large amount of good food economically grown, costing nothing for its culture after being established, but the rent and other charges on the land. The difficulties presented consist mainly in the large amount of labour, both manual and power, required to prepare it for use. This is work from which there can be no evasion; it must be done, and done well, otherwise all the trouble and expense previously gone to becomes a dead loss. When steam or water-power can be made available, the labour is not nearly so severely felt, nor is it so expensive; but when a furze meadow of from five to ten acres in extent has to be cut and crushed with horse-power, it becomes an almost overpowering labour. No matter how busy the horses may be at other work, it must be given up to go into the mill, and this not occasionally, but every day. A man must go to the meadow to cut it; a horse, cart, and man must be sent to bring it in. A man is required to feed the cutter, another to lift the shreds of material with a shovel, and place it in the hopper of the bruising machine; a man or boy must keep the cutter supplied, and throw it back as it accumulates under the crusher, and the horses must have a driver. All these hands must necessarily be withdrawn from other occupations for the time being. There is a certain amount of time lost in going and coming, and expenses are unavoidably increased. As the season advances, and spring work becomes urgent, the withdrawal of the horses and men from field work is felt more severely, and is more or less grudged, the probability being that if hay, roots, and straw, are moderately plentiful, a portion of the furze is left uncut, rather than lose the opportunity of fine weather for getting in the spring

crops. For working the furze machine with horse-power, the ordinary gearing of the thrashing mill will be sufficient, any ordinarily intelligent mechanic always finding a mode of attaching a working axle to which the belts can be attached without disturbing the more permanent fixtures of the thrashing machine, further than throwing the one out of gear while the other is at work, and *vice versa*. With such work as preparing furze, which requires to be attended to daily for such a lengthened period, there is no power so suitable as water, if it can possibly be had. With it there is no danger; the power is so continuously equal that there is no straining of the machinery, and when the works are once erected the expenses are reduced to the lowest point possible. Admitting the possibility of the furze-cutter being so constructed as to be able to cut the spray into infinitesimal portions, I yet hold to merely cutting into half-inch lengths with the ordinary chaffing machine, then passing through the crusher. It appears to me that the bruising so effectually given by the latter process permits exudation of the sap to a certain extent, which, adhering to the crushed fibre, imparts a flavour to the whole mass in no other way obtainable, the animals showing their appreciation of this mode of preparation by the ravenous way in which they devour it when placed before them. The deductions I myself draw as to the utility of furze as a forage crop are simply that it affords in combination with other dry foods excellent assistance in wintering stock, and in this way is exceedingly valuable. If, however, too much importance is attached to it, and an attempt is made to bring through the animals on furze solely, or but with little other help, they will become bound in their bowels, lose condition, and rapidly depreciate in value.

THE FARMING OF BELGIUM.

The kingdom of Belgium is more densely populated, and the soil is more subdivided than any other country upon the continent of Europe. Since the French revolution all feudal rights have been extinguished, and the Civil Code has jealously provided against the accumulation of landed property. The principle of equality has been carried to such an extent that an heir is compelled to restore to the estate anything he may have received by deed or gift, so that no one can be advantaged beyond the portion allotted by law. When real property cannot be conveniently divided, it is sold and the proceeds distributed, but only in case that a division is almost impossible; neither is any person allowed to dispose of his property to the prejudice of his heirs or descendants. There are, however, still a certain number of large estates, owing either to some wealthy proprietors succeeding in keeping properties together, or by buying many properties, or owing to farmers leasing lands from different owners and uniting them into large farms. There is a great desire for the acquisition of land and small savings are often expended in extensions rather than improvements. Division is not obligatory, provided those interested can come to an agreement to make up the various equal shares of the property; and such agreement may extend over a period of five years, and may be again renewed at its expiration. Out of every 100 farmers 43 per cent. cultivate less than 50 acres; 12 per cent. less than 1 hectare; 29 per cent. land not exceeding 5 hectares; and the number cultivating more than 10 hectares is only 8 per cent. This extreme sub-division compels both young and old to continuous toil and is naturally a serious impediment to educational progress in the rural districts. According,

however, to the best authorities the results up to the present time have proved advantageous, at least as far as production and rent are concerned.

The attractions of the great centres of manufacturing industry have operated upon the labour market so that the numbers engaged in agriculture have retrograded. The Belgians have supplied the deficiency by a vastly extended employment of agricultural machinery, and the peasantry have themselves gladly adopted the thrashing machine and the steam engine. In Hainault and Brabant there are few farms to be met with of any extent without the variety of implements known to our most enterprising agriculturists. The use of guano and other kinds of manure is in operation everywhere, more especially in the provinces of Antwerp, Brabant, and the two Flanders; whilst much of the progress made has been attributed to the beneficial action of the Societies through their meetings and exhibitions. The agricultural libraries and journals have likewise assisted in arousing a spirit of emulation amongst the growers.

A great experiment, the consequences of which may have some teachings for ourselves, was undertaken in a portion of the country, comprising nearly the whole of the two provinces of Antwerp and Limbourg. This region is called the Campine, and consisted of an immense tract of heath and bog, with here and there a few stunted trees. The soil is chiefly sandy, and represents now what the two provinces of Flanders were before they were brought under cultivation. Owing to the exertions of the Government, who have constructed a canal, connecting the Menze with the Scheldt, and running through the heart of the district, many parts have been converted into well-

irrigated meadows; portions have been made to produce cereals and root crops, whilst soil which is too poor for such productions is being gradually planted with Scotch fir. For this purpose a law was passed in the year 1847, conferring on the Government the power to order the sale of uncultivated communal lands, whenever such measure should be considered likely to prove beneficial to the public. This met with considerable opposition in the Ardennes, but is now favourably looked upon, both there and in the Campine, the result having been to increase agricultural products, to ameliorate the condition of the people as well as that of many of the communes, which till then had been without resources.

The last agrarian census was taken in the year 1866, but the information not having been made public, we are obliged to take the figures obtained in 1856. Accordingly we find the soil distributed much as follows, the whole area under all crops, grass, &c., being 4,521,826 acres: Under corn crops 2,484,493 acres, divided chiefly thus—wheat 804,758, barley 110,130, oats 541,347, rye 721,492. The fallows were 159,112, grasses and pastures 1,168,657, potatoes 369,850, and turnips, &c., 81,947. Although the production of grain is probably very large for the surface, yet so great is the density of the population, being 424 persons to the square mile—nearly double our own—it is inadequate to the wants of the country. In other produce, Belgium is a considerable exporter, and the two chief outlets are to France and the United Kingdom. Our purchases of all descriptions of goods now amount annually to nearly ten millions sterling, and of this two and a-half millions may be considered as belonging to agricultural produce. These results are not to be wondered at when we take into consideration the industrious character of the people, the extraordinary facilities possessed in the railways, and the possession of ocean-steam transit from the two ports of Ostend and Antwerp. In 1869 the number of animals that we received from thence was 169,971: the value of butter, eggs, and poultry, £610,391; fruit and vegetables, £207,943; flax, £573,042; hops, £209,313. Compared with ten years ago this shows a great increase in all except wool, which has fallen to comparatively *nil*.

The growth of beetroot has developed greatly, and that of hops has proved very lucrative. On a space of three square leagues in the vicinity of Lenze and Blicquy, in the province of Hainault, there are as many as eighteen sugar refineries. From the beetroot a coarse spirit is distilled, which is said to be much used for the manufacture

of wines, sold as sherries and madeira; whilst the pulp is preserved in dry tanks, or buried in pits covered with earth, and given to the cattle to fatten them during the winter. In the preparation of flax, the people have always excelled, although of late years the extent of land cultivated has sensibly diminished. The crop in many parts is sold standing to the merchant, who cuts it, and carts it off the land. The favourable results of the steeping operations conducted in Belgium, must be attributed in a very great measure to the watchfulness and unremitting care of those employed, and to their discernment in seizing the proper moment for commencing or leaving off the process. From the choice of the seed to the time when the fibre reaches the spinning mill, the inhabitants throughout these operations exhibit great superiority. The exports of the article, however, show a gradual decline during the past ten years.

There exists some difference of opinion with regard to the cattle. Although the breed of horses has undoubtedly improved, the returns show a diminution in the flocks of sheep, which seems to be general throughout the kingdom except in the province of Antwerp. The causes assigned for this decrease are the excessive subdivisions of property, combined with the sale and clearance of uncultivated lands that formerly served for pasturage. There appears to be a species of contract recognized by the Belgian law, the object of which is to regulate the loan or hire of cattle, or of any animals employed in agriculture or commerce. This contract, called the *bail à cheptel*, may be apparently turned to advantage whenever farmers are insufficiently stocked for the want of capital, as must be the case in many of the small holdings. Under this arrangement one person lends to another a certain number of cattle to tend, feed, and keep, on condition that all the profits arising therefrom out of the natural increase of the stock and the wool are to be equally divided between the lessor and the lessee, the latter being entitled to the milk, labour, and manure of the animals while under his care, any loss to be shared equally by both parties. It might be possible to introduce such a system into other countries if landlords were generally so disposed, under which cattle leased in this manner should in course of time, by gradual payments become the property of the tenant. In Belgium the relations between the landlords and the farmers are said to be of the most friendly character. The proprietors do all in their power to protect and support their farmers, and they in turn are very obliging towards their landlords.

THE "COUNT OUT."

An honourable member moved that the House be counted, but exactly forty members, including the Speaker, were found to be present. And, again, Mr. Bentinck said that "the thin attendance showed what little interest members took in a matter which so nearly concerned their constituents"—and an honourable member noticed that there were not forty members present, when the Speaker counted, and finding there were only twenty-one declared the House adjourned.

And what is this matter in which members of Parliament take so little interest but treat with such sublime indifference? Well, merely the Contagious Diseases of Animals Act, and the working of the Veterinary department of the Privy Council. Surely, however, it could not have been known to the Country Party, to the new school

of staunch Farmers' Friends that Mr. Sewell Read was about to bring on such question, or identity of interests, the close sympathy between landlord and tenant, and so forth, would have insured a good House and a bold front! On the contrary, nothing would seem to have been more sedulously put about. If we are only to believe all we hear, the English breeder and grazier is in more imminent danger than ever he has been for the last two or three years, and that is a bold word, too. The secretary of the Central Chamber of Agriculture has actually seen some Russian beasts, and has thereon indited a most alarming letter to *The Times*. Through another channel he "trusts that the Chambers of Agriculture and the Home Cattle Defence Association will take care that Mr. C. S. Read shall be well supported in his endeavour to expose the hollowness and the injury of the system we

are now under. And whatever the issue of the House of Commons debate on the subject on the 2nd of June, he hopes," and so on; while the secretary of the Home Cattle Defence Association not to be outdone also "earnestly hopes that my committee will, one and all, assist in the agitation which is essential to undo the Privy Council mischief; above all, that they will write to their members urging them to support Mr. Read. Let hon. members be reminded that the statistics of imported animals are apt to mislead; that many of the foreign sheep, especially compared to our own, are as a sprat to a herring," and so forth. Then, the secretary of the Central Chamber writes to the Lincolnshire Chamber to say the cattle of North Lincolnshire are "in most imminent danger," although the chairman of the meeting and Mr. William Torr hold to a directly different opinion, and do not consider there is much danger to be apprehended. Again, the Herefordshire Chamber resolves "to write to the members of Parliament for the county and city, asking them to support Mr. C. S. Read on the 2nd of June, when he calls the attention of the House of Commons to the working of the Contagious Diseases (Animals) Act"; the Leicestershire Chamber, with a member of Parliament in the chair, records its "alarm at animals being admitted freely from Holland, where pleuropneumonia now exists to an alarming extent"; and the York Chamber "views with consternation and alarm the re-introduction of Dutch and foreign cattle into the market."

And as the result we find a House of twenty-one members. Was there ever so pitiful a conclusion! Was there ever such a burlesque on the vigorous agitation of a grievance! And further, before Chambers of Agriculture and Cattle Defence Associations had been instituted, was the English farmer ever so utterly powerless, as this lame and impotent and abrupt demonstration has proved him to be? If we are to credit the officials of these two said societies Agriculture was seldom suffering greater wrong from the Government than at this moment, and in answer to their urgent exhortations forty members are gathered together, half of whom turn their backs on it in the very height of the debate! The secretary trusts that at its meeting to-morrow, the Central Chamber "will resolve to take vigorous steps towards placing the foreign cattle trade upon the only sound and reasonable basis;" and we see that about the first item of the general business is "to receive communications respecting the importation of foreign cattle." The most important of these communications must of course be the count-out of the House of Commons; to be followed by the reading of the list of all members of the House of Commons who are also members of Chambers of Agriculture; as to be further supplemented or pointed by the names of such honourable gentlemen as were in their places to support Mr. Sewell Read on Friday. Handled in this way, some "vigorous steps," as the

secretary says, may be taken, otherwise the receipt of any such communications will be a mere mockery and a sham. Evidently, however, the interests of the lairds and tenants who meet here are identical—that is to say, some hundreds of M.P.s will unite with their constituents over the adjustment of local taxation, and some dozen or two over the importation of cattle diseases.

The plain fact, we fear, is that people are getting sick of the way in which the foreign cattle trade has been worked. The attempted panics and cock-and-bull stories which have been tried on so often of late years have conduced to a state of things that is anything but satisfactory. But, passing over such petty considerations, as we hope to do for ever, nothing could be better timed than Mr. Sewell Read's motion. There can be no question whatever but that Veterinary Science, so far as the farmer is concerned, is in a most unsatisfactory condition, either within or without the department of the Privy Council. It was only the other day that at the general meeting of the Royal Agricultural Society of England the Report from the Council stated that: "The original purposes of the grant made by this Society to the Royal Veterinary College were two-fold:—First: to advance Veterinary Science by means of the instruction afforded to students at the College. Second: to enable members of this Society to obtain the best assistance and advice in case of the outbreak of disease amongst their stock. In addition to these primary objects the Society hoped to present to its members in general, information on Veterinary Science, by means of lectures, reports on cases treated, and on measures to be adopted to prevent disease. The first of these objects has scarcely been so satisfactorily performed as could be wished: the number of Veterinary Surgeons who have gone out from the College, and become established in the country, have not so full a knowledge of the treatment of the diseases of cattle, sheep, and pigs as to give confidence to their employers." And, again, "the second object has not been satisfactorily attained. Members of the Society do not apply to the Veterinary Inspector in cases of disease so much as they might do, and complain that it is not easy in these cases to obtain the professional advice which they require. Further than this, the Society does not receive from the College, or its Professors, the current information on diseases, or the suggestions for their cure and prevention which the Council think ought to be at their service." In fact, the inquiry which Mr. Sewell Read asked for is in every way warranted, and the Chamber of Agriculture, under whose countenance the honourable member may be supposed to have moved, and whose especial business it is "to look to matters before Parliament," insured him a House of twenty-one members—that is going so far as to assume that every one counted was with the mover of the resolution. This is naturally not very probable, as the miserable end attained only goes the more to confirm our impression that Mr. Read might have been of far more service to his fellows had he not worked with such a body tied to the tail of his coat.

THE SUPPLIES OF WOOL.

The second great textile industry of the kingdom, and that now represented in the annual Exhibition at South Kensington, is that of wool. Although of late years outstripped by cotton, it was in earlier days our most important manufacturing industry. There are more than a quarter of a million operatives engaged in the factories, while the total number of per-

sons directly dependent upon the trade may be set down at fully one million (including the workers), there being a larger number of dependent workers in auxiliary trades than in connection with any other British manufacture.

If we look merely at the export trade of British wool and woollens, we find it now constitutes one-sixth of the

total value of our exports; [cotton forming one-third, and iron one-tenth.

	Value of woollen manufactures and yarns, exported.	British wool.
1855	£9,744,469	£986,523
1860	16,000,448	877,082
1865	25,534,234	901,660
1870	31,831,217	575,583

The value of the foreign and colonial wool imported, averages more than £15,000,000 sterling, and of foreign woollen manufactures we import to the value of £2,500,000 annually.

The statistics of the woollen industry of the United Kingdom were thus given in the census returns of 1861:—

Division and Counties.	Woollen Factories.	Spindles.	Power Looms.
ENGLAND AND WALES.			
Yorkshire	924	1,296,190	11,405
Devonshire	16	12,585	255
Gloucestershire	49	59,986	618
Lancashire	101	277,655	6,377
Montgomeryshire	43	20,920	262
Somersetshire	26	31,401	401
Wiltshire	32	44,825	549
Other Counties	265	103,288	477
Total	1,456	1,846,850	20,344
SCOTLAND.			
Aberdeen	25	17,510	93
Clackmannan	15	38,311	214
Peebles	7	51,142	101
Perth	16	16,353	—
Roxburgh	21	60,747	300
Selkirk	16	46,365	158
Stirling	23	32,950	64
Other Counties	61	53,804	373
Total	184	317,185	1,303
Ireland	39	18,574	123
Total United Kingdom.	1,679	2,182,609	21,770

The great progress made in the manufacture of late years is shown by the following official figures, the latest available, which, however, do not bring the date down to last year. Still the great increase of factories and machinery indicate the present activity of the trade. The last census returns just taken will show even greater progress.

WOOLLEN, WORSTED, AND SHODDY—1868.

Division.	Factories.	Spindles.	Power Looms.
England and Wales .	2,211	6,512,590	118,755
Scotland	207	436,134	3,529
Ireland	47	28,104	215
	2,465	6,976,828	122,499

OPERATIVES EMPLOYED.

England and Wales...	233,535
Scotland	18,174
Ireland	1,378
	253,087

The cotton factories (2,549) in the United Kingdom employed in the same year 401,064 operatives. The total

number of persons employed in these factories in England and Wales in 1868 was in

Spinning	16,510
Weaving	2,284
Spinning and weaving	75,659
Finishing	5,160
Other descriptions of work	2,325
	101,938
Shoddy factories	3,187
Worsted factories—in spinning	42,983
Weaving	17,601
Spinning and weaving	66,689
Other descriptions	1,137
	128,410
Total	233,535

An estimate of the woollen and worsted trade of the United Kingdom was furnished to the Rivers Commission in the course of their inspections of the West Riding of Yorkshire in 1865. From these returns the wool produced in the kingdom was estimated at 152,000,000 lbs., of which upwards of 7,000,000 lbs. were exported, leaving nearly 145,000,000 lbs. for home consumption. The estimates for 1854 of the wool produced and imported was 447,445,889 lbs., and 63,254,102 lbs. being re-exported, there remained 384,191,787 lbs. of wool of the value of £31,698,120. This vast amount of raw material was worked up thus—35,500,000 lbs. of English wool, exported as yarn, valued at £5,000,000; and the following in manufactured goods: 110,000,000 lbs. of English wool in fabrics, valued at £22,000,000; 150,500,000 lbs. of foreign and colonial wools in tissues, valued at £22,600,000; 4,900,000 lbs. of mohair into fabrics valued at £1,200,000; 4,500,000 lbs. of foreign yarn into goods worth £1,800,000; and 79,500,000 lbs. of shoddy and extracts contributed to the extent of £4,000,000 to the value of woollen goods; the whole producing manufactures, &c., valued at £57,100,000. To this must be added cotton yarn and other material worth £7,300,000, bringing the total value of the manufactures up to £64,400,000. A further analysis gave the following estimate: 140,500,000 lbs. wool worked up into woollen and worsted goods and yarn exported of the value of £23,948,800, and the remaining 243,700,000 lbs. into goods for home consumption of the value of £40,451,200. According to the latest published official return (1865) the woollen and worsted trades of the kingdom give employment to the following:

	Factories.	Operatives.
Woollen	1,658	118,004
Shoddy	104	3,187
Worsted	703	131,896
	1,465	253,087

In a paper read by Mr. Archibald Hamilton before the Statistical Society in December, 1870, on "Our Wool Supply," he stated that: "The importations of wool during the last fifty years have increased with such marvellous rapidity, that this material now ranks second in importance as regards our textile industry; and has this peculiarity, that whereas cotton and silk are produced only in certain latitudes, and in comparatively few countries, wool is produced, more or less, in all countries. Another characteristic is the great variety of qualities, comparing the produce of one coun-

ly with another, or even of different districts in the same country—each fleece indeed contains several ‘sorts’ adapted for various purposes—so that there is perhaps no single article of commerce that gives rise to so many dealings as wool. Intercourse of their produce takes place even between manufacturing countries; for example, we import from Germany seven millions of pounds annually, and the German manufacturers take two and a-half million pounds of English wool, in addition to yarn spun from the same material. Again, wool is so much preferred to any other material for nearly all clothing purposes, that the use of woollen and worsted goods has hitherto been restricted only by the cost—the consumption extending readily as the price of wool becomes less—and notwithstanding the extraordinary increase in the imports, there has been as yet no accumulation of wool in stock, if we except the present year, when the natural course of things has been interrupted by war.”

We are mainly dependent on our southern colonies in Australia and Africa for our supplies of wool. Germany furnishes small quantities of the finer kinds, and the River Plate districts are increasing their supplies, although the quality is not so good as the Australian. The rapid progress in the woollen trade is best illustrated by the increasing supplies of foreign and colonial wool of all kinds used up, as shown in the following quinquennial figures :

COUNTRIES.	1860.	1865.	1870.
British Colonies			
Australasia ...	59,166,000	109,734,000	175,081,427
India	20,214,000	17,105,000	11,143,148
South Africa ...	16,574,000	29,220,000	32,785,271
Foreign countries.			
Spain	1,000,000	115,000	} 23,686,039
Germany	9,292,000	6,855,000	
Other Euro- pean States .	28,570,000	27,693,000	} 20,554,614
South America	8,950,000	17,567,000	
Other countries	4,630,000	3,614,000	
Total imports	148,396,000	212,206,000	263,250,499
Re-exported ...	30,761,000	82,445,000	92,542,384
Left for con- sumption. ...	117,635,000	129,761,000	160,708,115

The computed real value of the wool and woollen rags (torn up to be used as wool) imported last year was

£16,101,221, and of foreign woollen manufactures and yarn £4,891,477, making a total of nearly £21,000,000 paid for foreign and colonial raw materials and manufactures.

Our home supply of British grown wool	Lbs.	
has been carefully estimated at...	...	160,000,000
Our imports, foreign and colonial, last year, were	...	263,251,000
The skin wool from imported sheep is estimated at...	...	2,400,000
Making a total of ...		Lbs. 425,651,000
Foreign and colonial	Lbs.	
re-exported...	92,542,000	
Domestic wool ex- ported	12,400,000	
Total...	Lbs. 104,942,000	104,942,000

Leaving for home consumption... Lbs. 320,709,000 besides some 40,000,000 lbs. of shoddy or rag-wool.

The gross value of worsted and woollen yarn and British made goods exported last year (1870), was made up of the following items:

Worsted stuffs ...	£18,797,738
Hosiery, &c. ...	352,177
Shawls, &c. ...	267,772
Carpets and rugs ...	1,398,576
Flannels and blankets ...	1,098,828
Woollen cloth, &c. ...	4,740,369
Woollen and worsted yarus ...	5,175,757
	£26,831,217
British raw wool ...	575,583
	£27,406,800

These details will serve in some degree to point at the real magnitude and value of the woollen manufactures which have hitherto been most imperfectly known. We know the quantity and value of the manufactured goods exported, but we have no guide to the precise amount consumed by our own large and well-conditioned population in these islands. This, some of our most experienced merchants estimate to be three-fourths of the whole manufacture. If but £1 a head for woollen goods were allowed for every soul of the population, this would give us fully half the manufacture, which cannot certainly be set down in value of annual production at less than £70,000,000.

TEXTLESS NOTES.

BY A CROTCHETY FARMER.

“I’ve been a-thinking a-thinking” of not a few things lately, connected with the science and practice of farming, of which I am—being crotchety—an unworthy member; and some of my “thoughts,” if not worth the traditional “penny,” have nevertheless given me some concern, and have not presented to me an altogether satisfactory view of some of the points connected with that science and practice, of which we are in the habit of speaking rather glibly, as if it was altogether the thing of life and progress which we pretend to think it is, but which in many respects it is not. They say “the schoolmaster is abroad,” and people are doing their very best to believe it in the sense that he is abroad to some practical pur-

pose—abroad working not talking. I take leave to think, being crotchety, that the phrase may be viewed in a another sense, and that the schoolmaster is abroad as not being “at home” either in the subject which he purposes to teach, or in the sphere, or amongst the people he is supposed to be teaching. It is a good thing to be at home in the opposite sense to all this, but when I look around me, and think of all I have seen of late, as to the science, or rather the “no science” of the practice of farming in some—shall I say a goodly number?—of the districts of the kingdom, I much fear that either the schoolmaster or his pupils are abroad in the least satisfactory meaning of the term, and that much yet has to be done

before the lights of science dispel the Egyptian darkness which reigns there. The train of thought has been with me for some time, having been set-a-going by some few things I have witnessed; but a fresh stimulus has still more recently been given to it during the late severe weather, during which I have seen something not altogether satisfactory in the practice of farming, and in districts, moreover, where the lights of science are said to shine very brightly, and which, indeed, do so shine in some parts of said districts, but which somehow or other do the rather show the density of the darkness which surrounds them, than have a tendency to lighten up that darkness. I am not quite so crotchety as to say that it is the fault of science, by no means, but I think rather that it is the fault of the media which are not prepared to receive it, or perhaps a determined obstinacy, which will not receive its lessons. There may be something in this, and I rather think there is; but how often do we meet with farmers who will listen to nothing about science, meeting all statements as to the good it can do them with a shrug of the shoulders, and a repetition of that grand old—how very, very old!—saying of theirs, which shuts up the speaker as one shuts up a bag with a clasp, which goes off like a pistol, "There's nowt like practice"—a saying which, so far as it goes, is good and sound enough, but does not go quite far enough, nor is it complete, for it is forgetful or disdainful of the truth which is conveyed in the saying, that "good practice is dependent upon sound science." It is hard to know how to get at such men, who are crotchety with a vengeance; and it is not satisfactory to think of the miserably small progress which has been made during so many years in getting them to believe that practice—with which they profess to be so enamoured—is nothing in a paying reality unless based upon science. It has been said that "self-interest is always intelligent." I do not think this is by any means true; now and then it is, but assuredly not always. Take, for example, the *winter treatment of farm stock*, which is one of the subjects about which of late I have been "a-thinking." Is self-interest here intelligent when we find that a large number of farmers who glory in the name of "practical men" go on, year after year, with a practice which results and cannot possibly result in anything else but a loss, and a heavy loss? and this done, moreover, in the face of opinions which they have heard about, and which opinions are dead against the economy of their practice. If self-interest was in such cases intelligent, it would prompt them to inquire into those opinions which are so counter to their own practice, to see "whether these things be so, or not;" for, to an intelligent man, the mere hint of a plan said to be better than his own is enough to make him inquire as to what that plan is. It is difficult for any farmer to be so isolated now-a-days as not to have heard of what science has done for his calling, if he has not heard much of its details. And yet in view of the information which has been spread broad-cast throughout the land through the media of our Agricultural Societies, our Farmers' Clubs, and their reports and papers, and last, not by any means least, the agricultural newspapers and journals, it is not pleasant to think of many who are really in ignorance of what science dictates to farming practice; and, nevertheless, we see in too many districts a practice which is based upon anything but science. To take the subject I have already named, I have almost before my very eyes as I write, in the midst of a purely agricultural district, abundant evidence that science is nowhere—that its teachings have never been heard of, or if heard of, thoroughly despised—so that I feel I did not put the matter too strongly in the beginning of my paper when I said that the schoolmaster was abroad in anything but a satisfactory sense, or if at home that

he could not get pupils to attend his teaching. It is assuredly so in the district in which I write, and in others of which I know; for here and there, the winter treatment of stock—to take only one of the many points lying open to my notice—is carried on in open defiance of all the dicta of science. With some of my neighbours here, the winter treatment simply means ill-treatment—with some, indeed, ill-treatment carried so far as to include starvation—starvation in such weather as we had so long during the past winter—starvation from cold—starvation from want of food. For this last named horrible treatment of stock there can be, and is, no excuse; it is one which should be punished, and that severely. In view of the suffering which innocent life has to go through in consequence of such treatment, I would have a law, Draconian in its severity, to punish those who were guilty of causing it. I am quite aware that those who do practise such abominable cruelties, call them by another name, and giving sundry wise shakes of the head and sundry "saws" in proof that this practice is sound, and dictated by prudence, think all is right. In one district I know of, this process of winter starvation is called by the name of "hardening"—a process which is well named indeed, so far as those are concerned who condemn their poor suffering animals to undergo it; I should say that the man who carries out this practice is "hardened" to a certainty. But then the "practice" is much approved of, because it is said to be so useful to the animals subjected to it. It is hard to say how this is proved. I know, indeed, of some cases—too many, alas!—where the success, perfect success, of the process was about to be proved beyond a doubt, but then the animals unfortunately—foolishly, I suppose—thought fit to die just as success was in the grasp of the practitioner. Some wretchedly ignorant magistrates have indeed proved themselves so stupid as to see in this so-called "practice" a disgraceful practice that was worthy of being heavily fined—a practice which, I doubt not, was deemed by the parties so fined a complete invasion of the rights of the subject, as "why should a fellow be interfered with in doing what he likes with his own?" But for those who follow such practice of "hardening" which, as I have already stated, is in many cases complete, and in nearly all semi-starvation, there is I fear little chance of doing them good by any teachings of science; they need, it is quite clear, a preliminary teaching of quite another sort—"the education of the heart." But, for those who do not carry their practice of winter treatment of their stock to such a shameful extent as to punish them by short supplies of food or actual starvation by total want of it, but who do their best according to their light by supplying them with food, but supplying them under bad circumstances, it is possible that they may yet see the errors of their ways—errors which are those of judgment, not of morality, like those who carry out the "hardening" process thoroughly and ill. I was going to say, "such is the force of habit, well"—but this term is altogether inapplicable to a system so monstrously bad. The reader will thus see that while I am so crotchety as to characterise the complete exposure of farm stock in winter as altogether a foolish system, I divide those who practise it into two classes: first, that which comprises those who are cruel knowingly so, who to all the inclemencies of the season add the torture of starvation—starvation brought about by placing them in fields utterly unable to yield "a good bite," and worse still, covered with snow, and that for days, by which the "bite" cannot be got at such as it is; and, second, that class which are humane, because they supply exposed stock with food, but not wisely humane, because they supply that food under circumstances which science tells them greatly influence the economy of the system. It seems very late in the day, after all that has been done in

the way of the reading of papers and the publishing thereof at once by the Agricultural Societies, Farmers' Clubs, and the like, to begin to explain what science really does do—to explain what the principles of feeding are, what food is, and how it goes to sustain the life of the animal, and make it give a favourable "return" to those who rear it for the shambles or for our dairy-land; yet, as I have hinted at already, it appears that all this has been done to little purpose, to so little that the question may not be altogether a crotchety one, Is there not something yet to do, some system to be inaugurated by which the lessons of science are to be taught to those who would so greatly benefit by them? Not many hundred yards from where I write, some cattle are going through the process of preparation for market. The fields all around me and the hills in the distance glisten white in their garments of snow. Not a blade of grass is to be seen, and over the frozen surface blows a wind from the "bitter east," which makes the blood even of the healthy, well-fed man who is exposed to it tingle again. These cattle I above alluded to are not going through the process of "hardening," so thoroughly carried out as to keep them starving—no! Their owner is humane; he supplies them with food, and abundance of it. But is there no way of letting the class he represents know, or if they know, convincing them of the truth of the knowledge, that the food is, after all, to a large extent wasted—that feeding, in the proper sense of the term, cannot possibly go on, exposed as they are to the biting blasts of a winter day, and, worse still, winter nights such as we have now? When the man who gives them their food—and it is just and right to say with no niggard hand—told me how they were exposed, I did not require to see the animals to convince me of what I knew would be the result of such a flagrant forgetfulness of what science tells me is the right way to do. But I did see them the other day; the sun was shining out, and then the animals were trying to get such warmth from its rays as a bitter wind would permit them to get and keep, which blew over the surface of the frozen snow upon which they stood and shivered. If I described them it would but be done by negatives, so unlike were they in all things to animals well and wisely treated. Surely there was no evidence here of self-interest being intelligent. The merest glance at the animals sufficed to show to the veriest tyro in practical farming that their condition was not what it ought to have been, and was enough, and more than enough, to have caused any reasonable man to pause, and find time to think, if think he would, that there surely must be something wrong in a system which gave results like these. But the worst of the matter is that such men will not think. Is there *no way* by which they can be forced into it? Echo answers, I fear, "*no way.*" If they are so keen in their appreciation of what they call

practice, and so dull to the value of science, that scientific papers they will not read or scientific advice listen to, have they an equal dislike to the wise sayings which float about them, and which are at least old enough to make them highly thought of by those who think age gives value? such as "Heat is meat"—a saying, by the way, which is an admirably condensed epitome of the essay of a modern breeder upon the principles of feeding. To say nothing of science, then, if this old saw or saying was thought of and believed in, it alone would surely urge farmers whose practice is such as I have named above, to adopt a mode of treatment of their stock in winter different from that under which a double suffering is perpetrated—the suffering of the animals under it, and the loss to the farmers in consequence of it. An animal badly kept can never pay; and it is a great argument in favour of humane treatment of our farm stock, that the better they are treated and the more humanity there is displayed to them the greater the pecuniary return. So long as it is considered good practice, at all events so long as it is the practice to keep stock out in the fields in winter, it is assuredly the wisest plan to arrange so that the rigors of such exposure as must necessarily take place, shall be lessened not only by the supply of good food but of good shelter-sheds. And these should be so constructed that in whatever direction the wind blows, the animals will be able to find shelter against it. Nor will the value of such shelter-sheds be less appreciated in summer time, when the "plague of flies" tends so much to irritate the stock at pasturage; and all good feeders know that restlessness, from whatever cause, is greatly against paying feeding, the same, by the way, holding true of dairy stock as well. The shelter-sheds should be well-built. Some sheds afford but little real shelter, so full of holes and crannies are they, and so wretchedly made are their roofs, that the rain and melted snow passes readily through them, making the floor a perfect puddle under the feet of the stock. Animals lying down under such circumstances suffer much from chills, and their coats get baked over with clay and ordure, till the skin refuses to do the office which nature intended it to do, and which performs a most valuable part in keeping the animal healthy and all its functions in good order. What is worth doing at all is worth doing well. I could say much upon all these points, and most important points they are in the treatment of farm stock, but a word to the wise is enough one says; but in the present case the misfortune of the thing is likely to be that it is just the wise who will think the word of any value, and it is not for those I write; the foolish think they are the wise, but it is they who give no heed to it—do not think, in fact, that it concerns them at all. It concerns the public very materially however; for it is not easy to over-estimate the loss which the nation suffers through the folly of those of whom I have now written.

ON REARING CALVES.

At the present season this subject engages the attention of stock-breeders to a large extent, the healthy progress of young cattle being a matter of very serious importance, much loss resulting to owners if they grow up puny or badly-thriven; and, on the other hand, the profit and satisfaction is considerable when they do well, becoming the very foundation of future prosperity. To have good calves worth the trouble and expense of rearing some foresight is necessary, the parents requiring to have, as far as

possible, good frames, fair size, and sound constitutions. It is useless to rear a calf out of a delicate cow, as however well attended to, it will be always weakly, and hard to keep in condition, never at any time preserving a creditable appearance amongst the rest of the stock, and never able to give a return for the expense incurred in rearing and feeding. To have sound healthy stock should be the leading object of every breeder, and this can only be accomplished by selecting parents of sound constitu-

tion, and sending away every calf as soon as born which is deficient in stamina, narrow across the loins, flat-ribbed, or too light of bone. Weeding them at birth prevents much after-disappointment, and saves both trouble and expense, as, after feeding a delicate calf for a few weeks, one is loath to get rid of the young creature, even although palpably not worth the trouble of rearing. Mere smallness of size I count no objection, as, if well-formed and healthy, a calf of good breeding can be forced into growth by liberal treatment, and at weaning-time the difference will be scarcely perceptible between those which were dropped of a fair size and those that were under the average at birth. The offspring of badly-bred bulls are not worth rearing, however healthy they may be, large of frame, or otherwise promising, as, with only ordinary advantages, in the shape of food and shelter, young cattle which are bred from pure bulls will shoot far a-head of them, and will be worth while but yearlings from three to five pounds a-head more than those which have the disadvantage of being cross-bred from both sire and dam. At a fair in the beginning of April I saw well-bred calves ten months old, in but very middling condition, sold by a farmer for six pounds each, while his neighbour who stood alongside him could not get an offer for his two-year-olds, although asking actually less money than the other got for his calves. Every effort should be made by the owner of breeding stock to procure good bulls. If the cows are few in number, two or more neighbours should join and get a good sire with a pedigree, and where even this cannot be accomplished a few of the best cows should be sent to a bull of breeding and character, and the service paid for. In the case of breeding young stock a fair start is more than half the battle, as from the time they are able to shift for themselves they are worth money and will bring it without trouble, while those that are cross-bred from both parents can scarcely be converted into cash until of such an age as to enable the purchaser to calculate with some precision what he will be able to turn them to so as to reimburse him for his outlay. There is neither profit nor satisfaction to be got by putting good and expensively grown or purchased food in bad skins, it never will or can pay. With good blood so widely diffused as it is at the present day, there is really little temptation to breed from cross-bred stock, and to continue doing so shows a large amount of carelessness and indifference to their own interests on the part of those who year after year carry out a system which should be obsolete. Apart from good blood, there is still another matter to be looked to, so as to ensure as far as possible the dropping of good healthy calves, which will be worth taking the trouble to rear. This more particularly refers to the treatment of the cows when carrying the calves, as if they are milked too long, or insufficiently supplied with food when dry, the offspring will be more or less affected, and a certain proportion of the members of a herd will if neglected at this time be sure to throw puny, wretched calves, quite unfit to be held over for feeding purposes, or for reproduction. If a cow is a free milker, no doubt the temptation is great to draw the milk from her as long as she will give it in any quantity, and this more particularly when there happens to be a good market for dairy produce. If a good bull has been provided for the stock, and rearing the calves forms a regular and important branch of industry in connection with the dairy business, milking to within a few weeks of calving time becomes very short-sighted policy on the part of those who permit such a thing to be done. It is clear that the foetus must be imperfectly nourished, when there is such a continual drain on the system of the dam, and what is made in one way is surely and unavoidably lost by the other; viz., the impaired constitu-

tion, and in consequence, decreased value of the calf. From eight to ten weeks is little enough time for the cow to be dry when a good healthy, well-developed, calf is desirable; and its extra value will fully repay its owner for the slight loss sustained in the decreased quantity of milk. January and February calves do well if the arrangements of the dairy permit of their being properly attended to, and the cows properly nourished during the period of gestation. They are reared and ready to go out to the pastures by the time the grass is sufficiently forward to afford a full bite, and are hardy and strong for the following winter. As a general rule, however, the month of April is the most suitable time for the bulk of dairy cattle to calve. It is first of all more natural, the springing is assisted by the genial weather, the udder is much better filled in consequence, and the cow is in better condition and health than when she calves in the dead of winter, even with a shorter interval of rest previous to parturition. This necessarily tells on the progeny, the calves being dropped firm and strong on their limbs, stouter of body, and well fleshed. Young cows calving very early in spring are exceedingly apt to get wrong in the bowels, lose condition rapidly, and if at all of a delicate constitution will remain thin for years unless permitted to lose a season, which renovates the constitution, and restores them to good condition if there is a possibility of its being recovered. I may remark *en passant* that permitting a very thin cow to run well into the season before calving—say from end of May till beginning of July, will generally have the effect of permanently strengthening her, completely overcoming the tendency to excessive leanness so frequently displayed by kindly milking cows of the very best breeds. The cow having brought forth her young, the young animal should be removed from its dam whenever she has licked it dry. On no account should it be permitted to suck, as its doing so provokes an infinity of trouble, the mother on its removal withholding her milk in the expectation of its being restored, and the calf obstinately refusing to swallow a drop of milk until absolutely starved into submission. The annoyance thus given by both animals is intense; this, however, being not altogether the greatest trouble involved, as there is imminent danger of the udder becoming inflamed and the cow sustaining serious injury from retention of the milk. Where the object in keeping a breeding herd is principally for rearing cattle of good blood, every other consideration being sacrificed or at best but secondary, then decidedly the calves should be suckled, the necessity for hand-feeding being in such a case completely negatived. Every calf intended to be reared should be allowed to partake of the biestings, nature's medicine, without which the little creature so recently ushered into the world cannot possibly survive, or, if perchance it may do so, it is only to drag out a miserable existence for a few weeks. Although comparatively easy to get calves to drink, when gone about in a proper manner, it is exactly the opposite when attempted by a hasty-tempered or ignorant person who endeavours to do by force what can only be accomplished by gentleness and patience. The instinct of the calf teaches it to raise its head and strike against the vessel which contains the milk, while the ignorant attendant keeps pushing the head down. Others, to save themselves trouble, put their finger into its mouth, keeping it there until the habit has been formed; and the calf, by-and-by will not touch the milk until the hand is introduced. In teaching the calf to drink, there is no better plan than to open the mouth with one hand, which is easily done by slipping the arm under its neck, keeping the mouth raised at the same time. With the other hand the milk can be lifted out of the pail and poured into its mouth, when it is compelled to swallow it. The first feed may be given

in this way, and possibly the second, if it may appear necessary; but after that there need be no further trouble taken; the calf, having acquired the habit of swallowing, will drink freely without the slightest assistance. This mode of teaching a calf to drink saves a great deal of after-trouble and annoyance; nothing more being required than to place the milk before it. Prevention of contact is of the utmost importance where there are a number of calves being reared together of mixed genders; they are less liable to accident, and enjoy better health. Separation by cribs so arranged as that the occupants can see each other is undoubtedly the best mode of preventing contact, as they can stir about and benefit by the exercise. Such accommodation is, however, not attainable by ordinary farmers, and they must content themselves with tying them by the neck. However unnatural it may seem at first sight to tie calves of a fortnight old by the neck, it answers wonderfully well in practice, and is altogether so convenient that anyone beginning to follow it out will be very reluctant to leave it off, and, in fact, is not at all likely ever to do so. A leather strap with buckle is the most convenient fastening, a swivel being attached to the cord connecting it with the post to prevent the possibility of an accident. Separation is the only cure for sucking, a habit which calves cannot be kept from when loose, and which is often the cause of serious loss. In this way also the food can be given to each animal with great exactness, every one getting its own share, however shy or timid; and if there are some tedious in drinking (which often occurs), they may take their own time without any danger of being robbed by the others. For this reason it will be found that the smaller or weakly calves come on quicker than when a number are fed out of one trough, the strong in the latter case invariably pushing back the weak. The young animals do not seem to suffer from want of exercise, as might very naturally be assumed, but on the contrary thrive rapidly, preserve an amazing appetite, and, if properly fed, are always in excellent condition. When sucking is thoroughly prevented, there is no danger of loss from hairs introduced into the stomach, and getting impacted into a hard ball, a fruitful source of mortality at some seasons, the poor things dying in frightful agony, and generally just at the age when they are all but reared. Twice a day is quite often enough to feed a calf, giving a third meal involving a certain amount of extra trouble, besides interfering with the milk which has been placed in the dairy, always an unpleasant thing for either mistress or maid who takes charge of it. The stomach being cleared by the action of the biestings, and digestion fairly commenced, there is little difficulty in keeping the young animal in healthy thriving condition. To sharpen the appetite half-a-gallon of new milk will be sufficient for each meal during the first four of five days, gradually increasing the quantity until it reaches two gallons a day, more than that being scarcely required for any calf intended to be held over for store purposes. About the tenth day a portion of good skim milk may be substituted, slightly increasing it each day until the sixteenth or so, when the new milk may be altogether withheld. In the early

months of spring and summer calves thrive well on good skim milk, and by the time the weather becomes warm enough to cause coagulation, they do equally well on the thick milk, fattening on it if supplied in abundance. For the quantity of milk to be given a calf at each meal there should be no special rule, each animal after being fairly started getting as much as it drinks without repletion, its fully rounded sides being an excellent and unfailing indication of enough having been drunk for that time. An objection may be made by many that the skim milk is here proposed to be too early substituted for the warm milk as it comes from the cow, but I say it advisedly, that it will not pay the ordinary tenant-farmer who breeds cross-bred cattle, to continue to give it longer than from a fortnight to three weeks. If he does so it interferes with his other arrangements regarding the disposal of his dairy produce; and however unlikely it may appear in theory the difference between two lots of calves at weaning time, which have been fed, the one on new milk and the other on coagulated milk, will not be perceptible unless the former is given in much greater abundance than any ordinary rent-paying farmer is likely to give it. Large numbers of the veal calves that reach the English markets from Ireland are fed purely on thick milk, the cream being taken off, and the unbroken mass then placed before the animal, which is permitted in this case to drink to repletion. Calves reared for merely store purposes are, in the great dairy districts of the Province of Munster, invariably thick fat when weaned, with grand bone and substance, although not a particle of trouble was taken with them in any way, otherwise than supplying them with abundance of coagulated milk. It is astonishing how soon calves will nibble at a bit of sweet hay when hung up temptingly before them, and when about a month old it should be placed within their reach, as it helps to preserve them in health, keeping the stomach and bowels in tone; it is, moreover, a source of amusement to the little things, and teaches them to eat. In May, when the days begin to get warm and fine, the early calves can be gradually accustomed to the open air by letting them out a few hours in the middle of the day; in a very short time they will become perfectly hardy, and may be allowed to remain out night and day. If put out too suddenly the coats will stare, and growth be checked for a considerable time. The cold-searching winds which generally precede rain at this season are highly injurious to young animals newly turned out of a warm house, and they should not be permitted to remain out under its influence. It is a wretched sight to see a lot of young calves standing with their backs arched and coats staring, while the rain beats pitilessly on them, and from this also they should have protection, until warm weather has decidedly set in. When calves are weaned it is highly essential for their well-doing that they should be supplied with abundance of water. A very little neglect on this point will undo much of the good already done, and undermine the foundation of good health and sound constitution so carefully and expensively laid during the previous four months.

THE SOIL IN THE FIELDS.

The first series of six geological lectures was given in the King's School, Chester.

Canon KINGSLEY said: Allow me before touching on the special subject of this lecture, to say a few words upon the object of the whole course. It is geology; that is, the science which explains to us the rind of the earth; of what it is made,

and how it has been made. It tells us nothing of the map of the earth. That is, properly speaking, an astronomical question. If I may be allowed to liken the earth to a fruit, then astronomy will tell us—when it knows—how the fruit grew, and what is inside the fruit. Geology can only tell us at most, how its rind, its outer covering, grew, and of what it is com-

posed—a very small part, doubtless, of all that is to be known about this planet. But, as it happens, the mere rind of this earth-fruit, which has, countless ages since, dropped, as it were, from the bosom of God, the eternal fount of life—the mere rind of earth-fruit, I say, is so beautiful and so complex that it is well worth our careful and reverent study. It has been well said, indeed, that the history of it, which we call geology would be a magnificent epic poem were there only any human interest in it; did it deal with creatures more like ourselves than stones and bones, and the dead relics of plants and dumb animals. Whether there be no human interest in geology, whether men did not exist on the earth during ages which have seen enormous geological changes, is becoming more and more an open question; and one on which I hope to speak hereafter, before the end of my residence, in this or in some other place. But, meanwhile, you must all agree that there is matter enough for interest; nay, room enough for the free play of the imagination in a science which tells of the growth and decay of whole mountain-ranges, continents, oceans; whole tribes and worlds of plants and animals. But it is not so much for the vastness and grandeur of those scenes of the distant past, to which the science of geology will introduce you, that I value it as a study and wish to awaken you to its beauty and importance. It is because it is the science from which you will learn most easily a sound and scientific habit of thought. I say most easily, and for these reasons: the most important and most magnificent facts of geology do not require, to discover them, any knowledge of mathematics or of chemical analysis; they may be studied in every bank and every grot, by the side of every stream, in every quarry, every railway cutting, by every one who has eyes and common sense, and who chooses to make himself, like my friend the late illustrious Hugh Miller, a great geologist out of a poor stone-mason. Next, its most important theories are not—or need not be—wrapped up in obscure Latin and Greek terms. They may be expressed in the simplest English, because they are discovered by simple common sense. And thus geology is (or ought to be) in popular parlance, “the people’s science”—the science by studying which the man ignorant of Latin, Greek, mathematics, scientific chemistry, can yet become, as far as he is a geologist, a truly scientific man. I said that the facts of geology were discovered by common sense; its theories laid down by common sense. Geology, therefore, fulfils the saying of my friend Professor Huxley, that “science is only common sense properly regulated.” But how will you learn science by mere common sense? First, always try to explain the unknown by the known. If you meet something which you have not seen before then think of the thing most like it that you have seen before; and try, if what you know explains the one will not explain the other also. Sometimes it will; sometimes it will not. But if it will, no one has a right to ask you to give any other explanation. Suppose, for instance, that you found a dead bird on the cathedral roof, and were asked how you thought it got there. You would say, of course, “It died up here.” But if a friend said, “Not so; it dropped from a balloon, or from the clouds,” and told you the prettiest tale of how the bird came to so strange an end, you would answer, “No, no; I must reason from what I know. I know that birds haunt the cathedral tower; I know that birds die; and, therefore, let your story be as pretty as it may, my common sense bids me take the simplest explanation and say, ‘It died here.’” In saying that, you would be talking scientifically. You would have made a fair and sufficient induction (as it is called) from the facts about birds’ habits and birds’ deaths which you knew. But, suppose that when you took the bird up, you found that it was neither a jackdaw, nor a swallow, nor a sparrow—as you expected—but a humming-bird. Then you would be adrift again. The fact of its being a humming-bird would be a new fact, which you had not taken into account, and for which your old explanation was not sufficient, and you would have to make a fresh induction—to use your common sense afresh, saying, “I have not to explain merely how a dead bird got up here, but how a dead humming-bird.” But if your imaginative friend chimed in triumphantly with, “Do you not see that I was right after all? Do you not see that it fell from the clouds?—that it was swept away hither, all the way from America, by some south-westerly storm, and, wearied out at last, dropped here to find rest, as in a sacred place?” What would you answer? “My friend, that is a

beautiful imagination; but I must treat it only as such, as long as I can explain the mystery more simply by facts which I do know. I do know that humming-birds can be blown across the Atlantic alive; I do know that they are brought across the Atlantic dead and stuck into ladies’ hats, and that ladies visit the Cathedral; and, odd as the accident is, I prefer to believe, till I get a better explanation, that the humming-bird has simply dropped out of a lady’s hat.” There, again, you would be speaking common sense; and using, too, sound inductive method; trying to explain what you do not know, from what you do know already. Now, I ask of you to employ some common sense when you read and think of geology. It is necessary to do so; not as necessary now, thank God, as it was thirty or forty years ago; for, in past times, men have tried to explain the making of the world around them—its oceans, rivers, mountains, and continents—by, I know not what, fancied cataclysms and convulsions of nature; explaining the unknown by the still more unknown, till some of their geological theories were no more rational, because no more founded on known facts, than that of the New Zealand Maories, who hold that some god, when fishing, fished up the islands out of the bottom of the ocean. But a sounder and wiser school of geologists now reigns, the father of whom, in England at least, is the venerable Sir Charles Lyell. He first, I may say, of Englishmen, taught us to see what common sense tells us, that the laws which we see around us now have been, most probably, at work since the creation of the world; and that, whatever changes may seem to have taken place in past ages, and in ancient rocks, should be explained, if possible, by the changes which are taking place now, in the most recent deposits in the soil in the fields. And in the last forty years, since that great and sound idea has become rooted in the minds of students, and especially of English students, geology has thriven and developed, perhaps more than any other science, and has led men on to discoveries far more really astonishing and awful than all fancied convulsions and cataclysms. I have planned this course of lectures, therefore, on Sir Charles Lyell’s method. I have begun by trying to teach you a little about the part of the earth’s crust which lies nearest you, which you see most often, namely, the soil; intending, if you do me the honour to listen to me again, to lead you downward, as it were, into the earth, deeper and deeper each lecture, to rocks and minerals which are probably less known to you than the soil in the fields. Thus, you will find, I shall lead you, or try to lead you, throughout the lecture from the known to the more unknown, and show you how to explain the latter by the former. Sir Charles Lyell has, I see, in his new edition of his “Student’s Elements of Geology,” begun his book with the uppermost, that is, newest strata, or layers, and gone regularly downwards, in the course of the book, to the lowest, or earliest strata; and I shall follow his plan. I must ask you meanwhile to remember one law, or rule, which seems to me founded on common sense, namely, that the uppermost strata are almost always the newest; that when there are two or more layers, whether of rock or earth, or indeed two stones in the street, or two sheets on a bed, or two books on a table, any two or more lifeless things, in fact, which lie one on the other, the lower one was most probably put there first, and the upper one laid on the lower one. Does that seem to you a truism? Do I seem impertinent in asking you to remember it? So much the better. I shall be saved unnecessary trouble in my future lectures. But some one may say, and will have a right to say, “Stop! The lower thing may have been thrust under the upper one.” Quite true; and therefore I said only that the lower one was, most probably, put there first. And I said “most probably,” because it is most probable that, in nature, we should find things done by the method which costs less force, just as you do them. I will warrant that when you want to hide a thing you lay something down on it ten times for once that you thrust it under something else. You may say: “What? When I want to hide a paper, say under the sofa corner, do I not thrust it under?” No, you lift up the corner, and slip the paper in, and let the corner fall on it again. And so, even in that case, the paper has got into its place first. Now, why is this? Simply because, in laying one thing on another, you only move weight. In thrusting one thing under another, you have not only to overcome weight, but to overcome friction; and so do clays, and sands, and stones. They are laid down on each other, and not thrust under each other;

because so less force is expended on getting them into place. There are exceptions. There are cases in which nature does try to thrust one rock under another; but to do that she requires a force so enormous, compared with what is employed in laying one rock on another, that she continually fails; and instead of producing a volcanic eruption, produces an earthquake. Of that I shall speak hereafter. I shall tell you in good time, how to distinguish rocks which have been thrust in from beneath, from rocks which have been laid down from above; as every rock, I believe, between this place and Snowdon—certainly within five-and-twenty miles of this place—has been laid down. That I only assert now. But I don't wish you to take it on trust from me. I wish to prove it to you as I go on—to put you in the way of proving it yourselves by using your common sense. At the risk of seeming prolix, I must say a few more words on this matter: I have special reasons for it. Until I can get you to "let your thoughts play freely" round this question of the supposition of soils and rocks, there will be no use in my going on with these lectures. Suppose then, to argue from the known to the unknown, you were watching men cleaning out a pond. At the top, perhaps, they would come to a layer of soft mud, and under that to a layer of sand. Would not common sense tell you that the sand was there first, and that the water had laid down the mud on the top of it? Then, perhaps, they might come to a layer of dead leaves. Would not common sense tell you that the leaves were there before the sand above them? Then, perhaps, to a layer of sand again. Would not common sense tell you that the mud was there before the leaves, and so on, down to the bottom of the pond? And then, I think, common sense would tell you that the bottom of the pond was there already, before all the layers which were laid down on it. Is not that common sense? Then apply that reasoning to the soils and rocks around Chester. If you found a deep boring, and found, as you would find, that the boring, after passing through the soil of the field, entered clays or loose sand, you would say the clays were there before the soil. If it then went down into sandstone, you would say—would you not?—that sandstone must have been here before the clays, and, however thick—thousands of feet thick it might be—that would make no difference. If next the boring came into quite different rocks (and it would); into different sorts of sandstone, and shales, and among them beds of coal; would you not say, "These coal beds must have been here before the sandstone?" And if you found in those coal beds dead leaves and stems of plants, would you not say, "Those plants must have been laid down here before the layers above them, just as the dead leaves in the pond were?" If then you came to a layer of limestone, would you not say the same? And if you found that limestone full of shells and corals, dead, but many of them quite perfect—some of the corals plainly in the very place in which they grew—would you not say, "These creatures must have lived down here before the coal was laid on the top of them?" And it, lastly, below the limestone you came to a bottom rock, quite different again, would you not say, "The bottom rock must have been here before the rocks on the top of it?" And what if that bottom rock rose up a few miles off, two thousand feet, into hills like Moel Famman and the Welsh mountains, what would you say then? Would you say, "Oh, but the rock is not bottom-rock because it is not under the limestone, but higher than it, and so perhaps it was made after it, and so Moel Famman must be younger than the Halkin mountain, or the Buckley mountain, because it is higher?" Would not that be about as wise as to say that the bottom of the pond was not there before the mud, because the banks round the pond rose higher than the mud? Is not that common sense? Now this is, as I shall show you, the actual arrangement of the soils and rocks round here: Soil—sand and clays, containing pebbles; sandstone; coal measures; limestone; bottom rock, containing slates. You will see now why I have begun with the soil in the field, because it is uppermost, and therefore latest of all the layers; and also for this reason, that if Sir Charles Lyell's theory be true, as it is, then the soil and rocks below the soil in the field may have been made in the very same way in which the soil in the field is made. If so, it is well worth our while to examine it. If we can understand a little about it, what it is made of, and how it got there, we shall perhaps be on the right road towards understanding what all England, the Welsh mountains included, are made of, and how they got

there. But we shall best understand how the soil in the field was made by reasoning, as I have said, from the known to the unknown. What do I mean? This: Take the fields in which the soil is already made on the upland; you don't know how. Then look for a field in which the soil is still being made (there are plenty of them in the lowland), and learn from it how the soil is being made there, and apply the knowledge which you gain from them to the upland fields which are already made. You have here peculiar advantages for seeing soil made. Thousands of acres of fresh-made soil are spread between your city and the sea, and thousands more are in process of being made between here and Flint. You will know from whence the soil comes which has filled up, in the course of ages, the great flats of the Dee from Chester Water Tower to Connah's Quay. It is river-mud and sand. The river, helped by a few tributary brooks, right and left, has brought down from the inland that enormous heap of sand and mud. You know that. You know that every flood and freshet brings fresh loads, either of fine mud from the red marl of Cheshire, or of fine sand from the sandstones; or, possibly, of limestone mud and peaty matter out of the Welsh hills above Llangollen. Here is one indisputable fact from which to start. Let us look for another. How does the mud get into the river? The rain carries it thither. If you wish to learn the first elements of geology by direct experiment, do this: The next rainy day—the harder it rains the better—instead of sitting at home over the fire and reading a book about geology, put on a mackintosh and thick boots and get away, I care not whither, provided you can find there running water. If you have not time to get away to a hilly country, like Mold or Gresford, then go to the nearest bit of turnpike road, or the nearest sloping field, and see in little how whole continents are made and unmade again. Watch the rain, raking and sifting with its million delicate fingers, parting the finer particles from the coarser, dropping the latter as soon as it can, and carrying the former down with it toward the sea. Follow the nearest roadside drain where it runs into a pond, and see how it drops the pebbles the moment it enters the pond, then how it drops the sand in a fan-shaped heap at the nearest end, but carries the fine mud on, and holds it suspended to be gradually deposited at the bottom in the still water. If you watch these things they will give you a key to the understanding of the making of whole continents. Then you would say, perhaps the sand which covers so much of Wirral was dropped by water very near the shore of a lake or sea, and perhaps as there are pebbles about, by rapid currents. Perhaps, again, the brick clays, which are often mingled with those sands, were dropped, like the mud in the pond, in deeper water further from the shore, and certainly in still water. It will be fair reasoning to say that. You may not be always right in your conclusions, but still you will be trying fairly to explain the unknown by the known. But have rain and rivers alone made the soil? How very much they have done toward making it you will be able to judge for yourselves if you will read the sixth chapter of Sir Charles Lyell's new "Elements of Geology," or the first hundred pages of that admirable book De la Bêche's "Geological Observer," and last, but not least, a very clever little book, called "Rain and Rivers," by Colonel George Greenwood. But though rain, like rivers, is a carrier of soil, it is more. It is a maker of soil likewise; and by it mainly the soil of an upland field is made, whether it be carried down to the sea or not. If you will look into any quarry you will see that, however compact the rock may be a few feet below the surface, it becomes in almost every case rotten and broken up as it nears the upper soil, till often you cannot tell where the rock ends and the soil begins. Nor this change has been produced by rain. First, mechanically by rain, in the shape of ice. The winter rain gets into the ground, and does by the rock what it does by the stones of our poor old Cathedral. It sinks into the porous stone, freezes there, expands in freezing, and splits and peels the stone with a force which is slowly but surely crumbling the whole of Northern Europe and America to powder. Do you doubt me? I say nothing but what you can judge of for yourselves. The next time you go to Moel Famman look at the loose broken stones with which the mountain is coated just underneath the turf. What has broken them up, but frost? When next you go to Llangollen, look at the tains of broken stones—"scree" as they call them in Scotland, "rattles" as we call them in Devon—which lie

along the base of those noble limestone cliffs. What has brought them down, but first? If you ask the quarrymen, they will tell you whether I am right or not. If you go thither, not in the summer, but just after the winter's frost, you will see for yourselves, by the fresh frost-crop of newly-broken bits, that I am right. Possibly you may find me to be even more right than is desirable, by having a few angular stones, from the size of your head to that of your body, hurled at you by the frost giants up above. If you go to the Alps at certain seasons and hear the thunder of the falling rocks, and see their long lines of "moraines," as they are called, marching slowly down upon the surface of the glacier, then you will be ready to believe the geologist who tells you that frost, and probably frost alone, has hewn out such a peak as the Matterhorn from some vast table-land, and is hewing it down still, winter after winter, till some day, where the snow Alps now stand there shall be rolling uplands of rich cultivable soil. So much for the mechanical action of rain in the shape of ice. Now a few words on its chemical action. Rain-water is seldom pure. It carries in it carbonic acid; and that acid, breaking in shower after shower against the face of a cliff—especially if it be a limestone cliff—weathers the rock chemically, changing, in the case of limestone, the insoluble carbonate of lime into a soluble bi-carbonate, and carrying that away in water which, however clear, is still hard. Hard water is usually water which has invisible lime in it. There are from 10 to 15 grains and more of lime in every gallon of limestone water, and I leave you to calculate the enormous weight of lime which must be so carried down to the sea every year by a single limestone brook, like the Alyn at Mold. You can, if you like, ascertain the weight of lime in each gallon, and the average quantity of water which comes down the stream in a day, and when your sum is done you will be astonished to find it one not of many pounds, but probably of many tons of solid lime which you never suspected or missed from the hills around. Again, by the time the rain has sunk into the soil it is still less pure. It carries with it not only carbonic acid, but acids produced by decaying vegetables; by the roots of the grasses and trees which grow above, and they dissolve the cement of the rock by chemical action, especially if the cement be lime or iron. But there is another force at work, and quite as powerful as rain and rivers, making the soil of the alluvial flats of the Dee—perhaps it has helped to make the soil of the great Cheshire and Lancashire lowland—and that is the waves of the sea. The next time you go to Parkgate try if you cannot learn there a little geology. Walk beyond the town. You will find the shore protected for a long way by a sea wall, lest it should be eaten away by the waves. What the force of those waves can be, even on that sheltered coast, you may judge—at least, you could have judged this time last year—masonry torn from their iron clampings, and thrown inland during the gale of the winter before last. If they are there now look steadily at those rocks and twisted stanchions, and then ask yourselves—it will be fair reasoning from the known to the unknown—what effect must such wave-power as that have had, beating and gnawing for thousands of years along the western coasts of England, Scotland, and Ireland? May it not have eaten up thousands of acres, whole shires may be, ere now? There is no doubt of this—that if England had, unfortunately for itself, been turned round, and Norfolk and Essex placed where Wales is, there would have been nothing left of England now but Wales probably. The teeth of the sea know neither rest nor pity, the cruel, hungry sea. Give it but time enough, and what would it not eat up? It would eat up in the course of ages all the dry land of this planet, were it not bailed by another counter-acting force, of which I shall speak hereafter. As you go on beyond the sea-wall, you find what it is eating up. The whole cliff is going visibly. But whither is it going? To form new soil in the estuary of the Dee. Now you will not wonder how the old harbour of Parkgate has become silted up. The sea has washed the land into it. Just so; but more, the sea currents do not allow the sands of the estuary to escape freely out to sea. They pile it up in shifting sandbanks about the mouth of the estuary. The prevailing sea winds being from west to north-west, catch it up when dry and roll it up into sandhills. Those sandhills are again eaten down by the sea and mixed with the mud of the estuary, and so is formed a mingled soil, partly of clayey mud, partly of sand; just such a soil as

stretches over the greater part of Wirral, and over the Lancashire flats. Now, why should not the soil of Wirral and the soil of the Lancashire flats have been made by the same means as the soil of the estuary of the Dee? You find in Wirral—you may see it within a mile or two of Chester—and you find on the Lancashire flats, pure loose sand just beneath the surface, which looks as if it was blown sand from a beach. Is it not reasonable to suppose that it is? You find at Helsby Craig and elsewhere in Cheshire what looks exactly like an old sea-cliff, long eaten by the waves, from the base of which the waters have gone back. Why should not Helsby Craig and Beeston be old sea cliffs? Why should we not, following our rule of explaining the unknown by the known, assume that such they are until some one gives us a sound proof that they are not, and say this great plain of Lancashire and Cheshire was probably once covered by a shallow sea, and its soils made as the soils of the Dee flats are being made now. Suppose once more, you were watching a pond being cleaned out, and suppose that under the lowest layer of mud you found, as you would find in those magnificent reservoirs so common in the Lancashire hills, a layer of vegetable soil with grass and brushwood rooted in it. What would you say but that the pond had not been always full. It has, at some time or other, been dry enough to let a whole copse grow up inside it. And if you found in the soil of Cheshire, as you will actually find at Dove Point, near Leasow, under the sand-hills, a bed of earth with shells and bones, under that a bed of peat, under that one of blue silt, under that a buried forest with the trees upright and rooted, under that another layer of blue silt full of vegetable fibre, and under that again another old land surface with trees again growing in it, and under all the main bottom clay of the district, what would common sense tell you? I leave you to discover for yourselves. It certainly would not tell you that those trees were thrust in there by a violent convulsion, or that those layers were deposited there in a few days, or even a few years; and you might safely indulge in speculations about the antiquity of the river Mersey and the changes which its mouth has undergone. But you may say, and most reasonably, that the Dee flats are just at the sea level. That the whole plain of Cheshire and Lancashire is many feet above the sea; it must therefore have been raised out of the sea according to your theory, and what proof have you of that? Well, that is a question both grand and deep on which I shall not enter yet. But, meanwhile to satisfy you that I wish to play fair with you, I ask you to believe nothing but what you can prove for yourselves. Let me ask you this—Suppose that you had proof positive that I had fallen into the river this morning, would not my presence here to-night be also proof positive that somehow or other I had, in the course of the day, got out of the river? I think you will accept that logic as sound. Now, if I can give you proof positive, proof which you can see with your own eyes and handle with your own hands, and alas, feel but too keenly with your own feet, that the whole of these lowlands were once beneath the sea, then will it not be certain that, somehow or other, they must have been raised out of the sea again? That I propose to do in my next lecture, when I talk to you of the pebbles in the street. Meanwhile, I wish you to carry home the truly grand idea, which all I have said to-night tends to prove true, that all the soil we see is made by the destruction of older soils, whether soft as clay or hard as rock; that rain, rivers and seas are perpetually melting and grinding up old land to compose new land out of it, and that they must have been doing so as long as rain, rivers, and seas have existed. If any one rejoins, "But how did the first land of all get made?" I must reply that that is a very rational question, but we can only answer that by working from the known to the unknown, and while we are finding out how those later lands were made and unmade, we may stumble on some truths as to how the first primeval continents rose out of the bosom of the sea. And thus I end this lecture. I trust it has not been intolerably dull. But I wanted at starting to show you something of the right way of finding out truth on this and, perhaps, on all subjects, to make some simple appeals to your common sense, and to get you to accept some plain rules founded on common sense, which will be of infinite use to both you and me in my future lectures. I hope, meanwhile, that you will agree with me that there is plenty of geological matter to be seen and thought over in the neighbourhood of Chester. It was said to

me, "But Chester is such a poor neighbourhood for geologists; you will be able to show them very little." I said to myself, wherever there is a river, even a drain, and a stone quarry, much more where there is a sea, or even a tidal estuary, there

is geology enough to be learnt, to virgin the greater part of the making of all the continents on the globe, and I hope you feel that, in so saying, I had common sense somewhat on my side.

THE ROYAL AGRICULTURAL BENEVOLENT INSTITUTION.

The annual dinner of this institution took place on Wednesday, May 31, at Willis' Rooms. The chair was taken by the Marquis of Huntly; and there was a very good attendance of subscribers.

After the usual loyal toasts, Captain SCOTT responding for the Army, Navy, and Volunteers.

The CHAIRMAN proposed: "Prosperity to the Royal Agricultural Benevolent Institution." It was, he said, with great diffidence that he rose to perform that duty, and that feeling was increased by the fact that previous anniversaries had been presided over by noble lords and right hon. gentlemen of great eminence. He had heard a great deal about the poor farmer, but he certainly saw no evidence of poverty in the scene before him. He might well congratulate the farming interest on that display, and he should be glad to be assured that the gentlemen whom he saw fairly represented English farmers generally. Be that as it might, no one could doubt that the position of the farmers of this country was a very peculiar one, and, having travelled a good deal, he must say he had never found anything resembling it elsewhere. Many English farmers occupied a position in their respective parishes or localities of the greatest importance, and when their conduct was upright and exemplary, as was generally the case, the respect in which they were held was little, if at all, inferior to that of the landlord himself. He felt the greatest respect for tenant-farmers as a body. It had been said that the old feeling which had united the proprietors and the cultivators of the soil was dying out; that when leases ran out they were not generally renewed, and that the occupation of farms did not descend now, as formerly, from generation to generation. In reading a well-known Latin poet—Virgil—on the previous day, he found some words which applied to that case. They were—

*Agricola laenro terram dimorid dicitro :
Hinc anni labor, hinc patriam, parcosque nepotes
Sustinet.*

If he might make a suggestion with the view of helping to keep up such a state of things as was described in that quotation, he would say, that the landlord who resided on his estate should mingle sometimes with his tenants (cheers). Having made those few remarks about the position of farmers as a class, he would now say a few words on behalf of that institution. There were two reasons for supporting it which had forced themselves conclusively upon his mind. The first reason was connected with the vicissitudes of farming life—vicissitudes arising from diseases in flocks and herds, unfavourable seasons, and other causes of that kind which were entirely beyond the control of the most prudent agriculturist. Unless a man had a large balance at his banker's, unless, in fact, he were rich, it is impossible that he could be secure against ruinous consequences arising from such sources. Further, he would remark that the great changes which had been made in the system of cultivation during the last few years had had the effect of absorbing a number of little farms into large occupations, and of driving out, as it were, many men who if they had lived in the olden times would have been thriving farmers. Many a farmer was now almost compelled to give a thousand pounds for steam machinery—an outlay which was quite out of the question in the case of a man who occupied only from fifty to one hundred acres. That institution assisted men who, without any fault of their own, had suffered from these changes in the agricultural system, and that was one great reason why he urged its claims to liberal support. When one of the smaller class of farmers owing to the causes which he had mentioned was unable to pay his rent, the landlord had no option but to give him notice to quit. Landlords did not like doing that; but in the present state of society rent must be paid (laughter). When compelled to give up his

holding, an ordinary farmer had before him only three resources—the workhouse, emigration, or assistance from that institution. On turning to the statement of the objects which the institution contemplated, he found them to be as follows: "To provide pensions to *bona fide* farmers, their widows and unmarried daughters, and to maintain and educate the orphan children of farmers." These objects were undoubtedly excellent and noble ones, and well worthy of more extensive support than they had yet received. During the eleven years since its formation the Society had relieved no fewer than 245 cases, composed as follows: 75 males, 32 married pensioners, 81 widows, 22 unmarried orphan daughters, 10 octogenarians (who receive a yearly grant of £10 till election), and 27 children maintained and educated. There were at present on the book 42 males, 80 females (*i. e.*, widows and unmarried daughters), 16 married couples, 8 octogenarians, and 27 children, making 189 in all. This number the Council was about to increase by election to 269, at an annual expenditure of £5,500 (cheers). He would not trouble them with any further details; but it was manifest from what he had stated that the institution had already conferred a vast amount of benefit on the class for which it was established, and that it ought to receive the support of every person who was connected with the land, whether as an owner or as an occupier. It had been stated that a country with which he was very closely connected—"poor Scotland"—(laughter) was rather behind-hand as regarded the recognition of the claims of that institution. It was not called "poor Scotland" by the people down there, many of whom thought no small beer of themselves (laughter), but it was undoubtedly matter for regret that it had not supplied more subscriptions to that useful institution (Hear). In the list of patrons he found only three leading landed proprietors connected with that country—the Duke of Richmond, the Duke of Buccleuch, and the Duke of Abercorn. He believed many other landowners would be willing to add their names; and, being connected himself with the county of Aberdeen, he wished to say that he would be happy to start a branch or auxiliary association in that county (cheers). In conclusion, the noble lord earnestly impressed upon all present the absolute necessity of individual efforts to obtain additional subscribers in their own localities and among their own friends, as the most effectual means of ensuring increased provision for distressed farmers, or the widows and orphans of those who had been unsuccessful as cultivators of the soil.

The toast was drunk with enthusiasm.

Mr. W. WELLS, M.P., proposed "The Chairman." After remarking that the noble marquis's speech showed how anxious he was to promote the prosperity of the Society, he said that for the last half-hour his lordship had been evincing his practical interest in agricultural topics by expatiating on the merits of a particular breed of cattle.

The toast was very warmly received.

The CHAIRMAN in acknowledging the toast said it afforded him great pleasure to meet on that occasion so many brother-lovers of the soil; adding that nothing delighted him more when away from the smoke of London than to have a day's amusement among practical farmers. As regarded his expatiation on cattle to which Mr. Wells had just alluded, he wished to observe that that breed was the Black Poll from Aberdeenshire. He had tried four different breeds—English Shorthorns, Alderneys, the cross between the Shorthorns and the Black Poll, and the pure-bred; and having had all these different sorts running about the field, he had found that the Scotch Black Poll ate about one-third of what the English Shorthorn consumed, and got fat sooner (Hear, hear).

Mr. J. J. MEECH, in proposing "The Agricultural Societies of England, Ireland, and Scotland," said he need hardly remark that as an apron-string farmer he entertained great respect for those societies, because when he wished to learn the

business of farming he had to look into the volumes issued by those societies, by means of which their accumulated wisdom, knowledge, and information were circulated among the farmers of the United Kingdom. Moreover, he felt that he had still a great deal to learn from such bodies, and happily they did much towards showing how agriculture might be practised most successfully. The question of the education of agriculturists was, in his opinion, most important. John Knox compelled the heritors of Scotland to set up a school in every parish; and no doubt it was owing in a great degree to the prevalence of education that Scotchmen had been so successful in every part of the world, and had in some respects got the start of Englishmen. He concluded by connecting the toast with the name of Mr. Henry Corbet, who he said, as they all knew, felt deep interest in the welfare of farmers, if a little too fond of patting them on the back.

Mr. CORBET in returning thanks said he had acquired considerable experience of the working of the three national societies. As regarded one of them—the Royal Agricultural Society of England—he had for some years endeavoured to discharge the duties of a very awkward officer. He had held the appointment of auditor. He had followed the Royal Agricultural Society of Ireland from Londonderry in the north to Killybegs in the south. The Highland Society of Scotland he had traced from Berwick-on-Tweed through “poor Scotland” to Inverness. All three of these societies had done a great deal of good, and he believed they were all at that moment in a state of prosperity. Until he read the speech of Lord Spencer at the late Dublin show he was afraid that the Irish Society was not doing as much good as it ought to do; but any one who had read that must feel that invaluable consequences had followed from the formation of that Society. Turning again for a moment to England, he had the honour to act also on the Executive of a Society, not for aiding the distressed English but the distressed French farmers. He was happy to say that the Chairman of that body and one of its most active members was the President of the Royal Agricultural Society, Lord Vernon (cheers), and that it also included a member of Council who was present that evening, Mr. Wells, and another legislator whose name was well known among agriculturists, Mr. Clare Sewell Read (cheers). That showed what an intimate connection there was between different movements in the cause of charity and the different societies which had to do with agriculture. He was glad to learn from what had fallen from the Chairman that evening that there was a prospect of Scotland being even brought into closer and more direct connection with that Society (cheers). His own experience of “poor Scotland,” as it had been termed, had taught him that it contained some of the finest farmers in the world (Hear, hear). He could give a long list of names in illustration of that; and he felt sure that if men like Mr. Hope, Mr. Douglas, and others were appealed to individually they would join a chain of help for the institution in Scotland which would greatly increase its efficiency and extend its influence. He was quite sure they could not cultivate too sedulously the sympathy of the three great national societies.

Mr. J. CLAYDEN, in proposing “The Executive Council,” expressed his admiration of the earnest attention which they bestowed on the affairs of the institution, and said it was chiefly through their influence that the Society had been enabled to gladden so many hearts which might otherwise have remained without anything to cheer them. He concluded by coupling with the toast the name of Mr. Charles Cantrell.

Mr. C. CANTRELL said, on behalf of the Executive Council he begged to thank the company most sincerely for the honour

conferred upon them. No one, he felt certain, could feel greater interest in that institution than he did; and the majority of the members of the Council, living in different counties, evinced their interest in it by travelling to and from London at their own cost (Hear, hear). The Council were greatly aided by the honorary local secretaries, a body of gentlemen to whom that institution was very greatly indebted (cheers). Mr. Disraeli, while occupying the chair at a preceding anniversary of that institution, remarked that in the furtherance of the objects of that institution almost every village ought to have a local secretary. He (Mr. Cantrell), although a simple tenant-farmer had had the good fortune to obtain subscriptions from every county in England (cheers). He made that statement not in order to gain credit for himself, but in order to show what might be done by a tenant-farmer whose heart and soul were in the cause of that institution (cheers). Another element of success was the books which had been distributed. He had made it a point to take part in the work of distribution himself as far as possible, and he was confident from his experience that for every sixpence expended by the institution in that form there had been a return of a guinea (cheers). Last year Lord Sondes having suggested for consideration whether it might not be desirable to make the pensions larger, he (Mr. Cantrell) promised on that occasion to bring that question before the Council. It was afterwards fully discussed, and the conclusion which the Council arrived at was that instead of giving larger pensions it would be better to enlarge the number of recipients (cheers). It was proposed to elect 70 pensioners at the next election. He well recollected that when they had only 20 pensioners their worthy secretary at that period (Mr. Charles Shaw) said he hardly knew how they were to be supported. After that day fortnight they would have about 270 pensioners, and would have given away £5,000 a year (cheers). That was a most marvellous result considering when the institution was established; but if every subscriber would try and induce his neighbours to subscribe there might soon be a further extension. In conclusion, Mr. Cantrell stated that the ages of candidates had been reduced from 70 to 60 years in the case of men, and from 60 to 55 in the case of wives and widows, and congratulated the company that as the pensions increased in number there was hardly any addition to the working expenses of the institution. Formerly the executive Council were accused of extravagance, but no one would make such an accusation now (Hear, hear).

The CHAIRMAN then proposed “The Secretary.”

Mr. C. B. SHAW, in returning thanks, said it was a source of great gratification to him to think that during the short period that he had occupied that post the Society had not retrograded, but had advanced; and he looked forward to a more flourishing era when political affairs had returned to their natural condition. The former Secretary boasted that during his tenure of office the committee had invested £21,000; but he was more gratified at being enabled to state that during his tenure it had spent what it had received.

The next toast was “The Honorary Local Secretaries,” proposed by the Rev. G. C. Berkeley, and responded to by Mr. Nash.

The CHAIRMAN then gave “The Ladies,” for whom Mr. Mechi answered.

The aggregate amount of donations announced in connexion with the anniversary was about £5,000.

The musical arrangements were under the direction of Mr. George Perren, who was assisted by Miss A. Banks, Madame Osborne Williams, Mr. T. Lawler, and Mr. Sidney Naylor.

FRENCH PEASANT-FARMERS' SEED FUND.

A meeting of the General Committee and Subscribers was held in the last week in May, at the Salisbury Hotel, for the reception of the Executive Committee's Report in reference to the distribution of seed-corn to the French peasant-farmers ruined by the war. Lord Vernon presided.

The minutes of the previous general meeting were read by Mr. B. T. Brandreth Gibbs, and confirmed.

Letters were read by Mr. H. M. Jenkins from several gentlemen expressive of regret at not being able to attend, including one from the Lord Mayor, and another from Earl Powys. He then proceeded to read the following Report of the Executive Committee:—

The Executive Committee, in presenting their first report nearly five months ago, viz., on January 30th, requested in-

structions with reference to the distribution of corn and seeds to the distressed French peasant-farmers. The General Committee thereupon passed the following resolutions, upon which the subsequent work of the Executive has been based: 1. That, considering the armistice which has just taken place, and the prospect of an early peace, this Committee, recognising the advantage of making an early beginning, entrust to the Executive all the arrangements they may deem most expedient for the distribution of seed, trusting that the instrumentality of the French Minister of Agriculture may be utilised in so far as may be found possible. 2. That an agent or agents, at the discretion of the Executive, be sent to France to aid in the distributions of the Committee. At the date of the last report the total amount of subscriptions promised was £2,076 5s. 11d., of which about £900 had been received. At the present time the subscriptions received amount to £41,955 2s. 2d., which sum includes, however, three grants, amounting to £13,000, given by the Mansion House French Relief Fund. The Executive now feel it their duty to lay before the General Committee and the Subscribers an account of their stewardship. They are not yet in possession of complete information on all points, but the termination of the period of spring-sowing seems the most fitting time to state, as far as possible, what has been done to enable the French peasants who have suffered by the war to sow their land during the past season in the hope that they may secure a crop during the coming autumn. Before recounting the steps which have been taken to attain this object, the Executive are desirous of recording the valuable assistance which they have received in the collection of donations from agricultural and other rural associations, and more particularly from the London Farmers' Club, the Chambers of Agriculture, the Agricultural Benevolent Institution, and the Boards of Guardians. The French Peasant-farmers' Seed Fund has been essentially an agricultural movement, and as such the Executive have felt it their duty to make its object known, as far as they could, to every landowner and tenant-farmer in the Kingdom. On the other hand, the town population has not been directly canvassed, but the Executive thankfully bear witness to the spontaneous generosity and sympathy of numberless urban subscribers, and also to the appreciation of their efforts shown by the Lord Mayor's Committee of the Mansion House French Relief Fund. Thus there has been no rivalry between these two great charitable movements, but the wealthy citizen has given from his abundance not only wherewithal to feed the starving Parisian, but also the seed to sow the land of the distressed peasant. Immediately after the last meeting of the General Committee, the Executive was strengthened by a delegation from a committee of corn merchants in Mark-lane, formed for the purpose of furthering the object of the Fund. To the disinterested co-operation of these gentlemen no inconsiderable share of the success of our operations is due. Through their agency the corn and other seeds have been bought at prices which are exceptionally favourable, and which have not been enhanced by any charge for commission; while the quality has in all cases been a source of admiration in every district in which the operations of the Fund have been carried on. The cordial thanks of the subscribers are eminently due to Mr. Odams, not only for his personal services, but also for the liberality with which he placed his wharf gratuitously at the command of the Executive as a storehouse for donations of corn. He allowed his wharf, for weeks together, to be monopolised by the purchases of the Fund, amounting to several thousand quarters of grain. He also conducted the shipping department with much ability and energy, and rendered numerous other services incidental to the hurried despatch of large quantities of seed-corn to France. The Executive must also express their obligations to the Great Eastern and Great Western Railway Companies, by whom donations of corn have been conveyed over their lines and delivered at Mr. Odams' wharf entirely free of all charges. The Executive are also indebted to the London, Chatham, and Dover, South-Eastern, London and South-Western, and the London and Brighton Railway Companies for conveying to France a certain quantity of grain free of cost in each case. On the other side of the Channel, the special acknowledgment of the Fund is due to the Chemin de Fer du Nord, which from the commencement of our operations has carried gratuitously all our consignments, and has given them precedence over all others. The other railway companies in France have not been so liberal, but they have promised to refund 75 per cent. of the charges which have been paid, and the Versailles Government have undertaken the reimbursement of the remainder. The mode adopted for obtaining information as to the requirements of the French peasant-farmers, by means of a schedule of questions, has proved most successful. The schedules were distributed in large numbers over the ravaged districts by the representatives of the National Society for Aid to the Sick and Wounded in War, and by the assistance of numerous private individuals. The replies to the questions were in all cases sufficiently explicit to be of service to the Executive in their difficult task. It was obvious that too much seed-corn could not be sent into districts in which, according to these statements, it was

"entirely wanting;" and it was satisfactory to receive repeated and distinct assurances from extensive landowners that the latest period of sowing spring wheat was not until March 15th, and in some districts April 1st, while oats and barley were commonly sown until April 15th, and in some districts until the beginning of May. The information obtained soon showed that the wants of the Peasant-farmers were infinitely greater than there was, at that time, any likelihood of the Committee being able to supply. It was therefore a matter of necessity, as well as of duty, to limit the distribution to *bona-fide* peasant-farmers who had suffered by the war, and to restrict the quantity given so as to extend the donations of the Fund to the greatest number of people, while conferring a substantial benefit in each case. The Executive, therefore, decided to instruct their representatives, who might be charged with the distribution of corn and seeds, not to allow claims made by persons occupying more than 50 English acres (20 hectares), and not to give to any occupier more than 8 bushels of wheat, or 12 bushels of barley, or 16 bushels of oats, or a proportionate quantity of two or more kinds of grain. Generally speaking, the representatives of the Fund have found it desirable to restrict still further both the area of occupation and the quantity of grain to be given in each case, and thus a proportionately larger number of people have received relief. The first purchase of seed-corn was ordered on February 4th, viz., 300 quarters of spring wheat, to be distributed in the Department of the Somme, by Mr. C. Sartoris, of Wilcote, Charlbury, Oxfordshire, who had placed his voluntary services at the disposal of the Executive. Mr. Sartoris having established his depot at Amiens as a convenient centre, it became a matter of anxious consideration how the grain should be conveyed there in safety, through a region which was partially occupied by an invading army. The assistance of the National Aid Society was again solicited, and, as in every other case, was freely given. At the instance of that Society, Major-General Sir Vincent Eyre, K.C.S.I., C.B., who had superintended their operations in the North of France, placed his services and those of his staff at the disposal of the Executive; and it is right to say that the energy and ability with which Sir Vincent Eyre and his colleagues (especially M. Vaillant, Mr. Seton Symon, Mr. Merridew, and Mr. Neave) have conducted the difficult operations entrusted to them, have contributed very largely to the success with which the distribution of seed-corn has been effected in the northern half of the invaded region. Through their exertions, not only was free warehouse-room obtained, and more important still, free railway transport; but the sacks bearing the stamp of the Fund were allowed to take precedence of all private consignments. It is necessary to call special attention to the value of such concessions as these in a country in a state of war, where every available railway-wagon is "requisitioned" by one or other of the contending forces for the conveyance of soldiers and war material. Obviously it would have been impossible to profit by these advantages had not Sir Vincent Eyre and Mr. Sartoris also addressed themselves to the German Commander at Amiens, General von Goeben, who, fully appreciating the efforts made by the Committee, issued an order which prohibited any requisition of the grain bearing the stamp of the Fund. The operation of the Fund in the North of France, as, indeed, in all other districts, ultimately assumed an importance which was not originally contemplated; and Mr. Sartoris soon found it necessary to avail himself of the volunteered assistance of Colonels Cox and Berrington. Afterwards, Mr. Sartoris being obliged to return to England, Colonel Cox was placed at the head of the depot at Amiens, and Colonel Berrington distributed in the adjoining Department of the Pas de Calais, from a depot established at Arras. The further extension of the area of distribution, at a more recent period, to the Department of the Aisne, in an easterly direction towards the Ardennes, where Mr. Bullock had been distributing the Daily News Fund, led to the appointment of Captain Webster Wedderburn as another assistant to Colonel Cox. Thus, the original area was, step by step, extended in every direction until it reached the boundaries of districts that were either supplied from other depots subsequently established, or, as in the case of the Ardennes and the Meuse, the confines of the regions that were under the special charge of other Committees, to whom grants of money were made by the Executive for the purchase of seed-corn. The capitulation of Paris on the 28th of January was succeeded by the signature of the preliminaries of peace on the 26th February, and the latter event was followed by a large influx of subscriptions. Thus the Executive were enabled to enlarge their sphere of operations in the North of France, and finally to establish depots for the supply of seed-corn to other portions of the invaded region. On February 21st the Lord Mayor's Committee made their first grant of £5,000 to this Fund. It was determined on the following day to purchase 1,500 quarters of spring wheat for distribution in the district of La Beauce—the principal grain-producing region of France. Colonel Elphinstone, who had superintended the operations of the National Aid Society in the Orleans district, and whose head-quarter were at Tours,

offered to superintend the work of this Fund, and his services were most thankfully accepted by the Executive. The history of this district offers a close parallel with the course of events just described. The wheat bought with the Mansion House grant was followed by oats, barley, &c., purchased with our own subscriptions, and Colonel Elphinstone availed himself of the assistance of Captain Rennick and other gentlemen, while Mr. Miles Lewis was engaged by the Committee to travel with the grain from Honfleur to Tours and elsewhere. The necessity of this precaution has been fully borne out by experience, and Mr. Lewis deserves much praise for the energy with which he acquitted himself of his task, and for the devotion with which he spent day and night almost for weeks together in the van of a goods-train. By these means the whole of the grain sent to this district was satisfactorily distributed, and without delay. A second vote of £5,000, made by the Lord Mayor's Committee, on February 24th, coupled with a large influx of subscriptions to the Fund, enabled the Executive to establish a depot at Paris for the relief of the small cultivators in the extensive region which had been devastated during the protracted siege of the capital of France. The Executive esteemed themselves fortunate in securing the services of Mr. J. Furlley, one of the most valued officers of the National Aid Society, as the head of their Paris Committee, which was further composed of Mr. R. N. James, as Secretary, Mr. Pitman, and subsequently Mr. Mansfield. A large quantity of wheat, barley, and oats was immediately sent to Boulogne to be forwarded to the warehouse at Paris which had been provided free of cost through the instrumentality of the officers of the "Société des Agriculteurs de France," whose distinguished President, M. Drouyn de Lhuys, has been throughout the unflinching guide and counsellor of the Executive Committee. With every prospect of a successful distribution, this Committee commenced its work, and about 500 quarters of seed-corn were sent into Paris and partially distributed in the southern rural districts, with the assistance of Mr. Norcott, the representative of the Lord Mayor's Committee; but, in consequence of the insurrection in Paris it was soon found necessary to remove the depot to Creil. This has, unhappily, prevented the representatives of the Fund from distributing more seed-corn in the district immediately south of Paris. The Executive were of opinion that it was impossible for the Paris Committee, necessarily removed to Creil, to distribute the whole of the seed-corn allotted to the Paris district, over one-half the area originally contemplated, so that it might be given to none but necessitous persons in time to be sown in its due season. They therefore decided, with the aid of portion of a further grant of £3,000 from the Lord Mayor's Fund, to establish a fourth centre of distribution at Rouen, for the relief of the Departments of the Seine Inférieure, Eure, and Calvados, with some of the corn originally intended for the district south of Paris, and an additional quantity specially purchased. The Executive were fortunate in securing the volunteer services of Captain W. Delf, of Great Bentley Hall, near Colchester, one of their own body, to take charge of this depot, and in associating with him Mr. Ramsay Bushnan, who had previously been in charge of the depot of the National Aid Society at Metz. So energetically did these gentlemen pursue their task that it is now satisfactorily completed. Such being the agency by which the work of the Fund has been performed, the Executive have now to report the quantity of seed-corn distributed from each centre of operations, viz., (1) Amiens, (2) Tours, (3) Creil, and (4) Rouen, and their subsidiary depots. (1) From Amiens Mr. Sartoris, Colonel Cox, and Colonel Berrington, with their assistants, have distributed in the Departments of the Somme, Aisne, and Pas de Calais, in round numbers, 1,000 quarters of Spring wheat, 1,450 quarters of oats, 1,050 quarters of barley, and about 100 tons of potatoes sent by the Executive. In addition 168 sacks of wheat, 1,060 sacks of oats, and 1,536 sacks of potatoes sent from Scotland by the Edinburgh Committee have been distributed chiefly in the Pas de Calais. One hundred quarters of vetches, 1,000 half-pecks of haricot beans, 1,000 quarter-pecks of turnip seed, 1,000 two-pound packages of carrot seed, and 1,000 quarter-pounds of onion seeds have also been given by this Fund to the Department de l'Aisne. The total number of occupiers relieved in these Departments is as follows:

Departments.	Seed-Corn.	Pota-toes.	Total.
Somme	11012	4401	15413
Pas de Calais	2053	850	2933
Aisne (approximate)			8000
Total (approximate)			26346

(2) From Tours, Colonel Elphinstone and Captain Remick, with the assistance of Mr. Miles Lewis and others, have distributed the following quantities in the region commonly known as La Beauce: 1,650 quarters of wheat, 1,040 quarters of barley, and 810 quarters of oats, sent by this Fund direct; also 4,280 sacks of potatoes, 394 sacks of oats, and 20 sacks

of various kinds of seed, sent by two Irish Committees at Dublin and Waterford, in the "Avoca." The Executive further sent 50 quarters of Spring tares, and 4,000 packets of small seeds, of the same description as those sent to the Aisne; and they also paid £1,000 towards the cost of one of the cargoes sent by the War Victims' Fund. For this £1,000 Colonel Elphinstone received for distribution 3,500 bushels of oats, 338 sacks of barley, and 158 sacks of potatoes. Unfortunately this consignment reached him so late that the period of sowing oats in that district had expired, and it became necessary to sell them for fodder; but the sum realized, nearly four shillings per bushel, showed a gain rather than a loss, and the Executive having authorized him to expend the sum in the purchase of maize in the South of France, the peasant-farmers of the district will also be no losers by this *contretemps*. The district of La Beauce comprises portions of the Departments in the following list, which shows also the number of occupiers relieved in each, exclusive of those who have received the tares and garden seeds, the returns for which have not yet been made out.

Departments.	Seed-corn.	Pota-toes.	Small Seeds.	Total.
Indre et Loire	3,021	2,332	394	6,247
Sarthe	738	652	117	1,507
Loir et Cher... ..	5,760	4,871	522	11,153
Loiret... ..	4,150	1,309	314	5,773
Eure et Loir... ..	3,170	1,096	393	4,659
Total	16,839	10,760	1,740	29,339

(3) To Paris and Creil, about 800 quarters of Spring wheat, 1,150 of barley, and 1,425 of oats were sent, also about 300 tons of potatoes, and 4,000 packages of small seeds as in the other cases. The returns in reference to this distribution have not yet been received by the Executive; but they are in a position to state that about 2,500 occupiers resident in between 40 and 50 Communes south of Paris, and about 4,300 occupiers resident in 127 Communes north of Paris have received relief from Paris and Creil respectively. No information as to the distribution from the subsidiary depots at Compiègne and Enghien has yet been received, and the figures just given may be considerably augmented in the final report. (4) From Rouen, Captain Delf and Mr. Bushnan have distributed in the Departments of the Seine Inférieure, Eure, and Calvados, the following quantities of corn and seeds sent by this Committee: 710 quarters of barley, 1,567 quarters of oats, 260 tons of potatoes, 100 quarters of vetches, 4,000 package of seeds as before, 2 sacks of cabbage seed and 11 sacks of grasses; also a cargo sent by the Scotch Fund, consisting of 11 sacks of barley, 231 sacks of oats, and 871 sacks of potatoes. Captain Delf also received from Boulogne a small quantity of wheat and some barley which had been intended for distribution by the Paris Committee; but the wheat, about 64 quarters, arriving too late to be sown, was sold for grinding. The returns relating to the distribution from this depot, also, have not yet been received by the Executive Committee. The following are the total quantities of grain, potatoes, and small seeds sent to France by this Committee:

Wheat	3,695	qrs.
Barley	3,836	"
Oats	5,387	"
Tares	250	"
Potatoes	700	tons.
Haricot Beans	4,000 half-peck bags (500 bushels).	
Turnip Seed	4,000 quarter-peck bags (250 bushels).	
Carrot Seed	4,000 two-pound packages (8,000 lbs).	
Onion Seed	4,000 quarter-pound packages (1,000 lbs).	
Sundry Seeds,	about 500 sacks and bags.	

The General Committee and the subscribers will doubtless be interested in learning the system which has been adopted by the representatives of the Fund so as to guard as much as possible both against fraud, and against misappropriation of the grain purchased with their subscriptions. The system adopted was commenced at Amiens after considerable deliberation, and having been found to work satisfactorily it was extended to all the districts in which the operations of the Fund have since been carried on. The first duty of the representatives has been to form a Local Committee consisting of landowners and other persons of influence and agricultural knowledge. The next step has been to obtain from the Maires of Communes, or other qualified persons, a statement in detail, on forms supplied for the purpose, of the wants of the peasant-farmers in their Commune or Canton, specifying the names, the acreage occupied, and the quantity of each kind of grain asked for. This statement has been signed by the Maire, the Cure or the Schoolmaster, and some agriculturalist of influence, generally either the President du Comité Agricole, or a Member of the "Société des Agriculteurs de France." It has then been examined by the representatives of the Fund and their local committee, revised if necessary, and the quantity actually voted stated thereon by the repre-

sentative. The seed has then been sent for by the Maire or his deputy, who has signed a receipt for it, and for each portion of it destined for the individuals whose claims have been allowed. With the grain he has taken duplicates of these documents to be signed by the recipients as it was delivered to them. The original return fully signed has been finally delivered to the representative of the Fund, while the individual receipts, duplicates of those signed by the Maire or his delegate, have been kept by that functionary as evidence that he duly performed his part of the transaction. In the face of these precautions it is almost impossible that there should be any room for misappropriation, except by the peasant-farmer himself; but it is of course quite possible that amongst the thousands who have received seed-corn some few may have sold it, or used it for other purposes than seed. So greatly, however, was the boon esteemed, that in at least one district the landed proprietors publicly announced that they would prosecute at their own expense any person who sold or otherwise misappropriated the seed, and demand the infliction of a fine representing twenty times the value of the grain mis-used. The Executive refer with the greatest satisfaction to the feeling of confidence with which their organization, both at home and abroad, has inspired the Committees of other Funds. It was obviously the duty of those Committees to make use of the safest medium for the distribution of their donations; and in addition to the large grants made by the Mansion House Relief Fund, the Executive have been requested to undertake the distribution of grain for several other Seed-funds at home and abroad. The Committee of the Scotch "French Farmers' Seed Fund" having deputed their Chairman, Mr. Scot Skirving, to proceed to France to make arrangements for the distribution of their seed corn, that gentleman, after personally examining the methods employed and the results obtained by Mr. Sartoris, at Amiens, begged him to undertake the duty. More recently the same Committee sent another cargo to Havre to be distributed by Captain Delf; and a Committee at Dundee has also distributed a quantity of potatoes through the same agency. Similarly, the Irish Committees established in Dublin and at Waterford sent their donations to St. Nazaire to be distributed by Colonel Elphinstone; and an American Committee also sent some small consignments to be distributed in the north-west of France by Captain Delf. Last, but, as a practical exhibition of confidence, certainly not least, M. Drouyn de Lhuys, the President of the "Société des Agriculteurs de France," has requested the Executive to distribute a Swedish Fund amounting to upwards of £4,000. The Executive have in every case willingly placed their organization at the service of these Committees, who have, as a rule, paid the freight of their consignments to the French port decided upon in each case, but the expenses of distribution in France have been borne by this Fund. This circumstance has increased the cost of the work of distribution; but the Executive considered that they were justified in this expenditure, as the great object was to relieve the largest possible number of peasant-farmers. It has also been a source of congratulation to them that by this working in concert with other Committees they were avoiding all danger of duplicate distribution. It is also desirable to draw attention, in reference to the question of expenditure, to the difference between the operations of a Seed-fund and those of Charitable Institutions for the relief of a starving multitude in a given place, or of operatives ruined by war. The grain must be taken from a suitable climate, it must be distributed by a given date to recipients who are scattered over a large tract of country, and such supervision must be exercised as will prevent its being sold or misapplied. To withhold the expenditure necessary for these operations would have been to nullify the object for which the subscriptions were given. The following is a summary of receipts and expenditure to Thursday last:—

RECEIPTS.

Cash received to May 18th.....	£11,955 2 2
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EXPENDITURE.

Seed-corn, Potatoes, Seeds, Sacks, Freight, &c., including grants to Mr. Bullock and the War Victims' Fund	£34,420 14 7
Distribution abroad*	2,681 8 9
Advertising	2,230 12 7
Printing, Stationery, Office expenses, Postage, Telegrams, and Petty expenses.....	496 11 11
Refund to Mansion House Relief Fund	5 5 0
Other Payments by Bankers, including com- mission	21 14 9
Balance in hand	2,098 11 7
	£11,955 2 2

* Including French railway charges to be refunded, amounting to about £1,500.

The outstanding liabilities may be roughly estimated at between £250 and £300, and the unpaid subscriptions at about the same amount.

This statement shows that there is a probable balance in

hand of about £2,000. In addition to this a re-fund of about £1,500, expended in the railway transit of grain in the north and west of France, has been promised, partly by the railway companies and partly by the Government of M. Thiers. The Swedish Fund (£1,272 19s. 11d.), already referred to, having been sent to M. Drouyn de Lhuys too late to be usefully expended this spring, has, with his consent, been held over until the autumn. In the opinion of the Executive there will be ample scope for the proper distribution of these sums after harvest, either in those districts of France which have not yet been relieved, or in that which is now being devastated by civil warfare. Should this suggestion meet with approval, the Executive propose to take steps to attain the double object of acquiring information for their guidance, and of ascertaining the agricultural and economic effects of the operations of the Fund. They are of opinion that if this charitable movement is destined to make a permanent impress on French agriculture, and they have received numerous assurances of the probability of this result, it is worthy of a permanent record. They, therefore, recommend to the General Committee that the Executive be authorized to depute some qualified person to visit the districts relieved, and report on the results of the operations of the Fund.

The CHAIRMAN asked the meeting to allow him to make a few observations before the adoption of the report was moved. It might appear to some people that it would have been more desirable to have delayed the present meeting until a final or conclusive report could be made; but the general powers entrusted to the executive committee at the beginning of the year left them quite unfettered in the exercise of their discretion, and it was felt that sufficient time had since elapsed to make it imperatively necessary to have an opinion pronounced upon what they had done. The first general meeting took place on the 5th of January; at that time the war was raging on the continent; the public had very little confidence in the possibility of carrying into effect the operations then sketched out, and the subscriptions consequently came in but slowly. On the 25th the armistice took place, but up to the 30th the subscriptions had only reached £2,000, and the committee were obliged to incur much expense to make the object of the fund known, or they would not, when the time for spring-sowing arrived, have had any seed-corn for distribution. On the 26th of February peace was signed, and after that much more sympathy was expressed, as was shown by the flow of subscriptions that then came in. But they were still beset by great difficulties, having no experience to guide them in their operations, and yet being within a month or thereabouts of the latest time when the sowing of the spring-corn could take place. They had no assurance that the corn could be conveyed at all, and still less certainty that they could get the corn to convey; and it was upon these particular grounds, no doubt, that the public in the first instance withheld their support. Experience proved many of these apprehensions to be correct, and that there would have been almost certain failure if they had attempted to convey seed-corn to districts abroad in the occupation of hostile armies, but when the preliminaries of peace were signed the whole case was reversed, and that which before was an obstacle and a difficulty became at once an element of strength, because, owing to the facilities given to them in the first place by the German embassy at home, and in the next by Sir Vincent Eyre abroad, whom he was happy to see in the room, they were enabled to send their corn with the certainty that it would not be requisitioned. According to their experience the German general at Amiens rendered them not only nominal but real assistance, and it was all the more necessary that he should allude to that, because he had observed a letter, sent by Mr. Robinson, the author of a work on the gardens of Paris, in which it was stated the writer had heard requisitions of seed-corn were made by the Germans. That, like all other reports of the kind, he carefully inquired into, and he was perfectly satisfied there was no authority for the statement, which could only have arisen from the tittle-tattle of the waiting-room at the Amiens railway station. Within six weeks after they commenced operations, they bought and conveyed and distributed seed-corn, and it required great vigilance to insure the quantity not being too low. The Mark Lane committee assisted them materially in the purchase of the corn, and he was certain within so short a time they could not possibly have bought the necessary supply if that Committee had not come forward and placed their services at their disposal. The conveyance of the corn was facilitated at home and abroad by the action of the railway companies, more especially that of the Northern of France,

which had from first to last conveyed their corn free of cost. The quantity of corn sent over that line was something prodigious, and its successful distribution was due to the energy and talent and prudence displayed by their representatives abroad, who also had no experience to guide them, but were left to act each upon his own individual judgment, while they were hampered as little as possible with constraints and restrictions. All that was done was simply to lay down the rule or principle that the corn should be distributed amongst the largest number practicable, and that no occupiers should receive more than sufficient to sow four English acres. A French peasant-farmer was defined to be an occupier of 50 English acres. He calculated taking a rough estimate—they had relieved 80,000 of such occupiers in France. If that number was multiplied by 3 or 4 which was thought to be a fair average of the members of each family, it would reach to a very considerable total. He estimated a sack of seed-wheat would yield about 40 bushels or 10 sacks of wheat, equal to 7 sacks of flour, capable of producing 600 quarter loaves, or two quarter loaves per day for each family for twelve months. That would give some idea of the amount of benefit the Fund had conferred. As the occupation of territory was raised it became necessary to increase the organizations abroad. They commenced with the Amiens district first, then extended their operations to Tours, then round Paris, and finally to Rouen. As the subscriptions came in they were enabled to increase the quantity of corn sent out to each district committee, and the accomplishment of all this work taxed their energies to the utmost. Indeed, had they not been supported by those who were equally anxious to ensure its success, the undertaking must have collapsed long ago. They had the help, however, of gentlemen of experience in the International Society, of others of great local knowledge, of others well acquainted with agriculture and familiar with the wants to be supplied; and, the task being now nearly completed, he hoped the English people would derive some satisfaction from the successful manner in which it had been performed (cheers). He was convinced it had not only produced lasting results in alleviating the misfortunes of many suffering people who were not responsible for the terrible state of things in France, but that it would also tend to cement and increase the good-will and amity which had now so long subsisted between the two countries (cheers).

Mr. T. GATES DANTON moved the adoption of the report, and bore testimony to the immense amount of labour and courage bestowed upon the work. Connected as he was with the War Victims' Fund, he had had opportunities of watching the beneficial influence this committee had exercised upon the other organisations.

Mr. SUTTON (Reading), in seconding the motion, echoed the sentiments of the mover, and observed that the experience thus obtained might prove equally useful in the future, as showing what could be achieved in this direction within two or three months.

Mr. H. M. JENKINS (Hon. Secretary), replying to a question, said it would be difficult to make out an exact account of how much had been received in donations of corn, but, speaking roughly, he should say about 200 qrs. of wheat, 600 qrs. of barley, 100 qrs. of oats, and 25 tons of potatoes, besides some 200 or 300 bags of seeds of different kinds. When the Committee came to make their final report, they hoped to be able to give the correct list.

The motion was carried unanimously.

On the motion of Mr. KENDALL, seconded by Mr. ODAMS, thanks were accorded to the various Societies and other bodies named in the report who have assisted in the operations of the Fund at home and abroad.

Mr. SCOT SKIRVING (Chairman of the Scotch French Farmers Seed Fund) proposed a vote of thanks to the various gentlemen who had been the agents of the Fund in France and the local committees who assisted them; and having witnessed some of their labours there, he was in a position to congratulate the committee upon having had such able and zealous representatives. The nearest approximation to the duty discharged was the Irish famine relief, but then, of course, the distribution was far easier to what it was in an invaded country, with the post-office, railways, and electric telegraph all disorganised. He had himself tried and failed at the work, or at least was glad to give it up. He hoped the balance in hand would be

applied to the relief of the environs of Paris, upon which the visitation had fallen with double severity. Perhaps in the autumn these distressed people might receive special attention.

Mr. PAVY (Mark-lane) seconded the motion, and spoke of the difficulty experienced in getting the seed within so limited a time. It was supposed with an unlimited supply of money an unlimited supply of grain could be obtained, but that was altogether a mistake. Difficult, however, as was the collection, how much more difficult must have been its distribution! In the one case there were only scores of persons to be dealt with, in the other thousands.

The motion having been carried unanimously,

Sir VINCENT EYRE acknowledged the vote on his own behalf and that of some of his absent colleagues, although he said there were others present much more entitled to do so. Great as were the services rendered by the International Society during the war, the work done by this fund must be regarded as of equal value and importance, for it had really and truly been the means of warding off a great famine, the effects of which would have been felt in no small degree at our own doors.

Mr. PITMAN also responded, and stated that all the districts around Paris had received more or less relief from the Fund. He suggested, however, that an attempt should be made to supply seed to other than those in absolute need of it at the same price that it could be purchased in London. At present, and perhaps it would be the same in autumn, it was from 50 to 60 per cent. dearer upon the spot than in England.

Mr. W. DELF also responded.

Mr. WELLS, M.P., hoped the public at large would understand how energetically this work had been carried out. Not a little of its success was due to Mr. Odams, and the gentlemen of the Mark-lane committee, who deserved their warmest thanks. People were not aware of the great difficulty of buying seed-corn within a brief space, and yet the whole of this work had been a race against time. The difficulties in the way would have been insuperable had it not been for the spirit with which these gentlemen had caused the corn to be brought forward, and he had very much pleasure in moving a hearty vote of thanks to them for their most valuable practical assistance.

Mr. N. RIX seconded the resolution, which was coupled with the name of Mr. Odams, whom, Mr. Rix declared, no amount of labour seemed to inconvenience, neither did it his office. The seed-corn bought was very useful for the purpose for which it was intended, and well worth the money paid for it.

The resolution was passed unanimously, and Mr. ODAMS, in acknowledging it, confessed that when he volunteered his services, he little thought of the vast labour it would bring upon him.

Mr. PAVY spoke in similar terms for the Mark-Jane Committee, adding that the labour could not have been more cheerfully undertaken.

Mr. H. CORBET proposed a vote of thanks to the three honorary secretaries, upon whom, he said, much of this success must have depended. Morning, noon, and night they were always in harness, willing and ready to go here, there, and everywhere to advance the interest of the Fund. At one time, as a member of the Executive Committee, he felt almost afraid to enter his room, so certain was he to hear of some special meeting or other coming off, and the Committee were compelled to stipulate that they should not be called together more than three or four times a-week. Not so these gentlemen, who, with their Chairman, were ever pushing the movement forward throughout the country; and the immense correspondence carried on, together with the great difficulties they had to encounter both at home and abroad, would fully entitle them to the present complimentary vote.

Mr. AMOS seconded the motion, remarking that these gentlemen were the right men in the right place.

The resolution was carried by acclamation.

Mr. B. T. BRANDRETH GIBBS returned thanks, regretting that, owing to two severe attacks of indisposition, he had not been able to do so much as he could have wished. Mr. Jenkins, upon whom the bulk of the work had fallen, must now be good enough to do the lion's share of the speaking.

Mr. H. M. JENKINS, after describing how the subscriptions had to be concentrated and spent in London, while the distribution of the seed-corn was from all points of the compass in France, compared the task they had overcome to that of

a Hercules; but they were, nevertheless, the more pleased the more the subscribers gave them to do. He must be allowed to glance for a moment at the future, because the work of the secretaries had not quite come to an end. Now, what was to be done with the balance? One suggestion was to devote it to an account for furnishing seed-corn at the cost-price to farmers who were in need of it, although not in a necessitous condition; but to adopt the suggestion would be embarking upon a sea of enlarged and endless difficulties, and it must therefore be steadfastly rejected like all other proposals calculated to interfere with the ordinary progress of trade. The work of distribution being now finished, he hoped the members of the Executive Committee would be able to spare a little more time to find out the best way of disposing of the balance in the autumn, and he promised that nothing should be wanting on the part of the secretaries to ensure a conclusion as satisfactory as the present appeared to be to everybody concerned.

Mr. C. S. READ, M.P., called upon the meeting to give a cordial, unanimous, and hearty vote of thanks to their excellent

chairman. Whatever might have been said in praise of other gentlemen, this at all events no one could dispute, that Lord Vernon's interest and industry in this matter was no less worthy of admiration. The kind and courteous manner with which he received every one who had anything to do with this movement had contributed a good deal to its success.

Mr. DELF seconded the motion, which was also passed by acclamation.

The CHAIRMAN warmly acknowledged this empathic expression of feeling in his favour, and declared it to be no mere form of words or utterance in a spirit of compliment, when he said no chairman could possibly have been more ably and readily supported than he had been by the Executive Committee over which he had the honour and pleasure to preside. Mr. Jenkins thought they undertook a herculean task when they entered upon the work, but great as it was they had every reason to be content with the corresponding results it had already yielded, or destined to flow from it in the future,

The meeting then separated.

THE GRUB IN SHEEP AND BOT IN HORSES, &c.

The following paper was read by Mr. J. VAUGHAN, Chairman of the Board of the Guardians of the Bultth Union, at the meeting of the Board:

Thinking it might interest you as agriculturists and owners of sheep and stock, I have just written the following imperfect account and history of the Fly which infests sheep, cattle, horses, and other animals, both wild and domestic, and in some parts of the world even man himself. This insect of late has been the cause of sad losses amongst the flocks of sheep in the surrounding country. The disease is commonly known by name as "the Grub, or Worm in the Head." Not having books on the subject by me to refer to, I regret that my knowledge and this paper is so imperfect, but I must ask you to take the will for the deed. The first person who in modern times studied and wrote on this fly and larva was Vallisnieri, an Italian and pupil of the great anatomist Malpighi. He published his essays about A.D. 1700 on the fly that affected the horse and sheep. The celebrated Reumur and Baron de Gee likewise wrote on this subject, but at that period they had but an imperfect knowledge of how the many different varieties of the fly existed or were propagated. It is to the celebrated Linnaeus we are indebted for classifying this fly under the common title of *Cestrus*. He was acquainted with five only of the European species, viz., the *Bovis* (ox), *Tarant* (reindeer), *Ovis* (sheep), *Hæmorrhoida* (horse) and *Nasalis* (horse). The writer Fabricius subsequently added three more to this class—the *Ces. Buccatus* in Carolina, *Ces. Pecorum* (in intestines of sheep uncertain), and *Ces. Trompe* (reindeer). Goulin next wrote on the *Cestrus*, but both these writers having drawn their facts from incorrect sources confuse the reader. Since their time others have written on this subject, and a very excellent article with monograph and illustrated by figures appeared in the 3rd vol. of the *Linnæan* transactions, and Mr. Bracy Clark has since published a separate volume on this subject. In Entomology this fly is classed amongst the genus of insects of the order of *Diptera*, being the *Cestrus* of naturalists, and commonly known as the Gad Fly or Breeze. There are, I believe, some twelve or more distinct descriptions of this fly known to naturalists. The *Cestrus Ovis*, or Sheep Bot Fly, is the first I will refer to. The generic character and appearance of the fly and grub or larva, is: the wings of the fly are transparent, punctured with small spots at the base; the belly or abdomen chequered black and white. The grub or larva is somewhat smaller than the horse bot, of whitish colour and egg-shaped or ovate, flat on the underside, oval or convex on the upper, but without spines along the segments. There are two small hooks attached to the small end, the other extremity is thick truncated, encircled by a prominent ring or margin, which apparently serves the purpose of closing over and cleaning the respiratory plate, and when in action a slight snap is heard sometimes by the sudden admission of air. The upper part is studded by black lines or dots, and the flat surface with small minute rough black spots or dots along the middle segment. When young, these spots are not visible.

The larva or grub moves with considerable quickness, holding on by the hooks or tentacula at a fixed point, and drawing up the body towards them. On the broad line of dots on the under side rough points appear, supposed to serve the purpose of assisting them over the smooth moist surface of the membranes, and of exciting inflammation in the parts where they rest, so as to cause a secretion of lymph or pus for food. It is believed that the larva or grub usually resides in the maxillary sinuses of the head, as the membrane lining these cavities are found highly inflamed, although after the death of the sheep the grub is more generally found up in the frontal sinuses and near the horus. As the lining of these cavities is not found inflamed, it is supposed that the grub crawls into these situations after the death of the sheep. At the same time, quite young and full-grown larvæ may be found in the sinuses of a sheep's head. From this it is inferred that the breeding is not confined to one particular period or season of the year, but it does not follow that all the larvæ should be hatched at the same time, although deposited by the same fly. The larvæ or grub when hatched in the sheep's nostrils, by its two hooks, crawl up into the interior cavities of the skull when full-grown, when they fall through the nostrils to the ground and change to the pupa or chrysalis state, lying on the earth or adhering by the side to a blade of grass, where in which state it remains for some two months or so, and in about the months of June and July the fly bursts the shell of the chrysalis and comes out and commences depositing its eggs on the sheep. The manner in which this species of fly deposits its eggs or ova is not easy to see, although standing close to the animal, on account of the obscure colour and rapid motion of the fly and the extreme fright and agitation of the sheep; but from the motions of the sheep afterwards, and the mode of defence it takes to avoid it, there is little doubt that the egg is deposited in the inner margin of the nostril. The instant the fly touches this part of the sheep they shake their heads violently, and beat the ground with their feet, holding their noses at the same time close to the ground and running away, sharply turning their heads on every side to see if the fly is near or pursuing them. They also sometimes might be seen smelling the grass as they go lest one should be lying in wait for them, and should they observe one, they run either back or some other way, as sheep cannot, like cattle and horses, take refuge in the water to protect themselves against its attack. Sheep generally have recourse to a rut, dry dusty roads, gravel-pits, high fern, or gorse, to hide, and where they crowd together during the heat of the day with their noses generally close to the ground, which renders it difficult for the fly, who makes his attacks when on the wing, to get at the sheep's nostrils. The nostril, from the repeated attacks of the fly and the frequent rubbing against the ground, becomes irritated, inflamed, and sore, which occasions their touch to be so much dreaded by the sheep. From the difficult and very precarious mode these flies pursue, they cannot succeed in depositing but a few of their eggs in each sheep; whereas, on the contrary, if they actually entered

those cavities of the face, to effect it they must deposit them all, and in one sheep, the impossibility of which is already stated. Sheep have always been subject to this troublesome parasite, and which is by no means necessarily fatal nor injurious to the quality of the meat. Two or three of these larvæ appear to have no ill effects on the sheep; but on account, as is generally believed, of the unusual dryness and heat of the last two or three years, and the past one in particular, this parasite has increased in some parts of the country to a very serious extent—as many as twenty and thirty of these larvæ have been found in the head of one sheep, and you can imagine the effect they would have on the poor animal when they begin to bestir themselves to get out, causing frequently the death of the sheep, usually preceded by stupor and debility. I much wish it was in my power to effect a remedy, but I know of none. Once the grub has ensconced itself in the maxillary sinuses and convolutions of the turbinated bones of the head, even trepanning—which some French shepherds resort to without hesitation, and has been done in this neighbourhood—will not always detect them. The great difficulty is to use any local application, or even fumigate the part where the grub is, that would destroy or cause it to fall out of the head. To prevent the disease much can be done. The sheep might be moved to a different pasture for the summer months of June and July, or earlier, whilst the greater part of the bots or larvæ are yet on the ground in a dormant chrysalis state. The pastures infected with the bots might, I think, with advantage be sprinkled or sown with salt, lime, or some other manure that would be likely to destroy the pupa or chrysalis and benefit the herbage, and the sheep not to be brought back again to such ground till the setting in of winter, which would be the means of destroying them most effectually, and for this process to be repeated for two or three years successively. This periodical movement of flocks to avoid the fly is carried on in other countries. In Lapland the inhabitants migrate annually with their reindeer on account of this bot which infests them. Internal remedies or drenches in this affection or complaint would be of little or no avail. The object is to prevent the fly, on emerging out of the chrysalis state, laying its eggs on the sheep's nostrils. Dipping the sheep's head in certain solutions, and using such external application as will prevent the fly attacking the sheep, is the object to be gained. An infusion of quassia chips, with a small quantity of carbolic acid added, would be a good dipping solution; for three or four shillings sufficient could be purchased to dip the heads of a hundred or more sheep in, and that more than once. The heads of the sheep could be dipped more or less frequently during the fly season. The part round the nostril and ears should be kept smeared with tar or fish oil, or both combined in equal parts. A little brimstone, assafetida, and colocynth powder might be added, but is not necessary. None of the mineral poisons, such as mercury, arsenic, or lead, would be of service. At the present time there is another disease existing amongst the sheep of this neighbourhood, of a different character altogether to the bot. In both complaints there is a discharge from the nostril, but in this latter disease no grub will be found in the sheep's head; it has more the character of an infectious influenza or inflammation of the lungs. The internal lining membrane of the nostrils, extending down into the lungs or lights, are found highly inflamed, with a running from the nose, and a discharge which, it is thought, gives it to the other sheep. Lambs suffer from this disease. The bowels also become affected, and a matter discharge is passed; the sheep soon becomes weak, refuses food, and frequently dies. In this disease strong opening physic, such as salts, does not appear to be called for, unless perhaps at the very commencement of the complaint; but milder physic, such as castor oil, sulphur, common salt, with ginger, &c., the nostrils washed with vinegar and water or a solution of Condy's disinfecting fluid, strengthening drenches, along with astringents, appear the most appropriate remedies in the latter stages of this disease; and carefully separating the affected from the healthy sheep is, I think, a necessary precaution to take.

BOTS IN HORSES.—There are at least two different kinds inhabiting the stomach of the horse, the *Cæstrus equi*, or large horse bot, and *Cæstrus hæmorrhoidalis*, or small horse bot, which at length produce, on their arriving at maturity, a two-winged insect of the fly kind. The larvæ of the large horse bot attach themselves to every part of the horse's stomach,

especially about the pylorus or lower part of the stomach. Sometimes they are found in the intestines. They hang in clusters, fixed by the small end to the inner membrane of the stomach, where they adhere by means of two small hooks; and if removed, they will fix themselves by these hooks on the skin of the hand. It is observed that these bots, inhabiting the internal membranes of animals, are furnished with these hooks, whilst those which inhabit beneath the skin are found without them. When young, the larva of this bot is of a pellucid ruby red colour, and without spines on the segments, and its food is the chyle or mucus of the stomach. They attain their full growth about the latter end of May, and are coming from the horse from this time to the latter end of June, or sometimes later. These large horse bots are not seen adhering to the bowel or rectum on leaving, as the small horse bots are. On dropping to the ground, they find out some convenient retreat, and change to the chrysalis. In about six or seven weeks the fly appears, with white wings, with a stripe of black and two small spots. The mode the fly pursues to obtain for its young a situation in the stomach of the horse is truly singular, and is effected in the following manner: When the female has been impregnated, and the eggs are sufficiently matured, she seeks among the horses a subject for her purpose, and, advancing on the wing, she holds her body nearly upright in the air, and her tail, which is lengthened for the purpose, curved inwards and upwards. In this way she approaches the part where she designs to deposit the egg; and suspending herself for a few seconds before it, suddenly darts upon it, and leaves the egg adhering to the hair; she hardly appears to settle, but merely touches the hair with the egg held on the projected point of the abdomen. The egg is made to adhere by means of a glutinous liquor secreted with it. She then leaves the horse at a short distance, and prepares a second egg; and poising herself before the part deposits in the same way. The liquor dries; the egg becomes firmly glued to the hair; and this process is repeated by various flies till four or five hundred eggs are sometimes placed on one horse. The horses after a time, when they find this fly does them no injury, as the Tabani and Canopes, by sucking their blood, hardly regard it. The side and back part of the shoulder, and the inside of the knee are the parts on which these flies are most fond of depositing their eggs, less frequently the extreme ends of the hairs of the mane, but it is remarkable that the fly does not place them promiscuously about the body, only those parts which are most liable to be licked with the tongue, and the eggs therefore are scrupulously placed within its reach, showing the strongest example of pure instinct. The eggs, when they have remained on the hair for four or five days, become ripe, after which time the slightest warmth and moisture is sufficient to bring forth in an instant the latent larva or grub, and if the tongue of the horse at this time touches the egg, it opens, and a small active worm is produced which readily adheres to the moist surface of the tongue, and is from thence conveyed with the food to the stomach. These eggs can be hatched in the hand by moistening them with saliva when perfectly ripe.

THE CÆSTRUS HÆMORRHOIDALIS, OR SMALL HORSE BOT.—The larva or grub, producing this insect, is much like the former, occupying the same situation also in the stomach of the horse. It is rarely distinguished by its smaller size, and being destitute of spines on leaving the horse, when full grown it assumes a reddish green colour, and in about two days becomes a chrysalis. None of the larvæ of this family appear to change their skin, which at length becomes also the shell of the chrysalis. After remaining in the chrysalis state about two months, the fly appears. It was erroneously supposed for a long time that the female fly entered the bowels of the horse to deposit its eggs, but the part chosen by this insect for this purpose is the lips of the horse, which is very distressing to the animal from the excessive titillation it occasions; for he immediately after its touch rubs his mouth against the ground, his fore legs, or against a gate or tree; and if two are standing together, they often rub themselves against each other. At the sight of this fly the horse appears much agitated, and moves his head backwards and forwards in the air, to baulk its touch and prevent its darting on the lips, but the fly watches for a favourable opportunity, deposits its eggs from the point of the abdomen, and he continues to repeat his attacks on the lip, till the enraged animal endeavours to avoid it by galloping away to a distant part of the

field. If it continues to follow or tease him, his last resource is in the water, where *Æstrus* is never observed to pursue him. This fly will sometimes get between the legs of the horse whilst grazing, and then make his attack on the lower lip; the titillation causes the horses to stamp violently with his fore foot against the ground, or strike out at the fly. The egg of this species appears darker than that of the former, and provided with a foot stalk from the small end, the opposite being obtuse, and provided with an operculum. These hæmorrhoidal bots are during the summer months hanging to the extremity of the horses' bowel, where they will remain for some days before they fall to the ground, and if the horse is used on the road while the bots are adhering to this part the irritation becomes peculiarly distressing, and causes him to move awkwardly and sluggishly as though tired, and if severely beaten he soon relapses again into the same awkward way of going; and as this generally happens during warm weather, it is attributed to mere laziness, and severe correction follows; but on removal of the bot the cure is instantaneous. I believe there is no specific medicine that will detach them from the stomach and intestines. It has been observed that horses which are not exposed to bots more frequently are affected with glanders, farcy, &c.—as those of the army, coach, and carriage horses—than those not exposed to receive them. In addition to the four species of *Æstrus* or gaddy I have referred to in the foregoing paper, there is also to be met with in this country the *Æstrus Veterius*, or *Nasalis* of Linnæus, the habits of which are not so well known. Those insects of this family inhabiting other countries I will not now attempt to give an account of.

BOOTS IN CATTLE.—Besides the bots peculiar to the horse and sheep, which adhere by small hooks and live in the internal mucous linings of the head and intestines, there are those of a distant kind belonging to the same family which live in their grub state under the skin of the backs of oxen, deer, and other animals. The larva of the *Æstrus Bovis*, or

great ox bot, is unlike the larva of this genus. When young it is smooth, white, transparent, afterwards becomes of a deep brown colour. On examining the dots seen on the segments of the body, real hooks turned in different directions can be detected, which, when moved about in the abscess increase the irritation, and so increase the discharge of pus and matter for the sustenance of the grub. In the summer months, usually about June, the larvæ, when of mature age, passes out through the external opening in the skin, and remains in its chrysalis state from about the latter end of June till about the middle of August, when the fly, forcing open a very singular triangular lid, or operculum at the small end, makes its appearance. Its effects on the cattle are often remarked; but the fly itself is rarely seen or taken. When depositing its eggs the pain it inflicts appears to be very severe. When one of the cattle is attacked by this fly it is easily known by the extreme terror and agitation of the whole herd. The unfortunate object of the attack runs bellowing from amongst them to some distant part, or the nearest water. The tail, from the severity of the pain, is held with a tremulous motion straight from the body. The rest, from fear, generally follow to the water, or disperse to different parts of the field. In former times, when oxen were yoked to the plough, one of these flies would make them quite uncontrollable, and off they would run through hedges or whatever obstructed their way. Usually, the strongest and healthiest beasts are preferred by this fly; and I have been told that dealers consider bots in the back as a criterion of goodness rather than otherwise. The whole of this family of insects appear to have a strong dislike to moisture, since the animals find a secure refuge when they get into a pond or brook, where the other flies which annoy them follow without hesitation, but the *Æstri* rarely or never; and during very cold, rainy, or windy weather they are not to be seen. The fly has brownish unspotted wings, belly with a black band in the middle, and its extremity with orange yellow hairs.

THE POTATO.

(A Paper read before the Madison Co. Farmers' Convention, by S. B. Johnson.)

Very few cultivators give the importance to this vegetable which fairly belongs to it. In the plans for the season a large area is given to corn; perhaps a still larger to wheat; and oats occupy no mean place, particularly if the seed commands a fabulous price. If perchance some little out-of-the-way corner yet remains unappropriated, the force, which has well nigh spent itself on the important crops, is allowed, on some leisure Saturday evening, to finish itself in the potato patch—and too often the patch itself is finished at the same time. The corn ground is prepared with the utmost care. You know almost to a mathematical certainty the distance the rows are apart and the points of the compass to which they run; the number of hills in a row, and the grains in a hill; and how many shoot up and make a stand. Should there be one too many stalks in a hill, out it must come at the proper time. It is harrowed and cultivated, thinned, re-cultivated, ploughed, and "laid by" just when it should be. When we hear of one crop of potatoes managed with similar care and patience, is it not the exception rather than the common practice? We could cite cases where, year after year, the owner was glad to get his potatoes dug on the shares; and the luckless wight who took the job made beggarly wages at that. With such results staring them in the face, it is little wonder that these men say, potatoes don't pay. Why not? The corn, wheat, and oats made good crops; the soil best adapted to them was selected; they were properly put in and properly cared for; a handful of corn was not allowed to grow in a hill, nor was it "laid by" in such a wilderness of weeds that one might lose his way in attempting to follow the rows. Is it not true that we do not fully appreciate the value of this crop? It stands side by side with wheat and corn—perhaps the third in importance of our great articles of national food. In 1860 there were 15,000,000 bush. of potatoes raised in this country. It is no exaggeration to estimate that in 1860 the product

reached 200,000,000 bushels. At 50 cents per bushel, the value would be 100,000,000 dols. While this crop stands third in importance as an article of food with these great staples, as a source of profit to the producer, it stands pre-eminently at the head and above them. You shall have no random statement for this, but figures, a logic which is hard to evade. What say the statistics for the years 1862, '63, '64, and '65?

States.	Corn.		Wheat.		Potatoes.	
	Dols.	Cnts.	Dols.	Cnts.	Dols.	Cnts.
Maine	46	52	25	45	69	79
New Hampshire	42	87	30	77	67	77
Vermont	48	80	29	03	59	72
Massachusetts	43	03	33	02	81	94
Rhode Island	43	46	30	87	88	89
Connecticut	40	22	32	57	80	37
New York	32	04	26	10	57	99
New Jersey	37	30	28	25	68	46
Pennsylvania	32	20	23	93	72	30
Maryland	24	19	21	73	58	45
Delaware	19	82	22	74	92	04
Kentucky	21	14	16	25	71	25
Ohio	20	20	16	25	64	83
Michigan	22	93	21	10	52	35
Indiana	17	96	16	30	59	26
Illinois	14	47	14	36	60	13
Missouri	17	81	18	75	60	46
Wisconsin	20	31	14	63	50	51
Iowa	19	59	12	85	54	91
Minnesota	20	43	13	16	58	40
Kansas	20	52	21	67	82	88
Nebraska	27	82	23	91	98	45

Here in our own proud state, the granary of the world, the

average cash value of corn per acre for four consecutive years is 14 dollars 47c., of wheat 14 dollars 26c., while that of potatoes is 60 dollars 13c.—more than three hundred per cent. in favour of the latter. Let it be remembered, too, that this was in war-times, when the prices of the cereals were considerably enhanced. With us the best results have been secured on the second bottom of a creek, running through the place. The land is high, dry, and rolling. The soil, a sandy loam; subsoil, a porous yellow clay. Is not easily affected by the extremes of wet or drought. About ten acres of it had been in cultivation for fifty years. The humus was exhausted; consequently, an essential ingredient was wanting for the potato. We seeded the field down to clover in the spring. The following year the clover made a good growth. The first crop was cut for hay. The after-crop, when matured, was well ploughed under late in summer, the following spring planted to potatoes. The poorest part of it produced at the rate of three hundred bushels per acre. The ploughing under of any green crop—we prefer clover—will add to almost any soil the essential ingredients to the growth of the potato. Low, wet, or argillaceous soils should be the last resort. A large crop is often produced on low bottoms, but the quality is inferior. Take your stand on the corner of the chief market-towns of this county, on a day when potatoes are coming in by the wagon-load. The first question the grocer puts is, Were they raised on the bottom or upland? If the latter, they will bring ten or fifteen cents more per bushel—an aggregate of from 4 to 5 dollars on the load—a difference sufficient to pay for marketing them. Men do not care to be taxed for extra water in a potato more than in milk. In many localities it would do to recommend a liberal supply of superphosphates, guano, wood-ashes, &c.; but with us, in most cases, it would not be practicable, nor is it necessary to a good-paying crop. With such a soil as has been recommended, if it be much worn and the necessary humus is wanting, green crops turned under and rotted will renew the soil. When the ground is sufficiently dry in the spring, start the plough, running from ten to twelve inches deep. If the subsoil is stiff, tenacious, the subsoil plough will be advantageous. Pulverize thoroughly with the harrow, and you are ready for planting. It is now a well-accepted fact that the earlier we can plant in this latitude the better. If the ground is sufficiently dry in March, even on the first day, let the work be commenced. We cannot disguise the fact that, with a soil unsurpassed, we labour under greater difficulties with this crop than they do in more northern and eastern localities. The potato rejoices in a cool, equable, not too humid climate. The droughts, which are the rule rather than the exception here, often set in at a time in early summer to result most disastrously, if the planting has been delayed to the latter part of April or into May, frequently killing the tops outright when the tubers are not half grown; or, if the plant survives, the growth of the root ceases for a while. With the cessation of the drought a second growth commences, and the tuber sports itself into all sorts of shapes, nearly ruining it for the table and market. By early planting, nine times in ten we escape this disaster. If we have no variety that can be planted early and will stay with us through the winter, it is our misfortune, and, as a *dernier ressort*, we will supply our northern neighbours through the summer, and they shall return the compliment in the winter; but are we driven to this alternative? All remember the alarm caused by the potato disease in Europe, in 1843. Sorts which had been tested for years and had always been reliable, failed. Strong men, helpless women and children in Ireland actually died of starvation, such was the famine produced by the failure of this crop. The loss to Great Britain in one year was estimated at fifty million dollars. A plague similar to it spread to this country and our losses from that source alone have been placed at six million dollars or more in a year. We cannot do better than to quote here the author of the "Potato Mania." In speaking of Rev. Chauncey E. Goodrich, of Utica, New York, chaplain of the New York State lunatic asylum, he says: "At this juncture, when men were looking on with dread at the prospective annihilation of the potato, moved by considerations of patriotism, Mr. Goodrich turned to account his habit of observation and experiment in the vegetable kingdom. Instead of seeking for the convalescence of old varieties, he believed that the true road out of the danger lay in the direction of a *renewal of the*

stock from original sources; and to this, being now relieved from a pastoral charge, he devoted himself with singular intelligence and industry. The potato is indigenous to the tropical mountain regions of South America. It flourishes best on the table-lands of the Andes. There is no cold of winter there, and yet the elevation makes the ground cool and moist. Mr. G., in 1843, at an expense of 200 dollars, procured some potatoes from Chili. From 1843 until the time of his death in 1863 he raised not less than sixteen thousand seedlings. There are few instances on record of zeal so disinterested, chiefly in two respects: First, in that he would not permit himself to be imposed upon in the judgment which he placed upon the merits of his seedlings, remorselessly sacrificing almost the whole of them, sifting and reducing the number to some seventy, and ultimately to eight or ten, which, by wide and generous distribution, he had caused to be tested over the breadth of the whole North, from Canada to Virginia; and secondly, in that he worked out his benevolent labours to the end of his life, without turning his industry to his own profit. Goodrich was the pioneer and patriarch of the New Kingdom of Potatoes." Of the Goodrich seedlings, we have tested but two varieties—the Early Goodrich and the Harrison. Mr. G. describes the former as being round to longish; sometimes a crease at the insertion of the root; white flowers, bright lilac; produces many balls; yield large. This sort is No. 1 in every way. We proved it to be a good bearer, and of good quality for two seasons; the third, the quality was good for a few weeks, after which it had a sweetish, disagreeable flavour, and we have since discarded it. The Harrison also gave fine promise at the outset; yielded prodigiously, and was of excellent quality; but, after the second trial, we throw it aside as only fit to raise for the hogs. From one of the other Goodrich seedlings, the Garnet Chili, Albert Bresec, of Vermont, originated a variety in 1861—the Early Rose—which has been tested for some years and challenges the world for a competitor. It has a stout, erect stalk of medium height; large leaves; flowers white; bears no fruit. The tuber is quite smooth, nearly cylindrical, varying to flattish at the center, tapering gradually towards each end; eyes shallow, but sharp and strongly marked; skin thin, tough, of a dull bluish colour; flesh white, solid, and brittle; rarely hollow; boils through quickly; is very mealy, and of the best table quality. Matures about ten days earlier than the Goodrich or any other variety with which we are acquainted. Nor is this all that commends it. It is not only the earliest, and most productive summer potato, but is good for winter and the following spring. We know of no better keeper. Early in June of last summer we had on our dinner table samples from the crops of 1869 and '70. They were then pronounced excellent. Where can you find another variety that will remain perfectly sound, firm, and retain its flavour, the year round? The Neshannock was once the prince of potatoes, but its glory has departed. It has lost its healthfulness, productiveness and flavour. The Buckeye or Early York, is still of fair quality; a tolerable bearer; eyes deep, and the center is often hard. The Peachblow is a late potato; good bearer; eyes deep; flavour fine when grown on light soil; if on a strong soil, is sometimes coarse, and hollow at the heart. It is the only variety we can recommend for a late potato. The Shaker Russet is coarse, unshapely deep-eyed, large, and few in a hill. The English Fluke is a large, smooth potato, of good quality, but not successful here. Until this new era in the potato it seldom occurred to the planter to count the number of eyes in a hill, even if he did the number of potatoes. If the seed was large, the rule was, fewer in a hill; if small, a greater number. So many bushels were left from the winter's store. Get rid of them at some rate, giving each hill a fair proportion, until the limits of the field are reached, and the store exhausted. This new era, this greenback, if not golden era, in the kingdom of potatoes, has worked a most salutary change in this respect. When a single tuber costs 50 dollars, or a valuable cow, or sixteen of them a thousand-dollar town lot, the purchaser can afford to take time to count the eyes in the potato. Thus, in the effort to make the most of what might seem a bad bargain, valuable facts have been evolved. To secure the greatest results from seed so expensive, it was cut close, planted thin—one eye to a piece, and one piece to a hill, were grudgingly deposited with mother earth. The lavish return she made for favours doled out so sparingly, has

brought about a radical revolution in planting. Now the question is, not how much, but how little seed shall be put in the hill. There is great diversity of opinion as to the best size for seed—whether large or small, but one eye is better than a dozen in a hill. Be careful to secure sound, well-ripened seed, whether large or small, the condition being of vastly more consequence than the size; cut the large potato to pieces of one eye. Begin at the butt end; cut towards the centre, leaving a due proportion of the potato with each eye. Very small potatoes may be quartered, cutting from the seed to the stem. We prefer the hill method to drills. Lay off shallow furrows $3\frac{1}{2}$ feet each way; place from one to three set in a hill, as you have the ground, or seed. If the eyes are perfect, you can calculate on about as good a crop from one set as three; cover with light plow or hoe from three to four inches deep; just before or after the plant appears go over with a two-horse harrow. This is better than two ploughings for keeping back the weeds. When about three inches high, with a one-horse Diamond plough, run close to the hill to the depth of five or seven inches, throwing the dirt from it. Go through each way in this manner. By this time the plant is six inches in height. Now take a large plough and throw the soil back to the hill. A two-fold object has been gained by this process. The seed is slow at first in starting. The soil has packed in an about the hills. Now you have broken the incrustated surface, loosened the soil, warmed and given new life to the sluggish plant. The tubers have a soft, mellow, roomy bed, in which to grow and mature. No further stirring of the soil is needed. Whenever the potato has commenced to set, it should be left undisturbed. Every additional stirring causes new tubers to set, and, as a consequence, you get a disproportionate number of small, immature potatoes. Should any weeds appear among the hills, pull them out by hand. The vicissitudes of the seasons—noxious weeds—even the terrible rot—are not at present the worst enemies of the potato. According to entomologists, there are ten distinct species of insects that prey upon the potato plant in the United States: The stalk borer, potato stalk weevil, potato worm, striped blister beetle, ash-grey blister beetle, black-rot blister beetle, margined blister beetle, three-lined leaf beetle, cucumber flea beetle, and the Colorado potato bug (*Doryphora lineata*). Nine of the insects named we shall not stop to notice, for they are pretty well cared for by their parasites. But the last named—the Colorado beetle—has been proved to be more than a match for its parasites, and has too often out-generaled the strategy of man himself. The lamented Dr. Walsh estimated some two or three years since that in the North-west alone this bug had damaged the potato crop to the amount of 1,750,000 dollars! It came from the Rocky Mountains, where it was found 45 years ago, feeding on a wild species of potato peculiar to that region. As the potato began to be cultivated there, this pest soon acquired a taste for it. It started on its eastward march, from potato patch to potato patch, at the rate of sixty miles a year. It now holds the country from Indiana to the Rocky Mountains. A detailed description is unnecessary here. You all have, doubtless, made his acquaintance the last season. It might sharpen the courage somewhat for the coming campaign, to refresh the memory for a moment with an allusion to its almost limitless resources. According to Dr. Shimer, each female lays about 700 eggs. In six days the eggs hatch into larvae, which feed on the foliage of the potato plant about seventeen days; they then descend to the ground, where they change into purple at the surface of the earth. The perfect beetle appears about ten to fourteen days after the pupa is formed; begins to pair in about seven days, and on the fourteenth day begins to deposit her eggs. There are three broods every year. If you can count the stars in the heavens, then perhaps you can calculate the number of the army that, now safely burrowed in "winter quarters" in the ground, is making ready to sweep over our potato fields the coming season. For two or three years previous to the last, they have visited us in small squads. Even in 1869 it was thought that their parasites—the lady-bug and others—could and did take care of them. But in 1870, they came upon us like an "extinguisher on a rush light." Those who were prepared for them, by close attention, saved their earliest-planted fields; but thousands of later-planted were stripped of all their green beauty, and the naked, blasted vines abandoned to the destroyer. Any of the ordinary appliances for destroying them were of no avail. To

undertake to catch them in tin pans and burn them, as had been done, would be of no more avail than to go through one of your extensive peach orchards with a doll's china cup to catch the curculio. How are we to save ourselves from this scourge? The little corner patch of an acre or so can be managed on the tin pan and fire plan. But here are 20, 50, or 100 acres in a plantation; we know of only one way in which it has been done effectually on a large scale; and that is by the use of *Paris Green*. This is a most virulent poison, and must be used with the utmost care. Secure the best. It can be purchased by the canister (14 lbs.) for 45 cents per pound. Puncture the bottom of a quart tin bucket with holes about the size of bird shot; solder midway on the side a handle with a socket three or four inches deep, into which thrust a stick four feet long; having muffled nose and mouth, mix thoroughly one part of Paris green with eight parts of gypsum. With this long-handled bucket, and by keeping on the windward side, the muffer can be removed, and you may march with safety into the battle field. Commence as soon as the plants appear and dust every hill thoroughly. Go over the field twice a week, if anything in the shape of the bug is to be seen. It may be disguised by countless myriads in the yellow eggs laid on the under side of the leaf; and some day, when least expected, the naked, defoliated stalks are reeking with the filthy larvæ. By the use of plaster (instead of flour, a stimulant is employed of great value to the crop. After the bug is vanquished, it would be of advantage to continue the application of the plaster until the crop is ripened. The digging and storing is not a difficult affair. With a four-tined potato-fork, a hand can dig from 20 to 40 bushels per day. Place the potatoes in convenient piles as they are dug, and cover with the tops to keep from the sun. Place in a cool, dry cellar, or bury in pits. They keep best buried. Put in piles, say four feet at the base and three feet high. Cover with six inches of straw and about six of the soil. Corn fodder evenly set up over this will be an excellent protection from rains and frost. They should be covered only lightly, until winter is about to set in for good. The half of a sheaf of straw tightly bound in two or three places should be set in the centre of each heap—like a smoke stack—to act as ventilator and carry off surplus heat or moisture. In very cold weather additional protection may be given by placing more straw at the top. If potatoes are buried in heaps, care must be exercised to thoroughly drain off the water. Potatoes intended for the table in early spring, should be kept in a cool, dark chamber to prevent sprouting.

THE COB AND PONY DAY.

AT TATTERSALL'S, ON MONDAY, MAY 22.

MR. MILWARD'S PONIES.

	Gs.
Don Carlos, 13.3 (entire); winner of the first prize at Sleaford, Birmingham, and Hinckley, in 1870.	
	Lord Calthorpe 210
The Crown, 14.2	Mr. Thomas 100
Eva, 14.1	Major Butler 105
Grafton, 14.1	Lord Stamford 110
Gerald, 14.1	Mr. Lushington 55
Padrona, 14.1	Mr. Elvon 90
Gladys, 14.1	Mr. Nixon 67
Cleveland, 14.0; winner of second prize at Birmingham in 1870	Mr. Praed 56
Carlyon, 14.0	Mr. Paine 56
Elsie, 14.2	Mr. Chaplin 100
Letzia, 14.1	Lord Annesley 55
Clifford, 14.2	Mr. Ward 60
Midnight, 14.1	Mr. Gow 51
Dodona, 14.2	Mr. Bland 40
Winifred, 14.1	Mr. Paine 75
China, 13.3	Mr. — 31

This is the highest average, as well as the highest price for a single pony, of Mr. Milward's nineteen sales.

MR. J. HORNSBY'S (GRANTHAM) COBS.

	Gs.
Sambo, 14.3, winner of five first and one second prize...	145
Beda, 14.3, winner of seven first and four second prizes	105
Pride of the Eye, 14.3, by Pride of the Isle.....	90
A Brown Hack, 14.2, by Kingfisher.....	41

THE BATH AND WEST OF ENGLAND SOCIETY, AND SOUTHERN
COUNTIES ASSOCIATION.—MEETING AT GUILDFORD.

There are few districts which have suffered more from adverse seasons of late than that selected this year for the summer show of the old West of England Society. These meetings, however, have gradually become of such strength and calibre as to depend only in a very minor degree on any particular locality for their successful issue. They gather, the rather, their forces from all quarters, and when we find, as in the present entry, Shorthorns from Cornwall and Yorkshire, sheep from the Midlands, horses from the Eastern Counties, whitefaces from Wales, and white pigs from Lincolnshire, the comprehensive character of the exhibition may be readily understood. Not but that the occasion was pointed by certain breeds or classes, such as the Sussex cattle and Hampshire sheep; where, in fact, any remarkable superiority may be said to centre. Despite the commendations so liberally scattered through the prize list, the more popular kinds of stock barely reached to an average of merit; while in some cases, as with the Hereford beasts and Leicester rams, there was an unmistakable falling away from the front offered at some of the more recent anniversaries of this Association. Your true Hereford, indeed, is a most capricious animal as tested by the show-ring; now making so poor a display of himself as to lead to the impression that he is fast dying away, and then suddenly shining forth again with unexpected brilliancy. As so far ascertained, 'seventy-one would threaten to be something of an off year, for many of the Hereford classes were very moderately filled at Guildford. The best bull of the all-aged entry, Monaughty 3rd, was second, but a long way behind the first, in the two-year-old class at Oxford, where the judges spoke of him as "useful," and he also took some prizes at the local meetings in Monmouthshire. He has anything but improved in the interim, being quite disfigured with excrescences of flesh about his quarters, but, with some style, was no question the best of an indifferent lot. The second prize bull, Theodore, was merely commended at Taunton, but placed higher in the absence of any competition at Southampton, where we spoke of him as a very bad one, an opinion we do not see any reason to alter, as he is noticeable neither for growth nor breeding. A yearling from the Leen would be, of course, out of his class amongst the old bulls, but in his absence another of Mr. Philip Turner's breed was placed first, although now in the herd of Mr. James, of Mappowder, who gave 70 gs. for Leopold at the last Hereford show. We thus wrote in protest at the time, on his taking no place: "Mr. Turner showed a very handsome taking young bull, that was merely commended, but beyond the winner it would not be safe to follow the award, as there were probably half-a-dozen better animals in the class than the second prize;" and the fact of Leopold winning in a very creditable company at Guildford tends to show how he was overlooked at Hereford. The bull calves are very indifferent, the best having a bad back and little quality, and the second promising to grow into the better beast of the two. Only two Hereford cows were paraded, and though both the prizes were duly awarded neither could have gone where it did with anything like competition. A woful falling off indeed. Then the best two-year-old heifer was only commended in the yearling class at Taunton, and there was in reality not much to beat here, the second prize,

Dahlia, being very coarse; whereas the winner, Duchess of Bedford 6th, is a handsome blood-like heifer at most points, a long way the best of her class if not of her breed. It must be remembered the Hereford yearlings of 1870 were a wonderfully good lot, as many of these have since been cleared out of the Duchess' way to further distinction. The yearling class now only ran to four entries, and the first of these, short and podgy, lacks much of the graceful outline and fine character we so frequently associate with the Leen herd. It is significant enough of the merits of the Herefords at Guildford that in six classes only *one* commendation was appended to the actual awards, while in two or three cases the premiums might have reasonably enough been withheld.

Of the Devons, on the contrary, the same set of judges commended the whole class of yearling bulls, and highly commended the whole class of cows; and as these were the two largest entries of the breed, the compliment becomes only the more emphatic. The best bull, moreover, in the all-aged class is already, at something under three years old, a very famous animal—the best calf at the Manchester Royal, and the best yearling again at Oxford, as well as at Taunton. The Duke of Flitton 5th, however, has not gone unscathed through his campaigns, and, in fact, despite his fine breed and quality, is now so terribly one-sided as to be almost deformed, and one of the judges was against passing him. The second-best, Sir George, another well-known but second-rate bull, has got a terribly slack back, and it is difficult to see how he should be preferred to Pennsylvania, a neater animal at most points. Noticeably enough, the judges at Oxford commended the class of Devon bull-calves again commended here as yearlings, but with the order of succession reversed, the Somerset Sir Harry, the Royal second, being now placed first, and a sixth Duke of Flitton, first at Oxford, here receiving nothing more than a special commendation. Mr. Farthing's young bull is very level, straight, and true in his frame, but coarse in his character, and Mr. Jackman's second prize a particularly nice stylish animal; so that it will be seen the Duke was not put out without good showing, as in truth the class was full of merit. In another very taking show of Devon cows there was still nothing to compare for high quality and refined appearance with Mr. Davy's really Lovely Queen, with her sweet head, fine expression, light limbs, and good frame, saving only a tendency to gaudiness about her quarters. Mr. Taylor, again, contrives to keep his North Devons very fine and bloodlike in Sussex, and so he took second prize, with a very sweet cow which was also second at Oxford to the Exeter Musk, here without a place. Mr. Smith's cow has great size, but she wants the style of those placed above her; and certainly at a show of breeding stock there can be no reason to quarrel with the award. Indeed, holding to their line the judges might have fairly placed the Glynley two-year-old before the Hooper Duchess, as they went pretty generally for style; and at Oxford Mr. Taylor's heifer was declared to be the better of the two. Again, there could be no greater contrast in two animals of the same breed than that between Mr. Davy's beautiful or really elegant Gay Lass and Mr. Farthing's coarse cloggy First Fruit, and here the Royal return was more thoroughly and more properly confirmed. It must be born in mind that the West of

England Society makes up mixed benches of judges, and the trio who took the Devons, Sussex, and Herefords had each one his own individual fancy and experience—Mr. Ford for Herefords, Mr. Pope for Devons, and Mr. Woodman for Sussex.

And these red Sussex took a deal of judging, for not only were the entries large, but the Sussex breeders themselves admitted that it was the best show of the sort ever got together. Mr. Beeching's Young Beauty was, in fact, the talk of the day—a great, grand, handsome cow, commendable alike for depth, quality, and constitution. Nothing could be well more perfect than her forehead if she was not quite so good in her quarters; while the second was another very taking cow, with many others in the class worthy of the two winners, as no question the general compliment to the class was very honestly earned. What with the difference between North Devons and Somerset Devons the Sussex certainly show more uniformity than their cousins in the west, and there could be no finer proof of the care with which the breed is now cultivated than the long line of cows and heifers all as like each other as peas from the pod—with size, without coarseness, and at no sacrifice of kindly feminine character. The Sussex bull, like the Alderney, shows, at maturity, but little of the high breeding of his helpmate, being pretty generally a lengthy, useful, but somewhat plain animal, more to be prized in his progeny than in himself. Still the judges commended, and highly commended many of the bulls brought out, and no question it was altogether a very admirable exhibition, the effect of which is to be still further emphasised by the famous steers which are again coming out to make their mark at the Smithfield Club. The doings of Selmes promise to be revived by the Heasmans and the Steeres.

In vain did Bythis and Lord Irwin, the first and second yearling Shorthorns of the Royal and All-Yorkshire-meetings, display themselves before Messrs. Drewry and Bowly. With a couple of mere commendations just to signify they were recognised were they passed over, and certainly neither has improved on his wintering. The white has disappointed us, but he is the better of the two, while Bythis has more unmistakably gone off, being now a very plain beast, although most probably he will again find friends in the ring. He is just one of those bulls which some will always like and others dislike intensely. The best of the class, on the other hand, is comparatively unknown, having never been exhibited but once previously, when he took a second prize at Basingstoke. This is Mr. Foster Soffe's Lord Morpeth, a good stylish bull, rather hard to the hand, but a nice mover, and with a bit of Thorndale to fall back on in his pedigree. A far higher-bred one, however, is Captain Oliver's Lord of the Forest, by Seventh Grand Duke, a somewhat awkward, ungainly beast, very weak behind the shoulder, and with his quality probably as the chief point in his favour, as putting the two cracks out of it, the class was not a strong one. A far better was the younger lot, where Lord Sudeley "got his rights" with a straight, showy, high-quality bull, rather pulled down by his plain head; while Mr. Stratton's second is well furnished and useful, but never more than a second or third-rate bull in good company. A commendation was given to another of Mr. Stratton's entries as well as one to Lady Pigott, while the class was disfigured by two or three common things, whose chief merits looked to be that they were handy home and had never been prepared. The award over the bull-calves looked to be simply inexplicable, the first prize being a poor, light-fleshed, gutty animal, and the next best, from Messrs. Hosken's herd, a very promising, smart young bull, of good constitution, a nice colour, and so forth, as altogether the only calf worth looking at in the class. However, the fatal objection of a

smutty nose was supposed to solve the mystery, although there is something of an absurdity in the way in which one set of judges will pass and another bench cast such a colour. Windsor's Butterly, the best cow, is wearing well, very straight and deep, on a particularly short leg, but coarse and steery about her head. The second, full of Jonas Webb's blood and by Englishman, is also a fairly good cow of nice character; but the class of seven in all was anything but a strong one. The next furnished the great difficulty of the day, with three heifers standing side by side, any one, or every one, of which should have been first. These three graces were Lady Pigot's Dame Swift, a second prize heifer about the country last year; Mr. Stratton's Flower Girl, second at Taunton and the reserve number at Oxford; and Messrs. Hosken's Countess of Oxford, the best Shorthorn at the last Cornwall show. For growth, substance, coat, and really grand points, The Countess looked to fairly over-shadow the white, whose mere neatness by no means warrants her growing into as fine, shapely a cow as either of the others promise to become, and we assuredly expect to see the placing of these three "put about" should they meet again. It was another very near thing with the three yearling heifers, where the high quality of Victoria was preferred to the style of Verona and the development of Innocence; but there was not the same amount of discussion over the award, which looked to be fairly justified. Still, judging a yearling of any kind is always something of a lottery.

Not professing to know much of Channel Island stock, the Shorthorn judges on whom this further duty devolved called Mr. De Salis to their assistance; although in the elder class of bulls the winner must have pleased himself. This is Mr. Gilbey's Banboy, a beautiful blood-like bull, bred from Mr. Danucey's herd, Lord Chesham's from the same stock not having fulfilled his early promise, but got all wrong in his back. The first-prize yearling was a great plain Guernsey, and the best of the lot by a long way Mr. Middleton's smart Jersey calf, just a year younger than the two placed above him, a point which could scarcely have been taken into account. There was an admirable class of cows, amongst which the winner was distinguished by her great bag; while Mr. Gilbey's second is not one of his Danucey tribe, but a very sweet Island-bred heifer which he bought at Oxford, where she was commended. The whole class of cows was here commended, including some entries bred in the New Forest, where, probably from the climate being more congenial with their own, it would seem that the Jerseys can be reared at little or no sacrifice of their fine character. Three commendations were attached to the two prizes in the nine entries of yearlings, where Mr. Middleton's two heifers were again to be distinguished by their style and purity; and as at Oxford high prices had been refused.

The sheep show was only strong in places, and often far below the average of the Society's gatherings. For instance, there were only two exhibitors of Leicesters, where Mr. Turner the younger and his finely-bred rams had altogether the advantage of Mr. Gould, whose ewes won in the absence of any competition. The Cotswolds were not much better represented, there being but one flock of any note in the entry, and the stylish Kilkenny rams swept off all the premiums, their only opponents being the Cirencester College and a Glamorganshire breeder, between whom the prizes for ewes were equitably divided, one for each of the two entries. Again, there were but two exhibitors of Kents, and Mr. Henry Rigden took everything, but we have seen far better specimens of this old-fashioned breed than were to be encountered on the Guildford show ground. Mr. Quartley, who was the solitary exhibitor of Exmoors, took the four prizes with four jpens, but with some nice "breedy" animals well worthy of their places. There were in all four ex-

hibitors of Oxford Downs, amongst whom the premiums were distributed, occasionally in the absence of any antagonism beyond the winning numbers. Mr. Wallis, however, for once had all the worst of it, and could get no higher than second with any of his rams. The Winchendon shearling looked smaller, smarter, and darker in his face than Mr. Treadwell usually has them, but he is a very taking sheep; while Mr. Milton Druce's three-shear was the third prize old sheep at Oxford, and he is still wearing well either to the hand or the eye, showing a deal of good character. Mr. Druce also sent a very neat pen of ewes, which had only a local entry to encounter. Of Somerset and Dorset Horns there was a very creditable exhibition, with some really handsome rams in the entry, and as it looked some close competition amongst the shearlings, although the judges added but one commendation. There was but a single pen of ewes in the catalogue, as the prize list here again duly chronicles the names of all the exhibitors—Messrs. Bond, Legg, Mayo, and Farthing.

Thus far it will be seen the Guildford sheep show was, as we have already intimated, of no remarkable strength, for however good some of the individual entries a deal more energy has often been displayed at a merely county or yet more local meeting. On the other hand, the Downs, Sussex, Hampshire, and Shropshire were all in some force. With the exception of the Duke of Richmond there was not a Southdown breeder of any particular note but who sent some sheep here. Nevertheless the judges pronounced the large class of shearing rams to be short of quality, although the Heasmans, Mr. Rigden, Sir William Throckmorton, Mr. Penfold, Lord Portsmouth, and Mr. Humphrey were in competition. The Messrs. Heasman were inclined to think they had a better sheep amongst their half-a-dozen entries than the one selected as the best of the class. They might very possibly have pointed to a heavier ram, but we go all together with the decision in favour of bloodlike looks and style, where the winner has all the pull, as well as with plenty of size and constitution in his favour. The Hove second is a capital sheep forward, and altogether of fine Southdown type, while it is significant of the esteem in which the judges held the remaining thirty odd entries that they added but one commendation, and that, as perhaps something of a necessity, to the reserve number. The old sheep they considered to be a much superior class, as the return shows; three high commendations being bestowed in a smaller class, while this compliment might have been still further extended had not Mr. Humphrey had the misfortune to recently lose the best of his entry. It was and always will be a near thing between Sir William Throckmorton's good useful first and Mr. Rigden's still smarter second, to our thinking the handsomest sheep in the show. Lord Portsmouth's reserve ram is so fatally bad about his head that he can never be expected to win in good company, and the judges had no doubt whatever as to where their first and second honours would rest. The three selected pens of ewes are all creditable; Sir Wm. Throckmorton's a really sweet sorry lot, Lord Sondes' as neat and high-bred as usual, and Mr. Hedworth Barclay's another very nice pen, the same flock having been also highly and deservedly commended for a ram, something of a distinction in such society. On the other hand, Lord Portsmouth's ewes were very plain, and Mr. Bryant Marshall's anything but show sheep. Some of the best Southdowns were to be found in the Special Classes, the four pens of ewes noticed being all very superior, and Mr. Ramsden's first prize a great good pen. The ewe lambs were as admirable in their degree, although here the Heasmans had clearly the choicest lot, uniting growth with breed; and the same flock was first again for ram lambs in the face of some formidable competition from

Lord Sondes and Mr. Ramsden. Very possibly at the Local Committee's dinner Mr. Upperton was speaking to the merits of the Bushbridge Downs when he said, "Having been for many years a farmer, although now mayor of the town of Guildford, he was able to testify to the improvement that had taken place in the breed of animals during the past few years by the operation of this and similar Societies. Within the last few months in this town he had seen lambs only four months old sold for 50s. each, and tegs fifteen months old at 85s."

We should be quite willing to let the Southdown returns of Guildford and Taunton rest here, but *The Times* reporter, having no doubt been duly instructed thereon, said in that paper on Wednesday, when speaking of the old class, "Here Sir William Throckmorton is first and Mr. William Rigden second. It seems that there is a fatality attaching to some vituperative criticism, for here is Lord Portsmouth's ram, 'highly commended' by the judges, although after obtaining a prize at a former Show this sheep was abused as a bad one by an authority in agricultural journalism." Of course this is intended to refer to the strong objection we took to the way in which the Southdowns were placed at Taunton, where we contended that Mr. Rigden's merely commended shearing should have beaten both the prize sheep, as he did beat them both at the Royal Oxford Meeting! We maintained, further, that Lord Portsmouth's ram had no right to the second prize in the old class, and that Sir William Throckmorton's merely commended sheep should have been first. Unfortunately Lord Portsmouth did not think fit to send his No. 2 to Oxford, where Sir Robert Throckmorton's Taunton commended ram took second prize to Lord Walsingham in a far better class! Lord Portsmouth's No. 2 is now highly commended, that is to say is well beaten by Mr. Rigden's ram, which the judges passed over without a prize at Taunton! If this be the fatality attached to "vituperative criticism," we shall certainly have no reason to complain of such a fate, seeing that, so far as it could be, our opinion has been corroborated. But only imagine a writer whose blunders in reporting agricultural meetings have become proverbial, who often muddles up one animal with another, and who generally backs the wrong beasts, like his "magnificent steer" at Birmingham which finished without any prize whatever in London!—Only fancy such a critic as this being weak enough to take up a case where not merely the argument but the facts are dead against that which he would insinuate rather than advance. It would be a wholesome sign to see a good bit of honest, bold, straightforward criticism in a *Times* report of a great show, instead of the continual trimming and clumsy puffing of this, and that, and the other.

There was a time, and not so long since either, when it was impossible for any one to show Hampshires successfully against Mr. Ravlence, and now Mr. Ravlence is beaten in both the classes where there is anything like competition; if no one could compare against his four capital entries of ram lambs. This alternation would, of itself, imply some improvement, as our reports of late have spoken to the increasing merit of such flocks as Mr. Morrison's and the Russells. At Fonthill, more especially, they have contrived to turn out a more comely, kindly sheep, which in the face of the old Conservative reading has not been unappreciated. The best old ram here was the best shearing at Taunton and Oxford, while Messrs. Arnold's is another good-looking sheep—a compliment that cannot always be paid to a Hampshire Down. The Russells' entries take more after the old type, but they have great quality, and they had to meet a number of good sheep amongst the shearlings, where we should fancy this same bit of quality was

the turning point in their favour. And the Kent-Hampshire are selling readily, a strong order having been recently shipped for Germany. Every now and then, however, as you walk through the show of these sheep you come across something still terribly coarse and ungainly; but Mr. Rawlence's pens of ewes are as really good, as they generally are, and here should be the corrective. The judges commended the three classes of Shropshires, and as they pretty generally put out the best known breeders, the advance should be something remarkable. The awards, however, were subject to much discussion, and in the old class of rams it is not probable that the decisions will be taken as a precedent. There are, of course, many readings of what a Shropshire should be, and the judges here looked to discard that especial neatness and smartness which have of late been so much in fashion.

As might have been expected, there were not many large white pigs at Guildford, there being but one entry of old boars, and the Duckerings maintained their lead with some pigs which opened the season very successfully a few weeks since at Glasgow. They promise to be quite equal to their previous repute, while in the young boar class the Lincoln was backed by a very good true pig of Messrs. Wheelers' breeding. There was more competition amongst the large sows, where Messrs. Howard's high quality seemed to be attained at an alarming sacrifice of coat; for beyond her ears the Duchess was absolutely bare. Of the two prize pens of breeding sows Messrs. Wheelers' were the better framed, but their coarseness kept them at the back of the Lincoln. The best small boar, a white, was also the best at Glasgow, but, good as he is otherwise, he stands badly behind; nevertheless black Essex, black Suffolks, and black Dorsets had to put up with secondary honours or more remote distinction. Lord Portsmouth's variety, which we believe was originally the Essex, now crossed with sundry other small blacks, was first and second in the younger class of boars, his lordship's own entry being set off by a bad head and cocked-up snout. We fancied the Eggesford sow, a capital lengthy pig, a deal more, although she did not win, being beaten by what promises to be a very famous sow. This is Topsy, first at Glasgow; and out of a sister to Little Queen, as she looks to have an equally brilliant career before her. Mr. Sexton's second prize sow is somewhat coarse, and the Suffolk pigs it will be seen had by no means the success of the Suffolk horses. The best couple of breeding sows were entered by Mr. Clark Andrews, who had never previously exhibited, but who here, with his own sort, a very neat white, beat the Duckerings' very good entry of really small pigs, Mr. Sexton, Lord Portsmouth, and others, in a pretty generally good class. Of Berkshires there was a famous display, as here was one of the strong sections of the whole show. Fine quality without delicacy are the points now so carefully cultivated by Mr. Stewart, and the Cirencester College, and they had their reward in a strong proportion of the prizes, Mr. Heber Humfrey and Lord Sudeley being the only other exhibitors who could really compete with them, and his lordship's second prize sow was bred by Mr. Stewart. Mr. Humfrey's pigs retain perhaps as much true Berkshire type as any we see out, although at the College there is no lack of size or constitution; while the Gloucester Berkshires, with all their fine character, were clearly more after "the manner" of at least one of the judges. But the Surrey Berkshire was, after all, the sight of the show; with a long, lean, hungry head, a high, narrow back, and a flat side, it was certainly to his credit that he had not been fed up for exhibition, as feeding up such an animal on any terms would threaten to be alike a tedious and costly process.

Owing to some confusion of conditions, at least half the entries of horses were sent in too late to be received,

and the show was as a consequence very limited; but in places it was by no means bad, as many of the prize horses would promise to hold their own against far greater competition. In fact the names of such exhibitors as Major Barlow, Mr. Battams, Mr. Badham, and Mr. Boby would in some degree answer for the character of the entries, as they seldom send a bad one far away from home; while it was said that Major Barlow was for some time in doubt as to which of his two four-year-olds he should show at Islington or Guildford. And at Islington the Seueschal horse was not only the best of his class, but the best hunter in the Hall. Still, with such collateral proof to go by an agricultural contemporary pronounces "the horses at Guildford the worst collection ever seen together at any show with any pretension to occupying an area beyond a parish or township," while *The Field*, which should really know better, actually declares "the collection to be worse than ever." The extraordinary comment on such criticism is conveyed in the fact that some of the horses had already been winners at our great shows, as some of the others have every promise of further distinction. We will take six winners out of the eight classes of horses—we say nothing of yearlings or ponies—and every one of these, if they go on, will be again placed on the return list.

In the all-aged class of hunters, Sedan, the winner, is up to weight, but common looking, and dropping his hind-legs after him in his faster paces, as the class was not a very meritorious one. The grey mare by Master Bagot, put second, is neat enough; while by far the best goer was another grey mare, but a very weedy, narrow animal, shown by Mr. Foster Soffe, the owner of the best Shorthorn bull. A small class of four four-year-olds nevertheless included two really nice horses, curiously enough bred upon the same farm, although the home of one is now in Devonshire and the other in Essex. Mr. Battams, a great horseman, and a known good judge in the West, had, naturally enough so near home the first choice, and he took the Knout colt; while Major Barlow bought the other, a son of Hunting Horn. They came together at Guildford for the first time; but even Mr. Battams admitted there was now no question as to which was the better of the two. The Hasketon horse is, indeed, the very stamp of a hunter, up to weight with breeding, famously furnished for his age, and with very good manners, although he looks to want a little rousing when extended. The *Czar* is altogether of a coarser cut, and with nothing of that "first impression" which the brown gives you, and which tells so much in judging anything. With the three-year-olds Major Barlow and Mr. Battams were again first and second, the winner being a particularly handsome colt, by Knight of Kars, good to look over in his box, and stylish enough for the Park when brought out. If anything he is a little light of bone below the knee, but has good clean legs; and Mr. Battam's entry, with but middling shoulders and short of fashion, was as unmistakably here again but second best. The yearlings were a very moderate lot, of which a son of Dalesman, a smart goer, was pronounced the best, the other three being underbred things, with little promise of anyone of them ever making a hunter. In the all-aged class of hacks, Mr. Badham's old white, Major, the hero of a hundred fights, was cast at last, as he is a mere wreck, with as much make-believe in doing nothing as a *Prima Donna* who has lost her voice. If we remember aright it was at one of these West Country meetings that Chester Emperor made his last appearance under such the same circumstances. Mr. Hampton's roan, with beautifully laid shoulders, and the knack of using them, was quickly put into price, and a very varmint skewball, who went like oil, took second prize.

In fact, what with the "milk white," the roan, and "the coat of many colours," it looked at the first glance as if the Circus people were going in for honours, a notion somewhat strengthened by the flash feeble style in which the old white paced the circle. The three-year-old Trusty is as clever a cob as ever was bred, but then he is out of that rare old mare Silverlocks, and so getting back to blood on one side of his head is really something more than what is generally known as a cob. He went a little tender, but with luck Trusty will astonish some of the critics that would have sent him back to his "parish or township." There were two or three nice ponies, the best shaped of which was an old one, foundered in his feet, and disqualified accordingly.

Royal Prince, the first-prize cart stallion, was second in the all-aged class of Suffolks at the Royal Oxford meeting, and second again this spring to Cup-bearer at Woodbridge, where he beat amongst others in a capital entry Oxford Emperor, so distinguished from having been the best two-year-old at Oxford. He is a very good specimen of the Suffolk, of a darker and more wholesome colour than many of the sort, with a grand forehead, but so fearfully overloaded with flesh as to look anything but his best. The second prize here, Young Champion, is also another second-prize horse, having been second to Honest Tom at Oxford, and second also at his own county show in Northampton in the spring, while he was nowhere at Sleaford where Honest Tom again won. He is a very gaudy looking animal with four white legs, and not good in his forehead, though a smart mover; and a country paper, published on the Tuesday morning, thus anticipated the award: "The horses were a better show this year than they were either at Southampton or at Falmouth, and we may say, without boasting unduly of Suffolk, that this improvement was caused mainly by the influx of Suffolk exhibitors. The horses for agricultural purposes numbered only 13 entries. Of these two were not sent, and the only two of the remaining eleven that were really fit for agricultural work—we mean by that working on the land—were Mr. C. Boby's Royal Prince, who looked every inch a winner, and Mr. G. D. Badham's Emperor. The others were nearly all thin-barrelled leggy animals, and no more fit for agricultural work than they were for carriage work. The judging of this class had not been commenced when our reporter left, so we are unable to give the result, but the first prizes for aged and two-year-old stallions must, we imagine, have been given to the Royal Prince and Emperor respectively. Royal Prince looks wonderfully fresh and well. A hard season's work does not appear to have toned him."

The appendix to the West of England show is of course still altogether unrivalled. Flowers, poultry, music, and pictures gave a grateful variety to the more substantial attractions of the meeting, as

*Ingenuas didicisse fideliter artes
Emollit mores, nec sinit esse feros.*

A free translation of which we take to be that when people's senses are delighted with roses and lilies and Don Pasquale they straightway grow "quite genteel," and forget all about Berkshire pigs and Sussex cows. There was a really admirable display of prize wheats, as well as of the famous Farnham hops, which are only too good to make into beer!

PRIZE LIST.

CATTLE.

DEVONS.

JUDGES (and for Herefords and Sussex):

J. Ford, Rushton, Blandford.

T. Pope, Hornisham, Warminster.

R. Woodman, Southease, Lewes.

Bull, exceeding two and not exceeding four years old on the

1st of June, 1871.—First prize, £20, J. Davy, Flitton Barton, North Molton (Duke of Flitton 5th); second, £10, W. Farthing, Stowey Court, Bridgewater (Sir George).

Bull, not exceeding two years on 1st June, 1871.—First prize, £25, W. Farthing (Master Harry); second, £10, J. Jackman, Hexworth, Lanneston, Cornwall (Earl of Hexworth); highly commended, J. Davy (Duke Flitton 6th). The class commended.

Bull-calf, above six and not exceeding twelve months old on 1st of June, 1871.—First prize, £10, W. Taylor, Glynley, Westham, Eastbourne, Sussex; second, £5, J. Jackman.

Cow, in-calf or in-milk.—First prize, £15, J. Davey (Lovely Queen); second, £10, W. Taylor (Frederica). The class highly commended.

Heifer, in-calf or in-milk, not exceeding three years old on 1st June, 1871.—First prize, £15, W. Smith, Hoopern, Exeter (Duchess); second, £10, W. Taylor.

Heifer, not exceeding two years old on 1st June, 1871.—First prize, £10, J. Davy (Gay Lass); second, £5, W. Farthing (First Fruit).

HEREFORDS.

Bull, exceeding two and not exceeding four years old on the 1st June, 1871.—First prize, £20, W. Evans, Llandowlas, Uske, Monmouthshire (Monaughy 3rd); second, £10, N. Benjafield, Short's Green Farm, Motcombe, Shaftesbury (Theodore).

Bull, not exceeding two years old on the 1st June, 1871.—First prize, £25, J. W. James, Mappowder Court, Dorset (Leopold); second, £10, W. Evans, (Von Moltke).

Bull calf, above six and not exceeding twelve months old on 1st June, 1871.—First prize, £10, J. Baldwin, Luddington, Stratford-on-Avon (Duc d'Anmale); second, £5, H. N. Edwards, Broadward, Leominster (Ajax).

Cow in calf, or in milk.—First prize, £15, L. Loyd, Monk's Orchard, Addington, Surrey (Picture); second, £10, E. Benjafield, Gummershea, Stalbridge, Blandford (Matchless).

Heifer, in calf or in milk.—First prize, £15, T. Fenn, Stonebrook House, Downton, Ludlow (Duchess of Bedford 6th); second, £10, J. Harding, Bicton, Shrewsbury (Dahlia); highly commended, J. D. Allen, Tisbury, Salisbury (Lovely).

Heifer, not exceeding two years old on 1st June, 1871.—First prize, £10, P. Turner, The Leen, Pembridge, Leominster (Rarity); second, £5, W. Evans (Princess Louise).

SUSSEX.

Bull, exceeding two and not exceeding four years old on 1st June, 1871.—First prize, £10, J. Turvill, Hartley Park Farm, Alton (Young Martin); second, £5, J. and A. Heasman, Angmering, Arundel (Southampton); highly commended, J. Turvill (Young Sutton).

Bull, not exceeding two years old on 1st of June, 1871.—First prize, £25, A. Agate, West-street, Horsham, Sussex (Grand Duke); second, £10, R. Mills, Theale Farm, Sinfold, Horsham (Bismarck); highly commended, Tilden Smith.

Bull-calf, above six and not exceeding twelve months old on 1st of June, 1871.—First prize, £10, J. S. Oxley, Fenplace, Worth, Crawley (Sampson); second, £5, J. and A. Heasman (Moltke); highly commended, J. and A. Heasman (Bismarck); commended, E. and A. Stanford (Challenger).

Cow, in-calf or in-milk.—First prize, £15, J. Beeching, Bowder's Farm, Balcombe, Hayward's Heath, Sussex (Young Beauty); second, £10, A. Agate (Primrose); highly commended, J. and A. Heasman (Southampton). The class commended.

Heifer, in-calf or in-milk.—First prize, £15, Lee Steere, Jayes, Ockley, Dorking (Young Tiny); second, £10, Tilden Smith, Knelle, Beckley, Hawkhurst, Sussex; commended, Lee Steere (Young Cowslip).

Heifer, not exceeding two years old on 1st of June, 1871.—First prize, £10, A. Agate (Actress 2nd); second, £5, A. Agate (Adelaide 2nd); highly commended, E. and A. Stanford, Eatons, Steyning (Marigold 2nd). The class commended.

SHORTHORNS.

JUDGES (and for Channel Islands):

E. Bowly, Siddington, Cirencester.

G. Drewry, Holker's Grange, Lancashire.

Bull, exceeding two and not exceeding four years old on 1st of June, 1871.—First prize, £20, R. Foster Soffe, Hams, Eastleigh, Southampton (Lord Morpeth); second, £10,

R. E. Oliver, Sholebroke Lodge, Towcester (Lord of the Forest); highly commended, Rev. R. B. Kennard, Marnhull, Blandford (Oxford Duke); commended, Lady Pigot (Bythis), and W. Linton, Sheriff Hutton (Lord Irwin).

Bull, not exceeding two years old on 1st June, 1871.—First prize, £25, Lord Sudeley, Toddington, Winchcomb, Gloucestershire; second, £10, Mr. R. Stratton, Burderop, Swindon (Master Glauville); highly commended, Lady Pigot (Gunpowder); commended, R. Stratton (Saunterer).

Bull calf, above six and not exceeding twelve months old on 1st June, 1871.—First prize, £10, H. D. Barclay, Eastwick Park, Leatherhead, Surrey (Zero); second, £5, W. Hosken and Son, Loggan's Mill, Hayle, Cornwall (Knight of Penwith).

Cow, in calf or in milk.—First prize, £15, J. How, Broughton, Huntingdon (Windsor's Butterly); second, £10, C. A. Barnes, Charleywood Farm, Rickmansworth (English Emily); highly commended, W. Linton (Carnation).

Heifer, in calf or in milk.—First prize, £15, Lady Pigot, Branches Park, Newmarket (Dame Swift); second, £10, W. Hosken and Son (Countess of Oxford); highly commended, Rev. R. B. Kennard (Oxford Duchess), J. How (Vesper Queen), and R. Stratton (Flower Girl).

Heifer, not exceeding two years old on 1st June, 1871.—First prize, £10, Lady Pigot (Victoria); second, £5, J. How (Verona); highly commended, R. Stratton (Innocence).

CHANNEL ISLANDS.

Bull, not exceeding four years old on 1st June, 1871.—First prize, £10, W. Gilbey, Hargrave Park, Stanstead, Essex (Banboy); second, £5, Lord Chesham, Latimer, Chesham, Bucks (Dandy); highly commended, G. Deller, Greywell, Odiham (Delta); commended, J. C. F. Ramsden (Omnibus), and C. Alexander, Sutton Place, Guildford.

Bull, not exceeding two years old on 1st June, 1871.—First prize, £10, E. A. Sanders, Stoke House, Exeter, Devon (Guernsey); second, £5, G. D. Wingfield Digby, Sherborne Castle, Sherborne (The Earl); highly commended, H. Middleton (Dandy); commended, G. A. Fuller (Billy Button).

Cow, in calf or in milk.—First prize, £10, G. A. Fuller, The Rookery, Dorking, Surrey (Milkmaid); second, £5, W. Gilbey (Duchess); highly commended, G. Simpson (Queen). The class commended.

Heifer, not exceeding two years old.—First prize, £10, G. Simpson, Wray Park, Reigate, Surrey; second, £5, H. Middleton, Cotteslowe, Oxford; highly commended, Lord Chesham, H. Middleton (Princess Louise); commended, A. Napper, Cranley (Lily).

SHEEP.

JUDGES:—Longwools, Leicesters, Cotswolds, Kents, Oxon Downs, and Shropshires.

B. Painter, Burley-on-Hill, Oakham.
T. Potter, Thorverton, Exeter.

LEICESTERS.

Yearling ram.—First prize, £10, G. Turner, jun., Alexton Hall, Uppingham, Leicestershire; second, £5, J. Gould, Poltimore, Exeter, Devon.

Ram of any other age.—First prize, £10, G. Turner, jun.; second, £5, G. Turner, jun.

Five yearling ewes.—£10, J. Gould.

COTSWOLDS.

Yearling ram.—First prize, £10, the executors of the late T. Gillett, Kilkenny, Faringdon, Oxfordshire; second, £5, the late T. Gillett.

Ram of any other age.—First prize, £10, the executors of the late T. Gillett; second, £5, the late T. Gillett.

Five yearling ewes.—First prize, £10, C. Spencer, Gileston, Cowbridge, Glamorganshire; second, £3, R. Swanwick, Royal Agricultural College, Cirencester.

KENTS.

Yearling ram.—First prize, £10, H. Rigden, Lyminge, Hythe, Kent; second, £5, H. Rigden.

Ram of any other age.—First prize, £10, H. Rigden; second, £5, H. Rigden.

Five yearling ewes.—First prize, £10, H. Rigden; second, £5, H. Rigden.

SHROPSHIRE.

Yearling ram.—First prize, £10, H. Wood, Pucknall Farm, Romsey, Hants; second, £5, W. Baker, Moor Barns, Atherstone, Warwickshire. The class commended.

Ram of any other age.—First prize, £10, T. Fenn, Stonebrook House, Ludlow; second, £5, H. Wood. The class commended.

Pen of five yearling ewes.—First prize, £10, W. Baker; second, £5, Lord Chesham, Latimer, Chesham, Bucks. The class commended.

OXFORDSHIRE DOWNS.

Yearling ram.—First prize, £10, J. Treadwell, Upper Winchendon, Aylesbury, Bucks; second, £5, G. Wallis, Old Shifford, Bampton, Faringdon. The class commended.

Ram of any other age.—First prize, £10, A. F. Milton Druce, Burghfield, Reading; second, £5, G. Wallis.

Pen of five yearling ewes.—First prize, £10, A. F. Milton Druce; second, £5, G. Bruford, Cranleigh, Guildford.

SOUTH DOWNS.

JUDGES:—Southdowns, Hampshire Downs, Somerset and Dorset Horns, Exmoors, and Special Prizes.

W. Canning, Elston Hill, Devizes.

T. Cooper, Bishopston, Lewes.

R. Woods, Osberton Hall, Worksop.

Yearling ram.—First prize, £10, J. and A. Heasman, Angmering, Arundel, Sussex; second, £5, W. Rigden, Hove, Brighton, Sussex; highly commended, Sir W. Throckmorton.

Ram of any other age.—First prize, £10, Sir W. Throckmorton, Bart., Buckland, Faringdon, Berks; second, £5, W. Rigden; highly commended, Lord Portsmouth, H. D. Barclay, and H. Humphrey.

Five yearling ewes.—First prize, £10, Sir W. Throckmorton, Bart.; second, £5, Lord Sondes, Elmham Hall, Thetford, Norfolk; highly commended, H. D. Barclay.

HAMPSHIRE DOWNS.

Yearling ram.—First prize, £10, R. and J. Russell, Farningham and Horton, Dartford, Kent; second, £5, J. Rawlence, Bulbridge, Wilton, Salisbury; highly commended, A. Morrison.

Ram of any other age.—First prize, £10, A. Morrison, Fonthill House, Tisbury, Wilts; second, £5, J. and M. Arnold, Westmeon, Petersfield, Hants; highly commended, J. Rawlence.

Pen of five yearling ewes.—First prize, £10, J. Rawlence; second, £5, J. Rawlence; highly commended, L. Loyd.

SOMERSET AND DORSET HORNS.

Yearling ram.—First prize, £10, A. Bond, Huntstile, Bridgwater; second, £5, E. Gapper Legg, Coombe Down, Beaminster; highly commended, H. Farthing.

Ram of any age.—First prize, £10, H. Mayo, Coker's Frome, Dorchester; second, £5, H. Farthing, Nether Stowey, Bridgwater; highly commended, A. Bond.

Pen of five yearling ewes.—First prize, £10, A. Bond, Huntstile, Bridgwater.

EXMOOR AND OTHER MOUNTAIN.

Ram of any age.—First prize, £10, J. Quartly, West Molland House, South Molton; second, £5, J. Quartly.

Pen of five ewes of any age.—First prize, £5, J. Quartly; second, £3, J. Quartly.

SPECIAL PRIZES.

Pen of ten Southdown ewes of any age.—First prize £7, J. C. F. Ramsden, Busbridge Hall, Godalming, Surrey; second, £3, H. H. Penfold, Selsey, Chichester; highly commended, J. and A. Heasman and Lord Sondes.

Pen of ten Southdown ewe lambs.—First prize, £7, J. and A. Heasman; second, £3, J. C. F. Ramsden; highly commended, Lord Portsmouth.

Pen of five Southdown ram lambs.—First prize, £7, J. and A. Heasman; second, £3, Lord Sondes; highly commended, J. C. F. Ramsden; commended, Lord Portsmouth.

Hampshire Down ram lambs.—First prize, £10, J. Rawlence; second, £6, J. Rawlence; highly commended (twice) J. Rawlence.

HORSES.

JUDGES.—H. Corbet, The Farmers' Club, London.

V. B. Watts, Melcombe, Horsey, Dorchester.

FOR AGRICULTURAL PURPOSES.

Stallion foaled before 1862.—First prize, £25, C. Boly, Alton Hall, Stutton, Ipswich, (Suffolk, Royal Prince); second, £15, J. Manning, Oringbury, Wellingborough (Young Champion).

Stallion foaled in 1869.—First prize, £20, G. D. Badham, The Lawn, Bulmer, Sudbury (Suffolk, Emperor); second, £10, Mrs. Orme, South Farm, Broadwater, Worthing, Sussex (Tiger).

Mare and foal.—First prize, £15, W. Stanford, Charlton Court Farm, Steyning (Venetre); second, £5, E. Hilder, Woking (Suffolk, Darby).

HUNTERS.

Mare or gelding, foaled before the 1st of Jan., 1867.—First prize, £25, G. B. Battams, Kilworthy, Tavistock (Sedan); second, £10, H. Humphrey, Aslington Hurst, Sussex (Miss Bagot).

Mare or gelding, foaled in 1867.—First prize, £25, Major F. Barlow, Hasketon, Woodbridge, Suffolk; second, £10, G. B. Battams (Czar).

Filly or gelding, foaled in 1868.—First prize, £10, Major F. Barlow (The Knight); second, £5, G. B. Battams (Bismarck); commended, J. Michelmore, Berry Pomeroy, Totness (Handcuff).

Colt or filly, foaled in 1870.—First prize, £10, Major F. Barlow; second, E. and A. Stanford (L'Eclair).

HACKS.

Mare or gelding, foaled before the 1st of January, 1867, not exceeding 15 hands high, calculated to carry not less than 12 stone.—First prize, £15, G. Hampton, Findon, Worthing (Quicksilver); second, £5, A. Ridgway, Shepley House, Blacktown, Totnes (Master Tom).

Mare or gelding, foaled after the 1st January, 1867, not exceeding 15 hands high.—First prize, £15, Major F. Barlow (Trusty); second, £5, R. Neville-Grenville, M.P., Butleigh Court, Glastonbury (Lothair).

PONIES.

Mare or gelding, not exceeding 14 hands high.—First prize, £10, T. Watson, Clarksland, Billingshurst, Sussex (Charlie); second, £5, R. Neville-Grenville, M.P. (Cobnut).

Mare or gelding, not exceeding 13 hands high.—First prize, £10, Miss Frances Blackmore, Alresford, Hants (Trot); second, £5, E. Hilder, Woking (Tom Thumb).

PIGS.

JUDGES.—J. Moon, Plymouth.

J. Smith, Henley-in-Arden.

LARGE BREED.

Boar above one year, and not exceeding two years old on the 1st June, 1871.—First prize, £5, R. E. Duckering and Sons, Northorpe, Kirton Lindsey, Lincolnshire (Cultivator 7th).

Boar not exceeding one year old on 1st June, 1871.—First prize, £5, R. E. Duckering and Sons (Young Prince); second, £3, J. Wheeler and Sons, Long Compton, Shipston-on-Stour (General).

Breeding sow in farrow, or with her litter.—First prize, £5, R. E. Duckering and Sons; second, £3, J. and F. Howard, Britannia Farms, Bedford (Duchess); highly commended, W. Hampton, Applesham, Shoreham (Black Sussex); and J. Wheeler and Sons (Ace of Hearts).

Pen of two breeding sows, not exceeding two years on the 1st June, 1871.—First prize, £5, R. E. Duckering and Sons (Rose and Lily); second, £3, J. Wheeler and Sons (Violet and Daisy).

SMALL BREED.

Boar above one year old, and not exceeding two years old on the 1st June, 1871.—First prize, £5, R. E. Duckering and Sons; second, £3, W. Mortimer Ware, Newham House, near Helstone, Cornwall (Essex, Diamond); highly commended, G. M. Sexton, Wherstead Hall, Ipswich (Black Suffolk); and R. E. Duckering and Sons; commended, J. Wheeler and Sons (Peter).

Boar, not exceeding one year old on the 1st June, 1871.—First prize, £5, W. M. Ware (Essex, Ebony); second, £3, The Earl of Portsmouth, Eggesford House, Wembworthy, North Devon (black); highly commended, G. M. Sexton (black Suffolk); and R. E. Duckering and Sons (white). The class commended.

Breeding sow in farrow, or with her litter.—First prize, £5, R. E. Duckering and Sons (white, Topsey); second, £3, G. M. Sexton (black Suffolk); highly commended, The Earl of Portsmouth (black); commended, J. Wheeler and Sons (white, Lucy 4th).

Pen of two breeding sows, not exceeding nine months old on the 1st June, 1871.—First prize, £5, J. C. Andrews, Tail Mill, Crewkerne (white); second, £3, R. E. Duckering and Sons (white, Rose and Kate); highly commended, J. Wheeler and Sons (white, Rose 6th and Rose 7th), The Earl of Portsmouth (black), and G. M. Sexton (black).

BLKSHIRES.

(Not allowed to compete in any other class.)

Boar, above one year, and not exceeding two years old on the 1st June, 1871.—First prize, £5, A. Stuart, Saint Bridge, Gloucester (King of the Valley); second, £3, A. Stuart (Marquis of Brawn).

Boar, not exceeding one year old on the 1st June, 1871.—First prize, £5, H. Humfrey, Kingstone Farm, Shrivenhall (No. 337 M); second, £3, R. Swanwick, Royal Agricultural College Farm, Cirencester (Sambo 3rd); highly commended, A. Stewart (Young Prince).

Breeding sow in farrow, or with her litter.—First prize, £5, R. Swanwick (Sally 5th); second, £3, Lord Sudelye, Toddington (British Queen 3rd); highly commended, A. Stewart (Bobtail 3rd and Young Snowdrop), N. Benjafield (Duchess).

Pen of two breeding sows, not exceeding nine months old on the 1st June, 1871.—First prize, £5, R. Swanwick (Sally 5th and Sister); second, £3, A. Stewart; highly commended, H. Humfrey (Nos. 346 A and B).

SPECIAL PRIZES.

(Offered by the Guildford Local Committee.)

WHEAT.

JUDGE.—J. Catt, Ship-street, Brighton.

GROWN IN 1870.

Chidham, 5 sacks.—First prize, £5, A. Riversdale Grenfell, Tile House Farm, Shalford; second, £3, T. and G. Drewitt, Piccard's Farm, Guildford; third, £2, T. Langford, Weston Farm, Albury, Guildford; highly commended, W. Dickinson, New Park, Lymington, Hants. The class commended.

Talavera, 5 sacks.—First prize, £5, J. Franks, Bramley, Guildford; second, £3, W. Messenger, Woodlands, Womersh, Guildford; third, £2, A. R. Grenfell, Shalford; highly commended, E. Hilder, Woking. The class commended.

White (not Chidham or Talavera), 5 sacks.—First prize, £5, J. H. Clark, Altwood, Maidenhead, Berks (Trump); second, £3, J. Ellis, Artington, Guildford (Trump); third, £2, G. Burford, Cramleigh, Guildford (Rough Chaff).

Red Nursery, 5 sacks.—First prize, £5, I. Ellis, Great Enton, Godalming, Surrey; second, £3, J. Franks, Bramley, Guildford, Surrey; third, £2, T. Langford, Weston Farm, Albury, Guildford, Surrey. The class highly commended.

HOPS.

JUDGE.—A. White, Nettleshed, Yalding.

GROWN IN 1870.

Golding, one pocket.—First prize, £7, J. Messenger, Bonhams, Neatham, Alton, Hants; second, £3, C. Attfield, West-street, Farnham, Surrey. The class commended.

White bine, one pocket.—First prize, £7, W. Messenger, Woodlands, Womersh; second, £3, J. Turvill, Hartley Park Farm, Alton, Hants.

Hops, not Golding or white bine, one pocket.—First prize, £7, J. Allden, Frensam, Farnham, Surrey; second, £3, R. J. Chaudler, Croadall, Farnham, Surrey.

INSPECTOR OF SHEARING.—E. Olding, Court House, Woodford, Salisbury.

INSPECTOR OF STOCK.—Professor Browne, New Cavendish-street, London.

SHOEING SMITH.—T. D. Broad, Broad-street, Bath.

THE FIELD TRIALS.

On the Monday the experiments with implements were carried on in the ploughing-field. Mellard and Co., of Rugely, had three ploughs at work—their original American patent single-furrow plough, adapted for ploughing from 10 to 18 inches deep, a double-furrow plough, and a revolving mould-board plough. Davey, of Devonport, had

new double furrow-ploughs; and also his patent Excelsior turnwrest plough, with self-acting and self-locking wheels, and a new arrangement for wheels. Perkins, of Hitchin, showed one of Pirie's double-furrow ploughs, fitted with lifting apparatus, by means of which both sides of the plough are lifted out of the ground, also with patent steering for turning the plough at the headlands with the least possible effort on the part of horses and man. Howards, of Bedford, had some of their patent new double-furrow ploughs at work, and the value of these is becoming more generally appreciated as they dispense with a man and a horse. Hornsby and Sons also had some of their new patent double-furrow ploughs at work, where they have introduced the novelty of a central pedestal, on which the plough swings round when turning. Ransomes also showed some new light double-furrow ploughs in action. One of Fowler's four-furrow steam ploughs was also at work, represented by two of Aveling and Porter's 12-horse traction-engines, driving an eleven-tine turning cultivator, a four-furrow balance plough, and a 15 feet wide turning harrow. Howard's had a 10-horse power stationary engine for driving a cultivator, plough, and harrow. These all did excellent work in the clover stubble. An experiment was made in attaching one of Mellard's double-furrow ploughs to the wire of Aveling and Porter's steam-engines, with no very signal result.

The reaping machines were tried on a luxuriant crop of rye, averaging nearly seven feet in height, indeed many stalks were a few inches above this. All the principal makers went in for work. Samuelson and Co., of Bury, with their two-horse self-raking reapers; Hornsby and Sons, Burgess and Key, Picklesy, Sims, and Co., Howard's International reaper, Bamlett's two-horse self-raking reaper, and Brigham and Co.'s new reaper. The Beverley Iron Company also had a two-horse reaper with double self-acting or reversible swathe delivery on the field. This delivers at either side, thus enabling it to work both up and down the same side of or all round the crop, as circumstances may require, the width of cut being 5 feet 2 inches. The work was so uniform and excellent, of all these machines, as they operated on a fine standing crop under most favourable circumstances, that it is difficult to select one for precedence over another. In Bamlett's self-raking reaper, the rakes are driven at two rates of speed, delivering a sheaf at different distances. In Picklesy, Sims, and Co.'s new reaper the wind-mill arms are raised up during a part of the rotation so that the driver's seat can be placed on the side of the machine instead of on the pole. The new Wood self-delivery reaper calls for notice, or rather the series of reapers, comprising one-horse manual, two-horse manual, and the self-delivery. These machines are constructed upon an entirely new principle. The driving wheel is without either axle or spokes, the connecting rod works through the wheel, and the parts are most simple and seemingly calculated for wear. The cutter-bar is on a line with the axis of the wheel, and follows the undulations of the ground with it. There are but two shafts and three wheels. The balance is perfect, and side and direct draught are reduced to the minimum. The self-delivery has the same driving power as the manual, but with increased traction, and the rakes are quite as novel as the motive-power. They are actuated by a screw attached to the main shaft, and are so balanced as to be entirely under the control of the driver, who has a comfortable seat at the side of the machine, out of the way of the horses, but just where his weight is most needed. Whilst sweeping the platform in a similar manner as the machines of Samuelson and Hornsby, the rakes on the "Wood Champion" differ in nearly every respect from all others. The lower end of

the rake-arm works both under and over the cam, which is of itself quite new in form. One rake counterbalances the other, and at the same time holds it in place. The adjustment is very simple, and the rakes can be arranged to suit the different conditions of the crop. When desirable, in light crops, the rakes, by a movement of the driver's foot, can be thrown out and made to act as brakes or dummies, or the corn carried at the corners in turning. There is no jar when in motion, and the work is very uniform. The gathering of the rakes and beaters is such that the crop is lifted towards the cutter-bar, and the sheaf can be formed at pleasure. These machines are quite novel, and the work done by them in the heavy rye was very good. As to their real merits in the field we shall be able to speak with more confidence when they have been more severely tested: at least they combine the good qualities of simplicity, strength, and lightness.

The haymaking trials were carried on the Tuesday in some water meadows near the town or main entrance to the showyard. The grass was light, but the trenches tried the capabilities of guidance of some of the mowers. W. N. Nicholson, of Newark, sent into the field a new patent horse rake and hay collector, with improved spring lever, and seat for driver. It has 48-inch wrought iron wheels, with steel taper teeth, and such simple leverage that it can be lifted by a boy, who can either ride or walk. He also showed some improvements made in his double-action haymaker, which has been three times rewarded by the Royal Society. Howards tested one of their double-action haymaking machines. W. Brenton, of Cornwall, showed one of his Nonpareil mowers and combined machines. Although alleged to be well adapted for uneven ground, having india-rubber buffers or collars fitted between the pole and the frame, so as to prevent any jar on the horses' necks, yet it appeared to labour much in its work, and required a second man to follow and aid with the rake. One of Picklesy, Sims, and Co.'s Standard 2-horse mowers did excellent work, quite equal to the scythe. One of Wood's two-horse mowers also did well, the light crop being well suited to its capabilities. Many new improvements have been added to this well-known mower. The slipper guard and inclined cut just introduced last season have been fully adopted for this. The needle lubricator is applied to a part of the machine, and is popular, while on the others a new fountain lubricator is used, also a new patent nut-lock, which effectually prevents the nuts from shaking loose. An adjustable track-clearer is shown for the first time, and will find favour where a wide clean track is demanded. Many other points of detail have been carefully looked after. Maynard's self-acting horse-rake did not rake clean. A two-horse clipper mowing machine from the Reading Iron Works did its work effectually. The pole, which in other mowers is used for draught, is in this machine entirely independent, as the horses draw from an attachment which is free to slide on the under side of the pole, to which attachment the whipple-tree and draught bar are connected, the other end being attached to the main frame of the machine. As the result of this arrangement, the draught of the horse acts in two ways—first, in a direct forward motion; secondly, with a tendency to lift the shoe off the ground. This is particularly useful when the machine is ascending an incline; while it leaves the knife-bar free to fall, and accommodate itself to the surface of the ground when descending, and the horses are drawing more lightly—a regular and close cut of the grass is also ensured, whatever may be the varying conditions of the ground, with the greatest ease to the horses. Brigham and Co., of Berwick, exhibited a two-horse "Star Buck-eye" mower, but it required a second hand to keep it to work. Hornsby

and Sons had one of their patent Paragon mowers at work, and owing to its admirable construction, there was no jolting or unsteadiness over an irregular ground, and the work was done well. Burgess and Key had at work one of their improved two-horse mowing machines, in which the two levers for lifting the beam and for throwing in and out of gear are placed well in front. Boby, of Bury St. Edmunds, had one of his light double-action haymakers, with very simple arrangements, and also a self-acting horse-rake; while J. Le Butt had Wyatts' double-action haymaker. Lastly, A. C. Bamlett, of Thirsk, had a two-horse mower, which made excellent work.

THE MACHINERY IN THE YARD.

The machinery in motion was on a very extensive scale, and there were even some novelties, showing that invention had been at work since the last Royal meeting at Oxford. The stands of implements extended uninterruptedly for more than a quarter of a mile, all the distinguished and celebrated firms being well represented, whilst there were also other local makers who, if not so well known, at least invariably follow in the train of the Bath and West of England Society.

Passing down the line of engines in motion in the order in which they are placed we noticed Cambridge and Parham, of Bristol, had a 2½-horse power portable, and an 8-horse power portable engine, driving a double blast finishing thrashing machine. The engine had a patent water heater, by which the water is made boiling hot by waste heats before going into the boiler, by which an alleged saving of half the fuel is effected.

Ashby, Jeffery, and Lanke, of Stamford, had some small vertical portable high-pressure steam engines, driving their new chaffcutter. The 2-horse power engine occupies a small space, and costs one-third less than the horizontal portable, being exceedingly compact, and consuming very little fuel.

Clayton and Shuttleworth occupied a large space, covering four or five stands with portable single-cylinder engines from 4 to 8-horse power, working double-blast thrashing machines, with patent trussed frame, 54-inch drum, and adjustable rotary corn screen; and straw elevators, delivering to a height of 27 feet at any angle.

Edward Humphries, of Pershore, had three single and double-blast thrashing machines, with rotary screens, worked by one of Clayton and Shuttleworth's 7-horse engines.

Ransomes, Sims, and Head, of Ipswich, had some 6 and 8-horse power portable engines, driving thrashing machine, and Hayes' straw elevator.

W. M. Parker, of Farnham, exhibited two of Aveling and Porter's 12-horse power patent locomotive steam ploughing engines; and one of Fowler's six-furrow patent balance ploughs.

W. Tasker and Sons, of Andover, had some 6, 8, and 10-horse power portable and traction engines; also a patent balance elevator, or ricker.

Wallis and Stevens, of Basingstoke, had three portable engines at work, a 10-horse double-cylinder, a 6-horse single-cylinder, and a 4-horse, adapted for driving a 42-inch combined thrashing machine.

R. Hornsby and Sons, of Grantham, had an eight-horse portable engine, working one of their combined thrashing and finishing machines, which have carried off so many prize medals.

Brown and May, of Devizes, had several of their portable steam engines of from four to six-horse power working. Amongst other improvements they are fitted with a new feed-water heater, whereby the water taken up at the ordinary temperature of 60 to 70 degs. is in a minute or two heated by the exhaust-steam to boiling

point, and a great saving of fuel and water thus effected. But it is not only the mere cwt. of coal a day which may be economised, but the saving of wear-and-tear of the fire-box which has to be considered.

P. and H. P. Gibbons, of Wantage, had a four-horse power and an eight-horse power portable engine, driving combined thrashing machines.

Marshall, Sons, and Co., of Gainsborough, had four portable engines at work, of five, six, seven, and eight-horse power, driving thrashing and finishing dressing machines and telescopic straw elevator.

Hetherington and Moore, of Alton, exhibited two and three-horse power horizontal steam engines, with vertical multitubular boiler, also a combined pumping engine.

R. Garrett and Sons, Saxmundham, had an agricultural self-moving steam engine, of ten-horse power, driving a combined thrashing and finishing dressing machine, with a 54-inch drum; and a six-horse power engine, working a double-blast thrashing and corn-dressing machine, drum 48 inches wide; and one of Eton's elevators, for receiving and stacking the straw as thrashed. The elevator, with a one-horse driving gear, can be used for ricking hay. The steam engine is fitted with Garrett and Sons newly-registered apparatus, for heating the feed-water before entering the boiler.

Amies, Barford, and Co., of Peterborough, had a small 2-horse vertical engine of their own make, and one of Brown and May's 8-horse driving corn-grinding mills and moving combined elevators.

Barrows and Stewart, of Banbury, had at work an 8-horse portable engine fitted with steam jacketed cylinder placed on the smoke end of the boiler, a plan which economizes the consumption of fuel and water, and supplied with extra large fire-box, moving a machine with beam-thrashing apparatus, 54-inch drum, and adjustable rotary corn screen.

Robey and Co., of Lincoln, besides one of Thomson's road steamers, adapted for ploughing, improved and manufactured by the exhibitors, had an 8-horse portable engine at work, with patent governor expansion gear for economizing fuel, and steam-jacketed cylinder, driving one of Riley's improved self-feeding thrashing machines and an improved straw elevator with Roper's patent driving apparatus, which transmits the power to the carrying chain roller at any angle, without the intervention of gearing of any kind.

Ruston, Proctor, and Co., of Lincoln, had at work two portable engines of 8 and 6-horse power (nominal), driving combined thrashing and finishing machines with 54-inch drums.

Turners, of Ipswich, had a 5-horse power engine as a sample of the various sizes of portable engines made by them, and working a single-blast thrashing and winnowing machine, with a straw elevator attached.

Tuxford and Son, of Boston, had a useful 10-horse portable steeple engine, with two vertical cylinders, driving their combined thrashing and dressing machine.

Holmes and Son, Norwich, had one of their 7-horse power portable engines, fitted with feed water heater, driving their finishing thrashing machine, and one of their prize clover shellers, which are now so well known in seed-growing districts. The consumption of coal in the engine driving the combined thrashing machine rarely exceeds 5 cwt. per day in the hands of common farming men, whilst in experienced hands the duty ranges from 3½ to 4 cwt.

Albert Watson, of Andover, showed some new improvements in a powerful bone crushing mill, a new portable 1-horse gear-work, and a newly designed folding elevator, 28 feet long, adapted to work with combined thrashing machine, or the 1-horse gear just named, for every description of rick-making, without alteration.

John Weighell, of Pieking, had one of Brown and May's six-horse portable engines driving several of his corn-grinding mills, the Oxford first prize one being especially an efficient mill, with three-feet Derbyshire stones. The revolutions, 140 per minute, are very uniform and steady throughout.

Robert Maynard, of Cambridge, had a power chaff engine, with sifting and elevating apparatus combined, driven by one of Foster and Co.'s Lincoln portable engines.

Milburn and Co., of London, showed one of their new combined portable engines and drying machines for corn, pulse, roots, and various materials.

J. L. Norton, of London, had a number of useful articles, among others his patent grinding and disintegrating mill, driven by one of Brown and May's engines, also some of his lift and other pumps.

The Reading Iron Works had 4-horse and 7-horse portable engines, working thrashing machines of 54 and 48 inches.

Powis, Western, and Co., of London, had general joiners, mortising, and other machines driven by a 10-horse nominal high-pressure engine.

Worsam and Co. also had similar machines driven by one of Robey's 6-horse engines.

C. Powis and Co., of Millwall, had a large collection of cutting machinery driven by a 10-horse power engine.

Hayward, Tyler, and Co., of London, exhibited a selection of their universal steam pumps at work, besides farm fire-engines.

While we have pointed out the chief novelties. We may, however, name, further, Hayward and Co.'s small steam pump, throwing up 60,000 gallons of water a-day; A. Welch's model railway cattle-track; Burgess and Key's new hay press; Howard's safety water tube boiler for marine engines; and Ransome's new ploughs, with suspension wheels, and a new self-acting patent screen for grain, by R. Boby.

The following is a complete list of the implement exhibitors: Affleck, Prospect Works, Swindon; Alway and Son, Chapel-street, Pentonville, London; Amies, Barford, and Co., Peterborough; Andrews, Southampton; Apted, Guildford; Arnold and Sons, West Smithfield, London; Ashby, Jeffery, and Luke, Stamford; Baker, Falcon Works, Wisbeach; Baker, Compton, Newbury; Bamlett, Patent Reaper Works, Thirsk; Barrows and Stewart, Cherwell Works, Banbury; Bayliss, Jones, and Baylis, Monmore Green, Wolverhampton; Beach and Co., Dudley and Tipton Mills, Dudley; Beare, Newton Abbott, Devon; Belcher, Gee, and Co., High Orchard, Gloucester; Bell and Co., Dean-street, Oxford-street, London; Bellamy, Millwall, London; Beverley Iron and Waggon Company (Limited), Beverley; Bigg, Leicester House, Great Dover-street, Borough; Boby, St. Andrew's Works, Bury St. Edmund's; Boyall, Grantham; Brenton, Polbathic, St. German's; Boulton and Co., Rose Lane Works, Norwich; Bradford and Co., 63, Fleet-street, London; Brigham and Co., Berwick-on-Tweed; Bristol Waggon Works Company (Limited), Temple Gate, Bristol; Braggins, Banbury; Brown and Co., Bridgewater; Brown and Co., Charlotte-street, Blackfriars, London; Brown and May, North Wilts Foundry, Devizes; Bromley, Farnham; Burgess and Key, Newgate-street, London; Cambridge and Parham, St. Philip's Iron Works, Bristol; Cannings, Finch Dean, Horn-dean; Carpenter, Staines, Middlesex; Carson and Sons, La Belle Sauvage Yard, Ludgate-hill, London; Carson and Toone, Wiltshire Foundry, Warminster; Carter and Co., High Holborn, London; Cheale and Sons, Southover, Lewes; Cheavin, Boston; Clayton and Shuttleworth, Lincoln; Coleman and Morton, London Road Iron Works, Chelmsford; Corbett, Perseverance Iron Works, Shrewsbury; Coultas, Perseverance Iron Works, Grantham; Crane, High-street, Guildford; Cranston, Parkfield, Peishore-road, Birmingham; Davey, Croft-hole, Devonport; Davies, Great Portland-street, London; Day, Shavington, Crewe; Day, Son, and Hewett, Dorset-street, Baker-street, London; Dear, North Stoneham

Park, Southampton; De Leon and André, Somerset-street, Aldgate, London; Dening and Co., Chard; Dennis and Co., Chelmsford; Dodge, Upper Thames-street, London; Duffield, William-street, Regent's Park, London; Eames, Lynch, Midhurst, Sussex; Farmers' Supply Association, King William-street, London; Filmer and Mason, Guildford; Fox, Walter, and Co., High Holborn, London; Fuller S. and A., Bath; Garrett and Sons, Leiston Works, Saxmundham, Suffolk; Gibbons, Vale of White Horse Iron Works, Wantage, Berks; Gibbs, Mark-lane, London; Gill and Carling, Guildford; Goss, King-street West, Plymouth; Gower and Son, Hook Foundry, Winchfield; Grandy, Godalming; Hardon, Albert Works, Strangeways, Manchester; Hart and Co., North London Iron Works, Wenlock, City-road, London; Harwood, Banner street, St. Luke's, Middlesex; Hathaway, Chippenham; Haynes and Son, Edgware-road, London; Hayward, Tyler, and Co., Upper Whitecross-street, London; Heasman, Coltsford Mill, Osted, Godstone; Headley and Son, Cambridge; Heap, City-road, Manchester; Hetherington and Moore, Alton Foundry, Alton; Hill and Smith, Brierley Hill Iron Works, Staffordshire; Hobbs, Iron Works, Basingstoke; Hodgetts and Son, Moreton-in-Marsh; Holmes and Sons, Norwich; Hornsby and Sons, Spittlegate Iron Works, Grantham; Howard, Britannia Iron Works, Bedford; Howes and Son, coach builders, Chapel Field, Norwich; Hudspith, South Tyne Works, Haltwhistle; Humphries, Pershore, Worcestershire; Hunt, Earl's Colne, Halstead, Essex; James Isaac and Son, Tivoli Works, Cheltenham; Johnston, Oxford-street, London; Jones, Gloucester; Kearsley, Iron Works, Ripon; Kiddle, Birdbush, Ludwell, Salisbury; Kittner, Fulston, Louth; Larkworthy and Co., Worcester; Le Butt, Corn-screen and Haymaker Works, Bury St. Edmund's; Lee, Windlesham, Bagshot; Lyon, Windmill-street, Finsbury, London; Maim, Leadenhall-street, London, and Glasgow; Major and Co., Bridgewater; Markall, Union-street, Whitechapel Road, London; Marshall, Sons, and Co. (Limited); Britannia Iron Works, Gainsborough; Marshall, Upton Pyne, Exeter; Mason and Sons, Alford; Matthews, Royal Pottery, Weston-super-Mare; Maynard, Whittlesford Works, Cambridge; Mellard's Trent Foundry (Limited), Rugeley, Staffordshire; Meyerstein, Queen-street, London, E.C.; Milburn and Co., (Limited), Church-lane, Whitechapel, London; Milford, Haldon Implement Works, Kenn, Exeter; Milford, Cart and Waggon Works, Thorverton, Cullompton, Devon; Milford and Son, West of England Wheel Works, Thorverton, Cullompton, Devon; Mitchell and Co., Manchester; Moule's Patent Earth Closet Company (Limited), Garriek-street, Covent-garden, London; Murray and Co., Banff, Scotland; Newnham and Son, Broad-street, Bath; Newton, Manor-road, Bermondsey, London; Nicholls, The Representatives of, Annatto Works, Rowden Hill, Chippenham; Nicholson, Newark-on-Trent; Norton, Belle Sauvage Yard, Ludgate-hill, London; Parham, Northgate Iron Works, Bath; Page and Co., Bedford; Parker, Warren Corner, Farnham; Peacock and Wilson, Grange Walk, Bermondsey, London; Penney and Co., (Limited), Lincoln; Perkins, Hitchen; Pickles, Sims, and Co. (Limited), Bedford Foundry, Leigh, Manchester; Powis and Co., Cyclops Works, Millwall-pier, London; Powis, Western, and Co., Victoria Works, Belvidere-road, Lambeth, London; Priest, Woolnough, and Co., Ceres Iron Works, Kingston-on-Thames; Rainforth and Son, Brayford Head, Lincoln; Ransomes, Sims, and Head, Orwell Works, Ipswich; Reading Iron Works (Limited), Reading; Reeves and Son, Bratton Iron Works, Westbury; Rendle, Welbeck-street, Cavendish-square, London; Reynolds and Co., New Compton-street, London, W.C.; Richmond and Chandler, Salford, Manchester; Roberts and Sons, Bridgewater; Robey and Co. (Limited), Lincoln; Robinson, Wembdon, Bridgewater; Rollins, Old Swan Wharf, London Bridge; Ruston, Proctor, and Co., Lincoln; Salmon, Bermondsey, London; Samnelson and Co., Britannia Works, Banbury; Sawney, Beverley, Yorkshire; Sharnam, Melton Mowbray; Shiner and Son, Beaminstor, Dorset; Sinclair, Bishopsgate-street, London; Smith, Basingstoke; Smith, Royal Iron Works, Kettering; Smith and Grace, Thrapston, Northamptonshire; Smyth and Son, Basenhall, Yoxford, Suffolk; Southwell and Co., Albion Iron Works, Rugeley; Spang, Fulham-road, London; Stacey, Bartholomew Cart and Iron Works, Newbury, Berks; Stedman and Son, Normandy, Guildford; Stiles, Blythe-terrace,

Westminster-bridge-road, Lambeth, London; Surrey Milk Company, West Horsley, Woking Station; Sutton and Sons, Seedsmen, Reading; Tasker and Sons, Waterloo Iron Works, Andover; Thorn St. Giles-gate, Norwich; Tipper, Chemical Works, Tindal-street, Balsall-heath, Birmingham; Tuck and Son, Bath; Turner, Ipswich; Tuxford and Son, Boston and Skirbeck Iron Works, Boston; Vezey, Long Acre, Bath; Voice, Handcross Crawley; Vulcan Works Ipswich; Waide, Southbrook-street, Hunslet-lane, Leeds; Warren, Maldon; Wallis and Stevens, North Hants Iron Works, Basingstoke; Watson, Andover; Weeks, King's Road, Chelsea; Weighell, Pickering, Yorkshire; Welch, Southall; Weston, Godalming; White and Co., 15, Trinity-street, Borough, London; Whitmee and Co., St. John-street, Clerkenwell, London; Woodbourne, Park Iron Works, Kingsley, Alton; Wood, Walter, London; Woods, Cocksedge, and Warner, Suffolk Iron Works, Stowmarket; Worssam and Co., Oakley Works, King's Road, Chelsea, London; Wright, Broad-street, Islington, Birmingham.

The seed pavilions of the two great firms of seedsmen were the most conspicuous objects on entering the show-yard, being placed immediately on the left of the Secretary's, Council, and other offices. Carter and Co. showed many hundred sample bags of their seeds, and specimens of their roots. Among the principal features of Suttou's stand was a large collection of dried specimens of natural grasses from their experimental farm, including those best suited for laying down permanent pastures; together with specimens of the root crops of last year.

THE ANNUAL MEETING OF MEMBERS

of the Society was held in the Council tent on the ground on the Tuesday, the president, the Earl of Cork, in the chair.

Mr. GOODWIN, the Secretary, read the following report: The Council, on the occasion of the ninety-fourth anniversary meeting of the Society, have the satisfaction of reporting a considerable increase in the number of new members, and they express a hope that the extension of the operations of the Society to the enlarged area of the southern counties, may hereafter be attended by a large accession of subscribers. There are at present on the books of the Society 139 governors, 73 life members, and 864 annual members. The funded stock of the Society has, during the last year, been augmented by the purchase of £1,700 stock, and now amounts to £7,300. The entries of stock, poultry, implements, &c., for the present meeting justify the hope expressed in a recent report, that the effect of cementing the union contracted between the western and southern counties may tend to the development of the agricultural and commercial resources of the two great districts. The entries of stock surpass in number those of any former year. There are in the cattle classes 31 Devons, 45 Shorthorns, 30 Herefords, 52 Sussex, and 31 Channel Islands—total, 189. In the sheep classes there are 10 Leicesters, 12 Cotswolds, 12 Kents, 59 Southdowns, 33 Hampshire Downs, 18 Shropshires, 13 Oxfordshire Downs, 16 Somerset and Dorset horns, and 4 Exmoor and other mountain sheep, whilst the prizes offered by the Local Committee have brought together 15 entries of Southdowns, represented by 120 animals, and the prizes liberally presented by the Right Hon. the Earl of Portsmouth and Mr. Morrison, for the encouragement of Hampshire Down ram lambs, have brought together 11 entries. The horse show, though an attractive feature of the exhibition, has not this year received the amount of support to which it was entitled by virtue of the increased amount of prizes offered for competition. It cannot be too strongly impressed on the minds of those interested in the Society's proceedings, that the date of entry for animals in every class is final and conclusive, and that in accordance with the rules of the Society no animals can be admitted for exhibition as extra stock. More than 50 horses have had this year to be excluded from the exhibitions, owing to non-compliance with prescribed rules. Of pigs there are 18 of the large breed, 39 of the small breed, and 35 Berkshires; making a total of 92 animals. For the local prizes there are, for wheat 22, and for hops 11 competitors; whilst for the special

prizes given by Mr. Miles, of Dixfield, Exeter, for the encouragement of proficiency in horse-shoeing, there are 26 competitors. In the implement department there are not less than 59 steam-engines, propelling machinery in motion, and great improvement is observable in the mechanism and finish of many of the more important machines. A great number of trivial articles, not strictly connected with agricultural progress and development, have on this occasion been rigidly excluded from the exhibition; but notwithstanding this regulation there are 184 exhibitors, and not less than 3,372 articles enumerated in the Society's catalogue. The art department is unusually rich in the exhibition of pictures of merit by rising artists; so much so that it has been found necessary to provide space for part of them in the building ordinarily appropriated to manufactures and works of industrial art. The publication of the *Journal* has during the last year been suspended, except in so far as relates to a special appendix, containing reports of the Taunton meeting. The third volume of the third series, containing reports of the Guildford Show, will be published as soon as possible after the meeting has terminated. The vacancy occurring in the Council since the last annual meeting by the retirement of Mr. William Wippell, of Cutton, Poltimore, has been supplied by the election of Mr. Robert Neville, of Butleigh Court, Glastonbury. It has been arranged with the local authorities of Dorchester that the Society's meeting for 1872 shall take place in the immediate proximity of that ancient and interesting borough, and it is hoped that the Society's second visit to that town may be attended with results as satisfactory as those which marked the very successful meeting of the Society at Taunton last year. The Council, having regard to the usage of the Society, that the president for any year shall be non-resident in the county wherein the annual meeting is held, recommend that his Grace the Duke of Marlborough be requested to occupy the office of president for the year ending with the Dorchester meeting. They also recommend that the Hon. and Rev. Samuel Best and Major Allen, M.P., be elected vice-presidents; and that the following members of the Society be appointed members of the Council, to supply vacancies occurring by retirement, rotation, and other causes:

EASTERN DIVISION.—H. G. Andrews, Rimpton, Sherborne; W. A. Bruce, Ashley, Chippenham; R. H. Bush, 10, Carlton-place, Clifton, Bristol; Henry Fookes, Whitechurch, Blandford; J. D. Hancock, Halse, Taunton; Henry Parr Jones, Portway House, Warminster; Joseph Lush, Hartgills, Kilmington, Bath; H. A. F. Luttrell, Badgworth Court, Axbridge; William Thompson, Dunsford-place, Bath.

WESTERN DIVISION.—E. Archer, Trelasse, Launceston; Francis W. Dymond, Bampfyld House, Exeter; Mark Farant, Growing, Collympton; William Froude, Chelston Cross, Torquay; John Hooper, Chagford; Thomas Hussey, Waybrook, Exeter; J. C. Moore-Stevens, Winscott, Great Torrington; W. Robson Scott, St. Leonard, Exeter; Charles Arthur W. Troyte, Huntsham Court, Bampton.

SOUTHERN DIVISION.—J. Best, Abbott's Ann, Andover; Robert Clutton, Hartswold, Reigate; Joseph Druce, Eynsham, Oxford; Frederick Gill, Beenham, Reading; Sir J. Clarke Jervoise, Bart., Idsworth House, Hordean; J. Farnady Lennard, Wickham Court, Beckenham; H. Middleton, Cotteslowe, Oxford; J. C. Ramsden, Busbridge Hall, Godalming.

ELECTED WITHOUT REFERENCE TO DISTRICTS.—Charles Edwards, The Grove, Wrington; E. F. Mills, Orcheston St. Mary, Devizes; James Pitt Pitts, Newton House, Drewsteignton, Chagford; James Rawleace, Bulbridge, Wilton; Robert Trood, Matford, Exeter.

Your committee cannot conclude without an expression of their best thanks to the Worshipful the Mayor, the Chairman, vice-chairman, and members of the local committee, for their liberality and untiring zeal in endeavouring to promote the success of the Guildford meeting; to those who have contributed valuable works of art and horticultural specimens; to the judges in the several departments for their services; and to the directors and officials of the railway companies for the facilities they have generously afforded.

The CHAIRMAN proposed the adoption of the report.

Mr. JONATHAN GRAY seconded this, and the report was carried.

Hon. and Rev. J. T. BOSCAWEN proposed, and Mr. J. C. RAMSDEN seconded, the election of his Grace the Duke of

Marlborough as president for the ensuing year, when the Society visits Dorchester.

Votes of thanks to the retiring president and to the various persons named in the report by the Council were then passed.

VISIT OF THE PRINCE OF WALES.

The Council, which had met at an early hour on the Wednesday, went in procession to the station to await the arrival of the royal train, which left the Waterloo Station at 11.40, and arrived at Guildford in 49 minutes, where his royal highness was received at the station by Captain Mangles, the chairman of the company, and the corporation. The Prince was accompanied by Prince John of Glücksburg, General Knollys, and Lieut.-Colonel Teesdale. The mayor then requested the honour of being allowed to present an address from the corporation. This, splendidly illuminated on vellum, and enclosed in a box covered with red morocco, ran as follows:

To H. R. H. the Prince of Wales, K.G. From the Mayor and Corporation of Guildford, May, 1871. May it please your royal highness—We, the mayor, aldermen, and burgesses of the borough of Guildford, in the county of Surrey, desire to avail ourselves of your royal highness's presence at Guildford, on the occasion of your visit to the annual meeting of the Bath, West of England, and Southern Counties Agricultural Association, held on the borders of this borough, to offer to your royal highness a most sincere and cordial welcome from the inhabitants of this ancient and loyal borough, and to assure your royal highness of the gratification which is felt by all classes of the community at your presence amongst them. We acknowledge with satisfaction the interest which your royal

highness always evinces in support of every movement having for its object the encouragement of agriculture, arts, manufactures, and commerce, the advancement of science, and the good of the public at large. We beg to tender to your royal highness our heartfelt wishes for your continued and increasing happiness, and sincerely pray that your royal highness may be long spared to fulfil, under God's blessing, the duties of your exalted station.—Given under our common seal, the 31st day of May, 1871.

EDWARD THOMAS UPPERTON, Mayor.
MARK SMALLPIECE, Town Clerk.

The Prince of Wales was then conducted by the mayor to the carriage of the Earl of Cork, accompanied by Prince John of Glücksburg, and the party drove to the entrance of the Show-yard, where the officials of the Society were in waiting. There were also present—The Earl of Lovelace, the lord-lientenant of the county, Lord Middleton, the Earl of Dunmore, Earl Fortescue, and Lord Sidmouth. The prize cattle and sheep were brought out for the inspection of his royal highness, and he also went round the horse department, and thence through the poultry enclosure, expressing his satisfaction at the general excellence of the show. The display in the horticultural department much pleased the prince. The fine arts department having been viewed, his royal highness visited some of the implement stands—Ransomes, of Ipswich; Howard, of Bedford; Beare, of Newton Abbott; Bradford, of Fleet-street; Burgess and Key, of Newgate-street, and others. His royal highness having gone through the greater part of the show partook of luncheon, and returned to London by the special which left Guildford at 35 minutes past two.

THE ACTION OF THE CENTRAL CHAMBER OF AGRICULTURE.

The Central Chamber of Agriculture was established on the farmer's behalf "to look to matters coming before Parliament"—such, so far as we remember, was the way in which its duties were defined. It is evident, however, from all that occurred at the last council meeting that a very strong line is drawn between looking at matters before Parliament and looking to members of Parliament. So far as the authorities or officials of the Central Chamber be concerned one of the gravest questions for consideration is the cattle-trade and traffic of the country. It is a point to which immediate attention must be called with a view to insuring some more certain protection to the home grazier and breeder. And an honourable member has a notice of motion to something of this effect; while as he happens to be, moreover, a leading member of the Central Chamber of course that body will do all in its power to have him properly supported. And this aid was certainly little enough, for the hapless proposition was counted out to a House of twenty-one members; the fact being that nobody ever knew anything about it! At the meeting on Tuesday Mr. Corrance, M.P., said that "he had received no intimation when the motion was likely to come on;" Mr. Heneage "thought it desirable that when important questions connected with agriculture were going to be introduced in the House of Commons, the Central Chamber or the provincial Chambers should send circulars to the members of their respective counties urging them if possible to be present;" and Mr. Pell, M.P., "had been engaged in the country on business in which his constituents took great interest." Some other honourable gentleman had, no doubt, bought a yoke of oxen and must needs go and look at them, a fifth had married a wife or had some other such urgent private

affair to attend to; and as nobody seems to have attended to Mr. Read or his motion of course nothing came of it.

Will it, though, be credited that at the meeting of a Society of such calibre, or at any rate of such design, explanations after this fashion should come to be recorded: Mr. Masfen said, "County members must be reminded of the duty which they owed to their constituents;" Mr. Corrance had not been reminded, and Mr. Pell said "the discussion showed how desirable it was that the secretary of the Central Chamber should reside in London." But surely he must reside in London, or how is it that he is always writing letters from the Central Chamber of Agriculture, the Salisbury Hotel, Salisbury Square, Fleet Street, London, E.C., where he certainly intimates that he has the honour to be! However, we will assume that this is mere make-believe, and that a man cannot live in a letter-box, or, unless he be really a conjuror, ever get into a quart bottle. But, assuming that the official staff of the Central Chamber be located only two or three days' post from town—say in the Isle of Man, at the Land's End, or in the heart of the Highlands, why should they not send out a circular to every M.P. when anything bearing upon agriculture would be likely to come before Parliament? In our innocence we had thought this was one of the special duties for which the institution had been invented. In our ignorance we had pictured piles of letters, bearing the stamp of the Salisbury Hotel, Salisbury Square, Fleet Street, London, ready and anxious to be started, no matter whether from Nova Scotia or the Fens of Lincolnshire. Nothing of the kind, however, appears to have been done, and so Mr. Corrance and others knew nothing about it. But in justice be it said, as it was *not* said at the meeting of the Chamber, that the secretary had not

only written a letter to *The Times*, but exhorted honourable gentlemen in his own organ, and still they knew nothing about it!

All this looks ludicrous enough; but this was not all. Of course the county members and the Farmers' Friends, knowing nothing of what was coming on, were very sorry that so good a man as Mr. Read was so badly supported, and made their apologies to him accordingly. Quite the reverse—Mr. Read "felt that *he* owed an apology to the county members"—"it would be presumptuous in him to send circulars to agricultural members"—"he believed they could not help being absent," and so forth. This is all very nice and considerate and polite; but in the mean time it does not seem that anybody is doing anything. County members know less about agricultural questions than ever, if we are to test them by a House of twenty-one, while Mr. Read would not be presumptuous enough to advise them, nor does it appear to be the business of anybody in particular to do so. And this is the stupendous result of looking at matters before Parliament! There is one thing, though, that the Central Chamber is strong in, and that is, in passing resolutions. And so straightway a formidable resolution is framed, and the chairman recommends that "the secretary should send a copy of the resolution which was about to be passed to Mr. Forster and the Privy Council, in order to show them that they endorsed the views of Mr. Read; and he would further suggest that Mr. Forster should be asked to acknowledge the receipt of it." This sounds forcibly enough, and a correspondence will be forthwith entered up between the Salisbury Hotel, Salisbury Square, Fleet Street, London, where the secretary's letter-box has the honour to be, and the Privy Council in Whitehall. And the Vice-President in some alarm will acknowledge the receipt when he finds how the Chamber endorses the views of Mr. Read; the more especially when he comes to remember

how it endorsed that honourable gentleman the other day in the House. "Call you this backing your friends?" as Sir John says.

Although *he* would not be so presumptuous, Mr. Read thinks the local Chambers might reasonably send circulars to agricultural members, an opinion in which we entirely agree with him. We think, as we always have thought, that any good to come from this movement must come from the local Societies. Let constituencies, by such an agency, directly address themselves to their own representatives; let them put their wishes and wants to those upon whom they have some claim, and something may be done. But this centralization serves chiefly to shift all responsibility, as, in the end, certain leading spirits here manage to do all that they desire to do, and to leave all undone that they do not care to be committed to. Only mark how at this meeting on Tuesday all attention was turned from the best Game Bill yet introduced. "The question was not on the Agenda Paper." Why not? for it most assuredly should have been. Again, says another M.P., "they need not be in a hurry, as the Game Bills would no doubt all be shelved for this session." Very possibly so; but what then? Are not the Local Taxation Bills more decidedly shelved for this session, and did not the meeting on Tuesday report, and talk, and make motions about Local Taxation, as if it were coming on again to-morrow? "The new Game Bill is a very good one," says Mr. Read; "it is far superior to any previous measure," says the chairman; and so the Central Chamber will leave it to fight its own way just as it did Mr. Read himself in the House of Commons. Still there is some hope, for the provincial Chambers are to discuss Sir Selwin Ibbetson's Bill, and it was the determined action of some of these provincials that fairly drove the Central Chamber into recording anything like a protest against the game evil. And such is the last sitting of the Session!

THE CENTRAL CHAMBER OF AGRICULTURE.

A Council meeting was held on Tuesday, June 6, at the Salisbury Hotel, Fleet-street; Sir M. Lopes, M.P., in the chair.

After the reading and confirmation of the minutes, Mr. H. Chaplin, M.P., was elected a member.

The question whether or not a meeting of the Council should be convened for July, was left to the Chairman and the Council.

The CHAIRMAN then read the Monthly Report of the Local Taxation Committee, which was as follows:

The Committee, in presenting their report, feel that they are entitled to congratulate the Central and associated Chambers on the withdrawal of Mr. Goschen's Local Government and Rating Bill and Local Taxation Bill, and the Committee feel assured that this result has, in a great measure, been due to the active exertions of the various Chambers of Agriculture. At the same time, your Committee must express their regret that no opportunity was afforded in the House of Commons of replying to Mr. Goschen's statement, and of exposing the numerous fallacies in the returns upon which his bills were founded. Your chairman, finding it impossible to call the further attention of Parliament during the present session to the incidence of Local Taxation, has given notice that he will take the earliest opportunity next year of bringing forward a motion with reference to this subject. Your Committee have diligently examined the various bills now before Parliament, with a view to discover the provisions which will injuriously affect ratepayers. Your Committee recommend that petitions should be presented to Parliament praying against the continued injustice of imposing upon the ratepayers new charges for national objects. The various bills referred to are as follows: (1) Army Regulation Bill, (2) Elections' (Parliamentary and Municipal) Bill, (3) Further Abolition of Turnpike Tolls' Bill, (4) Pauper Lunatics' Discharge and Regulation Bill, (5) Prison Ministers'

Bill, (6) Registration of Voters' Bill, (7) Intoxicating Liquors' (Licensing) Bill (withdrawn), (8) County Coroners' Bill (withdrawn), (9) Protection Against Dogs' Bill (passed House of Commons), (10) Corrupt Practices' Act Amendment Bill. Your Committee feel gratified in being able to state that they have received numerous resolutions and letters from different Chambers of Agriculture, thanking them for the action they have taken and the papers they circulated with reference to Mr. Goschen's report and the two Government Bills. A form of petition, praying that the clauses in the Army Regulation Bill which tend to impose *exclusively* upon ratepayers charges for national objects may not pass into law, has, during the past month, been forwarded to many Chambers of Agriculture; and your Committee have much pleasure in stating that these petitions have been well signed, and will be presented to Parliament by the representatives of the various districts. Your Committee beg to call attention to a question which was put to the Home Secretary with regard to the great inaccuracy of the "abstract of the county treasurers' accounts." This question was noticed by several of the principal London newspapers in their leading articles, and it was contended, that, if Government returns could not be trusted the public had nothing to depend upon for accurate information, and that if Mr. Goschen compiled his report from returns of an equally untrustworthy character, but little reliance can be placed on his conclusions. Your chairman also proposes to call attention to the "Municipal Borough Returns," which he has found to be even more inaccurate than those above alluded to. Your Committee wish most particularly to point out the effect which will be produced should the proposed Endowed Schools Act (1869) Amendment Bill pass into law. This Bill proposes to confiscate local endowments, which have been bequeathed by the charitable for the purpose of educating the children of the working classes, and to apply the

funds thus obtained for middle-class education. Should this proposal be carried out, those children who are now educated free of cost through the means of such endowments will, according to the provisions of the Elementary Education Act of last session, have to be educated in a great measure at the expense of the rate-payers. Moreover, many parishes, relying on the continued application of these endowments to their original purposes, omitted to make the necessary application to the Privy Council Office before the expiration of the past year for grants in aid of building elementary schools. These parishes are now precluded from obtaining any such grant, and the cost of these buildings will now exclusively fall upon the ratepayers. Your Committee also desire to call attention to the report of the select committee appointed to inquire into the operation of the Vaccination Act, especially to the following paragraph: "*The suggestion has been made that a considerable proportion of the expenses of working the (Vaccination) Act should be contributed from moneys to be voted by Parliament.*" Your Committee believe that efficient working would be promoted by such contribution. Without doubt local agency must be relied on for administration, but central inspection and control are also needed, and would be much more powerful if a payment towards the expenses could be withdrawn in cases of mal-administration." The principle of further contributions from the imperial exchequer in aid of national objects is here admitted, and your Committee cannot but think that the precedent thus suggested will be of great use hereafter. Your Committee would call attention to an important case recently tried in the Court of Queen's Bench, and reported in the *Times* of April 23rd last, from which it appears that the County of Lancaster issued a *mandamus* against the Treasury for a balance claimed by them to defray the charges of certain criminal prosecutions, and which had been disallowed by the Treasury. The Lord Chief-Justice said that he knew not who or by what authority some gentleman at the Treasury takes upon himself to disallow items in a very important prosecution, and that it could not be for the due administration of public justice that what a judge orders to be done in the matter of a prosecution, and the expenses incidental thereto, should be revised by one knowing nothing of the facts, except so far as appears from the bill of costs. It would, therefore, appear that large amounts are annually disallowed in each county by the Treasury for the costs of criminal prosecutions, which amounts ought to be paid in full by the imperial exchequer, and not by the ratepayers, upon whom the charge falls in case of disallowance. Your chairman has moved for a return showing the balance disallowed for each county by the Treasury during the past seven years, and he will shortly call attention to the subject. In conclusion your Committee beg to state that they consider that there is now greater necessity than ever to increase their efforts in order that they may be prepared to meet the attempts which will undoubtedly be made in the ensuing session to increase, rather than diminish, the burdens now pressing so heavily upon ratepayers. With this view your Committee are issuing a circular pointing out the necessity of further contributions being placed at their disposal, and they feel confident that their appeal for aid towards an object in which owners and occupiers of houses and lands are equally interested will be generously responded to.

A resolution was read from the Warwickshire Chamber, as follows: "That this Chamber fully approves of the course taken by Sir Massey Lopes, Bart., M.P., and pledges itself to give him every support in its power."

It was stated that since the last meeting two provincial Chambers had joined the Central Chamber, viz., the York and the Ripon Chambers.

Mr. BIDDLELL moved the adoption of the Report which had just been read. He expressed his regret that, in consequence of the withdrawal of the Government Bills, no opportunity had been afforded in Parliament of pointing out the inaccuracies of the statements on which the Government measures relating to local taxation were founded; especially as the authority of a Minister of the Crown rendered them very likely to mislead. Some explanation was due from Mr. Goschen to the Chambers; and, even for the right hon. gentleman's own sake, there should have been some correction.

Mr. JANCEY seconded the motion.

Mr. CALDECOTT could testify that the returns of county expenditure were very inaccurate so far as Warwickshire was concerned. As regarded prosecutions, a considerable amount

had been kept back by the Treasury that was required for expenses, which the Judge of Assize had ordered the magistrates to pay, so that there was no option in the matter. The magistrates had waited from the beginning of the year for the decision of the Court in the case of Lancashire. As soon as that decision had been given the Clerk of the Peace of Warwickshire applied to the Treasury for payment; but the Treasury did not admit the full force of the decision, and asked that the matter might be allowed to stand over till Michaelmas.

Mr. C. S. READ, M.P., said it might be some consolation to Mr. Biddell to learn that Mr. Goschen intended to publish his speech with some marginal notes relating to the accusations made against him in that Chamber and elsewhere. In that way, however, the right hon. gentleman would have the discussion all to himself.

The CHAIRMAN said, having taken some trouble to ascertain the real state of the case as regarded the expenses of prosecutions, he found that the Government had put aside about £150,000 to be divided among the different counties. They were obliged, he was informed, so to divide that amount that in each county there must always be a balance left unpaid; and hence it was that he had lately moved for a return showing the sums disallowed within the last seven years. The accounts by county treasurers were the most inaccurate ones he had ever met with, and he had found the municipal accounts also very incorrect. The inference to be drawn from all this was, that if the figures were so radically wrong, calculations founded upon them could be of no value.

The motion was then put and carried.

Mr. T. DUCKHAM moved the following: "Accepting the withdrawal of the Government Bills as an acknowledgment of their failure to meet the requirements of ratepayers, this Council greatly regrets that the Government have found it impossible to fulfil the promises held forth in the Queen's speech to remedy the gross injustice to occupiers and owners of land and houses under the present system of assessment to local rates." He said that, in common, no doubt, with every other member of the Council, he learnt with surprise that the Government Bills had been withdrawn. The admission by the Government of the principle of an extension of the area of taxation must be gratifying to them all; but he hoped that next session the Government would combine with the House tax the horse tax and the vehicle tax, and also adopt a more extended basis than that of parishes, under which rich parishes were benefited at the expense of poor ones. As regarded the removal of the house tax in rural districts, and the levying of income tax in place of it, that would, in most cases, be remitting so many shillings now levied from farmers, and imposing upon them an equal number of pounds.

Mr. TURNER, in seconding the resolution, reminded Mr. Duckham that an addition to the income tax had nothing to do with Mr. Goschen's Bills.

The resolution was then adopted.

Mr. E. HENEAGE moved the following: "That, in the opinion of this Council, those clauses in the several Bills now before Parliament which propose to increase the burdens on local rates should be firmly opposed until the question of local taxation has been more equitably adjusted." [Before Mr. Heneage commenced his remarks, resolutions were read from the Herefordshire, Staffordshire, Warwickshire, Leicestershire, York, and Lincolnshire Chambers in accordance with the resolution before the meeting.] Since the last meeting the Government Local Taxation Bills had been withdrawn, or at all events the Government had succumbed, and did not intend to go on with them; but, nevertheless, it was necessary that the Chambers should take steps, if they could not as yet lessen the local burdens which had been imposed upon the land during the last century, at any rate to prevent any addition being made to them. It was of the greatest importance that they should try and prevent any Bill from becoming law which would add to the local rates. One of the most popular things that a Chancellor of the Exchequer could now do was to bring in a budget, which, by means of a surplus made taxation appear as light as possible. There were two modes of accomplishing that; one being the exercise of great economy, and the other a resort to subterfuge. Let him explain what he meant by subterfuge. It was very easy to say in a Budget Speech I am going to make the taxes a million or two less than they were last year. That was all very well on

paper; but if there were a number of bills before Parliament which would impose additional burdens on the ratepayers and take out of one pocket as much as was put into the other, where was the advantage to the public? In one form a proposal to increase local burdens would create a tremendous row, while in another it might escape notice. That had been brought forcibly before his mind by the legislation of the present session. They had seen the Government doing all it could to show that its policy had not been expensive, while it was adding twopence in the pound to the income-tax, in order to obtain a surplus next year, and thus gain the power of securing some additional popularity. It had, in fact, introduced no less than ten bills which would impose burdens on the local rates, and he would proceed to state what they were. First, there was the Army Regulation Bill, which gave the Government a discretion with regard to local taxation which it was quite awful to think of. The Government had hitherto been in the habit of providing whatever was necessary for the militia, but it was now proposed that in future any barracks or other buildings which might be required for the use of the militia regiments should be provided out of the rates. It had therefore been considered rather a desirable thing to have a militia regiment quartered in a district on account of the demand for supplies which arose in consequence, but a very different feeling would be created if that provision of the Army Regulation Bill passed. Again, there was the Parliamentary and Municipal Elections' Bill, by which the expenses of county as well as borough elections were to be thrown upon the ratepayers. In a political point of view, there was a great deal to be said in favour of that arrangement; but, regarding it as a monetary question, they must object to it so long as there were such numbers of persons who did not pay their fair share of local expenses. The next bill was one for the Abolition of Turnpike Tolls. He did not believe they would have much more of that measure during the present session, but the question involved was a very serious one. The Pauper Lunatics' Discharge and Regulation Bill contained a clause (clause 5) requiring poor-law guardians to provide suitable casual wards for the accommodation of discharged pauper lunatics. If anything of that kind was to be done there should be a Parliamentary grant for the purpose. Further, there were the Prison Ministers' Bill, the Registration of Voters' Bill, the measure relating to licences, the County Courts' Bill, the Corrupt Practices at Elections' Bill, and the Dogs' Bill. Of these ten bills two had been withdrawn, but the remainder were still before Parliament; and it should be the stern resolve and earnest effort of the Chambers of Agriculture to prevent any addition to the local burdens by means of bills in Parliament until something had been done to relieve agriculturists from the unjust pressure of the existing system (cheers). In conclusion, he might remark that the resolution which he now proposed was almost identical with one recently passed by the Lincolnshire Chamber, of which he was the chairman.

Mr. CALDECOTT, in seconding the resolution, said the most objectionable of the bills referred to were, in his opinion, the Army Regulation and the Ballot Bills, these being the most likely to add seriously to the county rates. The returning officers of county elections were practically their own auditors, and might therefore make the expenses almost whatever they chose. In his own county (Warwickshire) the charges were nearly £2,000 for the two divisions, and if the number of polling places was increased as much as appeared probable, a penny rate might be required to pay the expenses of a county election.

Mr. D. LONG thought the bills which it was intended to oppose should be mentioned in the resolution.

The CHAIRMAN also concurred in this suggestion, and the resolution having been amended accordingly was adopted.

Resolutions were read from the Warwickshire, Yorkshire, and Leicestershire Chambers, expressing disapproval of the recent order of Council relating to cattle coming from Russia and Holland.

Mr. T. WILLSON moved, "That this Council views with alarm the recent Order of Council by which cattle direct from Russia are taken to the Metropolitan Market, and by which also cattle from Holland, where pleuro-pneumonia now extensively exists, are permitted free access to any part of the United Kingdom after undergoing a detention of only twelve hours." He said the view of the Leicestershire Chamber, which he represented, was that if foreign cattle were to be admitted into England after a detention of twelve hours,

during which they were supposed to undergo an examination, though it could hardly be called one, English farmers would be placed in a most disadvantageous position, inasmuch as when they sent their cattle to the Metropolitan Cattle Market they were not allowed to supply the south of England with beef and mutton. If it were not dangerous for foreign cattle to be moved about England, how could it be dangerous for English cattle to be taken to the towns on the south coast? All they wanted was justice. Let him mention a case as an illustration. The week before last a friend of his in the north of England had some very valuable cattle, which he wished to have removed to a distance. Owing to some arrangements of the North Eastern Railway Company, these cattle were not allowed to be placed in a horse-box on the line, and the consequence was that they had to be driven through the streets of Hull, and they were afterwards placed side by side on the line with some foreign cattle which were brought from Normanton, and were going to Liverpool. He was sorry to observe that Mr. Read, in speaking on that subject the other night in the House of Commons, spoke in favour of foot-and-mouth disease in foreign cattle not being treated in as stringent a manner as pleuro-pneumonia.

Mr. READ, M.P., denied that he had said what had been imputed to him.

Mr. R. H. MASFEN said he had been much astonished at the reception which Mr. Read's proposal met with in the House of Commons on the previous Friday evening. The county members must be reminded by the Chambers of the duty which they owed to their constituents; and if they allowed the House to be counted out when there was a question so important to agriculturists before it the Chambers could not feel that confidence in them which men ought to be able to feel in their representatives in Parliament (Hear, hear). It appeared to him that there was a great dereliction of duty on that occasion (Hear, hear), and that the county members did not show a proper regard for the interests of their constituents. Considering that upwards of 91 per cent. of the animal food of this kingdom was of home production, and that what Mr. Read proposed directly tended to secure that large proportion for the benefit of the whole population as well as of the owners of home flocks and herds, he could not understand county members not considering it their duty to support Mr. Read on the previous Friday. What must the Manchester-school of members think of the way in which agriculturists were represented in the House of Commons? In future, when a gentleman presented himself as a candidate for a county seat in Parliament, they should carefully endeavour to ascertain whether his object in doing so were merely self-aggrandisement or to do his duty to the constituency. There had been a great amount of lukewarmness manifested in Parliament, in reference to that question of foreign cattle. Agriculturists did not, as was alleged, wish to raise the price of meat to the consumer; what they wanted was simply to protect their flocks and herds (Hear, hear). He, for one, would be glad to find the price of meat much lower than it was then; but the untoward events of the last two or three years—the repeated droughts combined with the removal of the restrictions which were intended to keep out disease, had inevitably raised the price, and he believed it would be further enhanced if greater supervision were not exercised. English farmers did not desire anything beyond what was fair and reasonable, and surely as they provided nine-tenths of the stock with which the people of this country were fed, it was a matter of paramount importance that the interests of the class who produced it should be narrowly watched over. He protested against the notion that farmers as a class were persons who wanted to fill their pockets at the expense of the community at large (cheers).

Mr. READ, M.P., said he felt that he owed an apology to his brother county members for having brought on his motion on a day which might be considered to have belonged to the the Whitsun holidays. The truth was that in the present state of business in the House of Commons it was extremely difficult for any private member to bring on a motion at all. The motion which he had referred to had been on the paper for a month. He had gone to ballot after ballot, hoping that he might find a convenient day for introducing it, but he could not. He had never been very lucky at games of chance, and somehow or other the balloting had been against him. In the previous week the Government promised to keep a House for the discussion of his motion, telling him that it would be

necessary for them to do so, because they wished afterwards to go for a Committee of Supply, and therefore he expected that during the mysterious dinner-hour, when the House usually became so thin, the Government would secure him against a count-out; but whether it were because they found that the debate was likely to go against them, or that they wished to deprive him of an opportunity of replying and to have the discussion adjourned to a more convenient day, the understanding was not carried out. As regarded what fell from Mr. Masfen, he could very well understand the feelings which prompted them; but the House of Commons was dreadfully overworked, and he would add that the rights of private members were but little regarded, and that it was not till after the House met at nine o'clock that there seemed to be any chance of his motion coming on that day. Not knowing when he might have another opportunity of introducing the subject, he thought it best to do so then, and he believed that the remarks which he made, followed up as they were by those of other county members, would produce a good effect. He trusted that the Committee of Privy Council would see that they had committed a great error in allowing store stock from Holland—for it was to that point that he directed special attention—where pleuro-pneumonia was raging, after undergoing a twelve hours' quarantine, to be landed at Harwich, and to be sent thence all over the eastern counties and other parts of the kingdom (Hear, hear). He maintained that the permission of that was a grave dereliction of duty, and altogether contrary to what Parliament expected when it passed the Cattle Diseases Bill. He greatly feared that the foreign cattle market would not be opened on the 1st of January next, not one stone having yet been erected; and even when it was opened it would be a little, poking, out-of-the-way wharf on the wrong side of the river, and without any railway communication, so that hardly any benefit could result from it.

Mr. CORRANCE, M.P., said as he was one of the members who were absent from the House of Commons on the previous Friday evening, he wished to say that he had received no intimation that the motion was likely to come on, either from Mr. Read or from Mr. Waller, the Secretary of the Society for the Protection of Home Cattle. He was on a tour in Ireland for the purpose of collecting information on a subject in which agriculturists were deeply interested.

Mr. HENEAGE thought it desirable that when important questions connected with agriculture were going to be introduced in the House of Commons, the Central Chamber or the provincial Chambers should send circulars to the members of their respective counties urging them if possible to be present.

Mr. PELL, M.P., observed that that discussion showed how desirable it was that the Secretary of the Central Chamber should reside in London, and intimated that he intended to make a proposal on that subject at the next annual meeting of the Council. He was, he said, himself absent from the House of Commons on the occasion referred to, being engaged in the country on business in which his constituents took deep interest. In his opinion it was highly important that stringent measures should be adopted to check the spread of foot-and-mouth disease as well as pleuro-pneumonia. Something like 5 per cent. of the animals of this country had been lost annually for some years past through contagious diseases.

Mr. READ, M.P., said it would be presumptuous in him to send circulars to agricultural members asking them to attend the House on a particular occasion, but the provincial Chambers might reasonably do that. He felt that he owed an apology to the county members for having brought forward his motion so unexpectedly; but he could not help that, and he did not believe they could help being absent (Hear, hear).

Mr. T. HORLEY said the Government seemed to suppose that when they had got rid of cattle plague, there was no need for precautions. Very few persons, he believed, were aware of the amount of loss which arose from pleuro-pneumonia. He held in his hand a statement of the mortality among cattle in North Holland in the present year, from which it appeared, that from the 19th of March to the 22nd of April, 206 head of cattle had to be killed because they were suffering from pleuro-pneumonia. English farmers had a right to have their cattle protected against the diseases which existed in Holland, and they were naturally jealous of a relaxation of restrictions in favour of Holland when there were no corresponding relaxations in their own case. The importance of that subject ought to be impressed on agricultural members more strongly than it had ever been yet.

The CHAIRMAN thought they must all feel deeply indebted to Mr. Read for having brought the subject before the House of Commons (cheers). He would suggest that the secretary should send a copy of the resolution which was about to be passed to Mr. Forster and the Privy Council, in order to show them that they endorsed the views of Mr. Read; and he would further suggest that Mr. Forster should be asked to acknowledge the receipt of it.

The resolution was then adopted, and it was further resolved that a copy of it should be forwarded to Mr. Forster.

Dr. J. ROGERS, President of the Poor-law Medical Officers' Association, then introduced the question of poor-law medical relief. He said: In the years 1832 and 1833 a wide-spread feeling of dissatisfaction was excited in consequence of the huge extent to which the expenditure on pauperism had expanded, and a commission was appointed to inquire into the operation of the poor laws, with a view to suggesting such modifications as might appear advisable. Two of these commissioners, Sir J. Kay Shuttleworth and Mr. C. P. Villiers, have stated since that, although every conceivable cause bearing on the growth of pauperism was investigated by the commissioners, sickness of the poor, as an element in its production, was not inquired into; in fact, its importance was wholly overlooked. It cannot, therefore, be a matter of surprise that the Poor Law Commissioners on the one hand, and local boards on the other, in making their arrangements for the relief of such sickness, should have adopted that course which appeared to them as most economic, viz., fixing the stipends of the medical officers at the lowest possible amount, and then advertising the appointments as open to all comers. Although the sums named were in too many instances ridiculously below what was required for efficient services, they were sought after by two classes of applicants, those who, having been long resident in the locality, were desirous of preventing a stranger from encroaching on their private practice, and young men who thought, by taking these appointments, they might have a chance of getting it. Not only were the stipends in most cases obviously insufficient, but in almost every instance they were clogged with the condition that all drugs, &c., should be supplied by the medical officer, and, to make their dependence more complete, the parish doctor was reappointed annually. By degrees, however, certain concessions were made. Then the Government of the late Sir R. Peel introduced the principle of putting the charge of half the salaries on the Consolidated Fund. Certain fees for midwifery and sundry operations were ordered, and the appointments were made permanent; but though those improvements were effected, the great cardinal evil of the insufficiency of the stipends, the large area of many country, and the excessive population of many town districts, with the provision of all medicines by the medical officers, and though half the salary was paid by the State, the entire absence of any principle on which the stipends were fixed, even in the same union, led to a more or less continuous agitation amongst the members of the medical service for a redress of what has been called their grievances. Having given this short sketch, the speaker now proceeded to point out the evils that had resulted from the present system, stating that the amount of pauperism traceable to sickness of the working classes had been variously estimated. Dr. G. Wallis had put it at seventy-two per cent.; Mr. G. Hardy, in introducing the Metropolitan Amendment Act, at fifty per cent. His own inquiries had led him to the conclusion that Dr. G. Wallis' estimate was nearer the truth. That it was very considerable was shown by the last report of the Poor Law Board, from which it appeared that from a total of 1,085,000 paupers, four per cent. only were adult males destitute from want of work, and that thirty per cent. of the in-door, and thirteen per cent. of the out-door, were absolutely on the medical officers' books, these being wholly irrespective of the families dependent on them. Besides these there were vast numbers of people disabled by age, or spinal infirmities, and of children, many being orphans. Passing to the stipends of the medical officers, he stated that they were fixed on no principle whatever; thus they varied from 8d. to 7s. in a case of sickness, the largest proportion, however, being below 3s., and that from an analysis of the expenditure on drugs for sixty metropolitan medical charities it has been found that the average cost of medicines only amounted to 2s. 5½d. per case of sickness. It was therefore obvious that many of the pauper sick either went without

medicines, or if they were prescribed for as they should be, it would only be at a primary loss to the parish doctor. Passing to another point equally important, if sufficient visits, and consequently proper attention was paid to the sick, he found there was a general order of the Poor-Law Board limiting the area of a district to 15,000 acres and the population to 15,000 persons, and that as regards the area there were no less than 665 districts which exceeded 15,000 acres, and of this number 31 were above 30,000, 11 above 40,000, 12 above 50,000, 8 above 60,000, and 4 above 70,000; and in reference to population, there were 205 districts above 15,000 persons. Of this number, 15 exceed 30,000; 9, 40,000, and even more than this. Similarly, there was an understanding that one district only should be held by a medical officer, but in reality there were 627 districts, which were held by 291 medical officers, whilst 266 medical officers nominally attended from 1,000 to 10,000 cases of disease annually; in fact, the Poor Law Board had never seriously attempted to interfere with local medical relief arrangements, though it must be evident that it had been reduced in such huge districts and populations to a mockery. He then proceeded to state that, on turning to the annual reports of the Poor Law Board, he found that in 1852 the gross expenditure in pauperism was £4,897,685. Since that time it had almost uninterruptedly increased, until at the last report (that of 1869-70) it had reached the enormous amount of £7,673,000, or an advance of £2,775,315 above that of 1852. Turning to a more pleasing picture, that presented by Ireland, he said that up to 1851 their medical relief system was most unsatisfactory, but in that year an Act called the Medical Charities Act was passed, by which a medical commissioner and medical inspectors were added to the Poor-law Commissioners, and provision made for the division of each union into dispensary districts, there being for all Ireland 719 districts, with 1,045 stations, some districts having two or more stations. At that date the total outlay was £1,199,678, or 1s. 7d. in the £, inclusive of £54,289 spent on medical relief. At the end of seven years, the gross relief had fallen to £513,614, or 8½d. in the £, medical relief having been increased to £99,336. After that it slowly rose again, owing to the derth of employment, and the Fenian outrages; but in 1869-70 it was £218,858 less than in 1852, or 1s. 0¼d. in the pound, and yet medical relief had been increased £69,420 above that of 1852, being £123,000 under the Medical Charities Act, and £10,000 on the Irish workhouses—total £133,000. That under this system medical relief was so complete that during the year ending September 29th, 1870, 581,224 cases of disease were prescribed for at the dispensaries, and 203,200 cases visited at their own homes, total 784,424, at a cost of 2s. 6d. per head. He stated that medical relief in Ireland did not make the recipient a pauper; the result being that whilst there were 784,006 out-door poor in England, and 157,740 in-door, there were only 50,257 out-door to 288,953 in-door poor in Ireland; the rate per head for out-door poor in England being £4 5s. per annum; in Ireland, less than £1. In-door poor: England, £9 16s. 3d.; Ireland, about £2 10s. He then drew attention to the circumstance that the higher cost of in-door maintenance in England was due mainly to the fact that district medical officers had been compelled by the poverty of their resources to send many of their sick into the workhouses, and that these latter had degenerated in consequence (in urban districts especially) into huge hospitals; whilst in Ireland, owing to the efficiency of the out-door medical relief, the house could be and was used as a test. He then proceeded to contrast the results of the two systems, and quoted Belfast, where the population was 144,629—eighteen medical officers; cost of drugs, £1,508 6s. 3d.; salaries of medical officers, £2,397; gross relief, £25,000, with the contiguous unions of Newcastle and Gateshead, where the population was 170,377—medical officers, fifteen; salaries, £1,212 (out of which they had to find drugs); gross expenditure, £60,500; also Cork—population, 147,572; twenty-two medical officers; drugs, £1,407 1s. 4d.; stipends of medical officers, £2,430; gross relief, £35,846. Bristol and Clifton—160,714; medical officers, eleven; salaries, £1,210; gross relief, £70,414; pointing out that in each of the Irish unions the cost of drugs only was £200 above that paid the English medical officers as stipends, from which they were supposed to find them. He then gave the estimated population of England and Wales as 22,000,000, the cost of medical relief as £282,000; gross relief, £7,673,000; Scot-

land—population, 3,200,000; medical relief, £33,784; gross relief, £931,274; Ireland—population, 5,500,000; medical relief, £133,000; gross relief, £817,772—being for gross relief 7s. 0½d. per head in England, 6s. 0½d. in Scotland, and 2s. 11½d. in Ireland; and that medical relief constituted the twenty-seventh part of the gross outlay in England and Wales and in Scotland, and one-sixth part in Ireland. He then proceeded to state that if efficient medical relief was followed by diminution of expenditure on pauperism it was obvious that it must affect the death rate, and this he showed had been absolutely proved to be the case by a parliamentary return recently obtained by Mr. W. H. Smith, from which it appeared that whilst 1 in 43 of the population died yearly in England, 1 in 44 in Scotland, only 1 in 69 died in Ireland, and whilst zymotic or preventible deaths in England constituted one-fourth of the total mortality in 190 of the population, Scotland one-fourth, and in 194 of the population, whilst in Ireland it was one-fifth of the total mortality, and 1 in 305 of the population, and that the correspondence of general and zymotic mortality in England and Scotland was evidently due to the same cause—deficient medical relief. He further observed that this lower rate of mortality was not always the case, for in Ireland, up to 1852, fever was the opprobrium of the island, and small-pox destroyed its thousands of lives annually, now fever had remarkably diminished, and small-pox had been all but stamped out. He further proceeded to state that to show the importance of the subject it had been estimated there were 4,500,000 of the working classes, and that one-half of these were ill every year, therefore it was obviously the most economic policy to provide such means as would cure their sick as rapidly as possible. Dr. Rogers then proceeded to urge on the Chambers the advisability of adopting the Irish system of medical relief, and said if this were done it would involve an outlay of £310,884 on medical officers' salaries, £128,000 on drugs and appliances, and £94,000 on rent, &c., of dispensary buildings; total, £532,884, being an advance of £250,000 above that now paid for medical relief, and that if this sum was conceded it would allow the recommendations of the Royal Sanitary Commission to be effectively carried out. This additional outlay, he contended, would be speedily recouped by diminished gross poor relief expenditure. He further said that it was no part of his scheme to throw on the existing ratepayers any more burdens, *even apparently*. He had long since felt that the incidence of the poor-rate was most unequal, and that large numbers of the community escaped contributing to it in any way. He held, therefore, that it was desirable there should be a rearrangement of the meshes, so that all who benefit from the labours of the working classes should be brought fairly within the net. If this were true of poor rates in general, it was more especially correct when we came to deal with the expenditure on sanitary care and the cure of sickness when occurring among those whose means preclude their obtaining it for themselves. He would, therefore, urge that the entire cost of medical relief, and the charges incident to such sanitary care, should be paid from the Consolidated Fund, and for convenience he tabulated his reasons. They were as follows:—(1) Because the incidence of local taxation was unequal and limited. (2) Because the character of modern pauperism was migratory, and had nearly ceased to be parochial. (3) Because sickness cannot be localized; for these epidemics which strike first and hardest the poorer classes, extend from them to those above them on the social scale, and were also liable to, and did spread over large tracts of country. (4) Because such epidemics, when occurring among the poor, were entitled to at least as much consideration as when occurring among cattle—and the ravages of cattle-plague had been met by a rate thrown over a whole county—especially as the health of the poor, and their preservation from such epidemic outbreaks, was a subject in which the whole community was vitally interested. (5) Because illness among the poor in one part of the country required the same skill and outlay on medicines, to treat it successfully, as in another. (6) Because the principle having been conceded, of part payment from the Consolidated Fund, no valid objection could be advanced why the whole should not be thus paid. (7) Because local and often prejudiced opposition to necessary expenditure would be determined, if the whole community contributed equally, upon a basis settled by some central authority.

Mr. CORRANCE, M.P., said that the present poor-law system was admitted to be a complete failure; and one cause of that, no doubt, was that there was a centralised Board in London, very few of the members of which ever went beyond the circle of the Metropolis. The main principle of the poor-law of 1832 was that of endeavouring to get rid of out-door relief by bringing all applicants for relief to the test of the house. That principle was carried out, with a moderate degree of success, for a few years; but it ultimately broke down, because it was found that without risk of a revolution it would be impossible to apply such a test (Hear, hear). Some years after the establishment of the English poor-law system, the Irish one was started under the most unfavourable circumstances. There was degradation, physical and moral, to interfere with its satisfactory working; and about 1848 it completely broke down, owing to causes which were well known. Amid that state of things a remedy for the prevailing evils happily suggested itself. Under the Medical Charities Act passed in 1805, in order to arrest the spread of fever, power was given to divide the whole country into dispensary districts, and upon that basis there was founded a vast national system under which every family and individual who required it received medical relief without being thereby pauperised. It was that alone which rendered it possible to apply the in-door test in Ireland; and the result was that, while only 50,000 persons were classed as paupers, 700,000 persons received medical relief without being pauperised under the Act to which he had alluded. In conclusion, the hon. gentleman stated that he intended to introduce that question in the House of Commons on the 23rd instant, and appealed to the Council to assist him with some previous expression of their opinion.

Mr. VARDEN (Worcestershire) moved the following resolution: "That the present system of Poor-law medical relief is inadequate to the wants of the poorer classes, is unsatisfactory in its results, and requires amendment. To this end it is expedient that the provisions of the Irish Medical Charities Act and a dispensary system be generally adopted throughout England with such modifications as may render it applicable to the English system of Poor-law administration." It was manifest that if greater attention were paid to the sick poor the rates would be materially reduced. That treatment which lessened the duration of illness and saved life must be the truest economy to the ratepayer, a great blessing to the poor, and an important gain to the nation. It was a wasteful policy to create paupers by neglecting the poor in time of sickness (Hear, hear).

Mr. READ, M.P., seconded the resolution.

Mr. DALRYMPLE, M.P. for Bath, expressed his conviction that a large portion of the pauperism which prevailed was produced by diseases which were preventable, but which could not be prevented without speedy and early treatment (Hear, hear). One of the great defects of the present system was delay in bringing medical relief to the home of the poor man. The cost of medicine ought never to have been paid out of the medical officers' salary; such an arrangement being a temptation to scamp medicines in every way, and to throw the burden of the medical man in the shape of medicine upon the shoulders of the ratepayers in the shape of medical comforts (Hear, hear). He well knew that in the union with which he was connected the supplies of the butcher and the wine merchant had been substituted for medicine. He wished to see medical relief given in this country without involving the humiliation of pauperism, as it should be given to every one who owing to his humble station in life could not afford to pay for it. He wanted to see the pay of the medical officers so large as to make them less dependent on private practice and more ready to devote their time and attention to the wants of the poor (Hear, hear). The guardians had no right to employ an inferior-educated medical man for the poor (Hear, hear). The poor required the best kind of medical attendance as well as the rich, and if that were borne in mind there would be fewer of these epidemics which so much increased the amount of pauperism.

Mr. READ, M.P., said some years ago Mr. Pell and himself made a tour through Ireland, and what most struck them in the poor-law system there was that while the wages paid were less than those paid in England the amount spent in poor relief was very much less. They were also struck with the almost total absence of outdoor relief (Hear, hear). If a man

knew that he could have medical relief without being a pauper that would tend to elevate him, and to prevent him from becoming a pauper (Hear, hear). In such a case there was no sense of shame like that which existed amongst numbers of the English in the rural districts, many of whom were born paupers. Indeed, the great effort of many of the poor in some parts of England was not to see how long they could keep off the rates, but how soon they could get on them (Hear, hear). He believed that a better system of medical relief would do a great deal to benefit the labouring classes, and he felt certain that it would save the pockets of the ratepayers.

Mr. PELL, M.P., had known many families of paupers who became pauperised for want of medical relief when sickness first made its appearance among them.

Mr. TURNER said he should like to hear from Dr. Rogers whether the dispensary system had not been tried in England.

Dr. ROGERS replied that it was tried in London.

Mr. TURNER asked from what source the expense was paid in Ireland?

Dr. ROGERS replied that one-half came out of the Consolidated Fund, adding that the Irish Medical Officers' Association, like that which he represented, contended that the whole amount should come out of that fund (Hear, hear).

Mr. CORRANCE, M.P., observed that while Mr. G. Hardy was the President of the Poor-Law Board, the dispensary system was introduced in London, but that its operation was afterwards suspended.

Mr. TURNER, adverting to what had been said about the supplying of medicines by the medical officers, observed that in the Fen District, with which he was connected, quinine and cod-liver oil were purchased by the guardians.

Mr. KERSEY said he believed that sickness among the poor arose from overcrowded dwellings as much as from any other cause; and he concurred in the opinion expressed by Lord Derby, in an able speech made by him a short time ago, that they might do what they pleased to diminish drunkenness and other vices, but that unless they diminished overcrowding all their efforts would, so far as the doctor was concerned, be in vain. He (Mr. Kersey) believed that if the number and pay of medical officers were three times as great as they were, that would be for the interest of the ratepayers (Hear, hear).

The CHAIRMAN said he was sure they all felt that they were greatly indebted to Dr. Rogers for bringing that subject forward (Hear, hear). That gentleman appeared to have three objects—to secure greater efficiency, greater economy, and greater humanity—and no one could doubt that the subject was well worthy of attention (Hear, hear).

The resolution was then put and carried, and it was resolved that a copy of it should be forwarded to the provincial Chambers, and also to the President of the Poor-law Board.

A vote of thanks was afterwards given to Dr. Rogers.

The business on the agenda paper having thus been disposed of,

Mr. WEBB said he wished to mention one important matter which was not included in the agenda; he alluded to the vexed question of the Game-laws. There was then before the House of Commons a Bill to exempt hares and rabbits from the operation of those laws, and to secure compensation to occupiers for injury that was done to them in consequence of their prevalence on adjoining land.

The CHAIRMAN remarked that as that question was not included in the agenda paper the meeting could not entertain it (Hear, hear).

Mr. PELL, M.P., thought it would be most unwise to express approval without having first considered it in the usual way and without due notice having been given, that it was to be discussed (Hear, hear). Moreover, they need not be in a hurry in that case, as the game bills would, no doubt, all be shelved for this session.

Mr. READ, M.P., felt that the bill referred to was a very good one, but agreed with Mr. Pell that it was not desirable for the Council then to express any opinion upon it. No doubt it would be referred with the other bills on the same subject either this session or next, be a Select Committee.

Mr. DUCKHAM believed that the provisions of the bill in question were precisely in accordance with a resolution passed recently by the Chamber.

The CHAIRMAN, nevertheless, agreed with Mr. Pell that it was not advisable for the Council to express an opinion on a

Bill which it had not had an opportunity of fully considering, although it was far superior to any previous measure (Hear, hear). If Mr. Webb wished the attention of the provincial Chambers to be called to that bill, there could, he thought, be no objection to that, but he did not think anything beyond that would redound to their credit as an agricultural Parliament.

On the motion of Mr. WEBB, seconded by Mr. HORLEY, it was then resolved that the Central Chamber should call the attention of the provincial Chambers to the Bill introduced by Sir Selwin-Ibbetson in the House of Commons.

This terminated the proceedings. It may be added that this was understood to be the last meeting during the present Session of Parliament.

THE MIDLAND FARMERS' CLUB.

THE BREEDING OF STOCK.

At the June meeting, the President, Mr. G. Wise, in the chair, Mr. FINLAY DUN read a paper on "Some of the Principles concerned in the Breeding of Stock."

Mr. DUN said that for centuries Britain had been famous for its breeds of domestic animals. We boasted of the fleetest and grandest horses the world had ever seen; of the most symmetrical and precocious cattle, sheep, and pigs; of the most valuable dogs, poultry, and pigeons. In the art of breeding hundreds of intelligent educated observers had been engaged. The theory or science of breeding had been carefully investigated by such competent authorities as John Hunter, Owen, Darwin, and Wallace. He could not pretend to offer any original views or scientific observations, but only to gather into a simple, popular form some of the ascertained ideas in regard to a very intricate subject, and to endeavour to draw a few practical conclusions. The propagation and development, and the growth and decay, of plants and animals, all depend upon laws as fixed and immutable as those which regulate the movements of the heavenly bodies, the aggregation of crystals, or the affinities of chemical compounds. One of the most notable and generally recognised principles of stock breeding was expressed in the familiar axiom "like produces like." The most insignificant plant produced plants the fac-simile of itself, and experienced flockmasters and attentive shepherds could readily distinguish lambs descended from particular rams. Not only were the good qualities of parents transmitted to their offspring, but faults, imperfections, and diseases. Amongst cattle good milking properties, difficult calving, tendency to puerperal fever, and many other diseases were inherited both from the male and female parents; and frequently, amongst thoroughbred stock, the chestnut colour of some of the old stud horses cropped up. From ignorance, and still more often from a penny-wise-and-pound-foolish policy, sickly and delicate animals were used for breeding purposes. The practical conclusion from these premises was obvious. Both males and females intended for breeding purposes must be well formed, suitable for the purposes for which they were intended, and of sound and vigorous constitutions. In the breeding of stock, the progeny not only resembled their own immediate parents, but they called back or reverted to by-gone generations; and it was difficult to say for how many generations old peculiarities would continue to crop up. Shorthorn authorities demanded four distinct crosses of accredited blood as the minimum amount, without which no animal could be regarded as of sufficiently pure descent to be admitted into the *Herd Book*. It was evident the more inherent or family characters, rather than the accidental or individual ones, were more particularly transmitted from the parents to their offspring. To ensure definite results in breeding, the pedigree and antecedents of the parents must be known; and in this alone was the transmission of desirable characters certainly secured. In the successful breeding of sheep, the importance of using well-bred rams of established and fixed characters is now generally admitted by all intelligent flockmasters. The laws of variation must also be considered. Nature was so profuse in her variety, and so fertile in her resources, that mere slavish copies were never produced. Although to the superficial gaze animals and plants appeared identical, the variability of each was very great. But the law of variability had an evil as well as a good aspect. Whilst on the one hand there was fortunately a tendency to increase of size and vigour and fertility, there was, unfortu-

nately, on the other, a like tendency to weakness, to deterioration, and to infertility. It therefore behoved stock-breeders to be more careful than they were to choose the most desirable variations. Care should be taken to avoid extremes in the breeding of stock. No dependence could be placed on the union of animals possessing dissimilarity of size, of type, or even of colour. The produce of such unions were irregular, sometimes following one parent and sometimes the other, while they were apt to develop the bad rather than the good qualities of each. The practice of breeding in-and-in had been successfully pursued with some of the best race-horses of former days, while in the pedigree of the best Shorthorns the close breeding of some of the most celebrated animals was apparent. Breeding in-and-in, when carefully, rationally, and occasionally pursued, had certainly the merit of improving the quality, style, and neatness of the stock, and perhaps, also, of giving fixity and prominence to any good qualities; but, wherever excessively or injudiciously pursued, it brought many evils in its train. The relative position of male and female in the development of their offspring had given rise to much speculation and discussion. At one time it was believed that the female exercised a passive influence only; but there was no doubt that both parents contribute tolerably equally to the development, although certain parts of the organism appeared to be more especially moulded by each parent—a fact first clearly pointed out by Mr. Orton, of Sunderland, in a most interesting paper published by him in 1854. According to this view, the male impresses more especially his character on the bones, skin, external configuration, and limbs; whilst the female contributes more particularly to the internal organs, the temperament, and disposition. In other words, the male gives the external or locomotive organs; the female the internal or vital organs. From this law two important practical deductions might be drawn: (1) Never to use male animals of faulty form, or with weak, badly-shaped, or diseased limbs; and (2) never to use for breeding purposes females with narrow contracted chests, weak loins, or delicate constitutions. Prepotency of particular breeds and of particular animals was worthy the consideration of the careful breeder. Prepotency occurred in either sex, but was usually most developed in the male. Amongst horses some of the best thoroughbred families, and Shorthorns amongst cattle tribes, were notably prepotent, and, when crossed with Herefords and Longhorns, speedily wiped out, as it were, their specialities. Not only was the habitual and dynamic state of parents transmitted to their offspring, but he had noticed that the produce of worn-out mares and cows showed constitutional debility, and were difficult to rear. The crossing of different varieties of plants and animals was sometimes of great importance to the agriculturist. Amongst the domestic animals the first cross between somewhat remote families of the same species answered well enough, the offspring surpassing the parents. It was, however, difficult to go on breeding satisfactorily from such cross-breeds. The first crosses between the Shorthorn and West Highland or polled cow were generally admirable butchers' beasts, following the sire in size and precocity, and the dam in hardiness as well as fine quality of meat. But with neither of the parent stocks did those cross-breeds pair satisfactorily. It required at least four or five generations of judicious crossing and liberal drafting to obtain the uniformity of either of the parent breeds. The careful matching of different varieties of animals with subsequent judicious selec-

tion had evidently been the means whence had been produced some of the most valuable domestic animals, such, for example, as the race-horse and Cleveland bays, the Galloways, the Shorthorns, and Herefords, and within the present century the Hampshires, Wiltshires, Shropshires, and Oxfordshire Downs. In judicious and practical hands extreme crossing had occasionally been serviceable; but, of course, the produce of many of the earlier generations were by no means what was wanted, and required to be weeded out.

Mr. R. H. MASTEN fully concurred in what had been advanced relative to keeping females on good food immediately previous to and during the period of gestation. He had treated his ewes in the manner described, and the result had been very satisfactory. He was, moreover, convinced that, however good a first cross might be, it was a great mistake to breed from cross-bred animals. He recommended all persons to breed from pure strains, being of opinion that the man who used any male animal of doubtful lineage had to pay dear for his whistle.

Mr. FOWLER remarked that ordinary farmers who grazed for the butcher, paid their rent, and made a livelihood out of their land, could not, as a rule, afford to go to a great expense in keeping high-bred stock.

Mr. HORLEY thought no man could make a greater mistake than in keeping a badly-bred animal.

Mr. FOWLER said the question was one of degree.

Mr. BARTLETT thought it was to be regretted that at agricultural shows prizes were not offered for those animals which give the most milk and butter.

A vote of thanks was carried by acclamation to Mr. Dun, and the proceedings then terminated.

STEAM CULTIVATION.

About ninety members, on the invitation of Mr. J. R. McClean, M.P., paid a visit to Cannock Chase, for the purpose of inspecting the operations of the steam machinery employed in bringing into cultivation the large tract of land in the occupation of the Cannock Chase Colliery Company. The portion of the Chase held by the Company, under a long lease from the Marquis of Anglesey, produces an excellent description of coal, the principal portion of which finds its way to Birmingham and the neighbourhood; but situated in the midst of a dense population, the idea that the surface of 2,000 acres should not be allowed to remain unproductive forced itself upon the enterprising mind of Mr. McClean, who thereupon contracted with the Staffordshire Steam Ploughing Company to prepare it for the reception of crops. The party was headed by Mr. G. Wise, the president of the Club. At Hednesford Station the carriages in which they were conveyed were detached from the ordinary train and drawn by engines specially sent by Mr. McClean to the scene of operations, where they were received with a cordial welcome from that gentleman. The recent rains had caused the work to be suspended for a day or two; but the various implements were put in motion, for a time, for the benefit of the visitors. The system pursued is that known as the direct action; and the plant consists of eight portable or traction engines of from ten to fourteen-horse power each, a five and a three-furrow plough, two cultivators, two sets of harrows, and two double diggers—a new implement designed expressly to meet the requirements of the present work. These are mainly from the establishment of Messrs. John Fowler and Co., of Leeds, with a few of the items from Messrs. Howard, of Bedford. The soil for the most part is a black peat resting on poor sandy gravel; but some parts are quite boggy, and in others of a rather stronger nature. The first plot inspected had been worked with the double digger before alluded to, the chief peculiarity of which is that the share which takes off the surface is placed last instead of first. By this arrangement, on the return journey or second bout, the three inches of surface pared off, with the heather, fern, and bilberry roots, are passed over by the wide heavy wheel with a pressure of about two tons, and this valuable vegetable matter is then covered with eight to nine inches of the subsoil. The chief obstacle to the process is the bilberry plant, which grows in patches in most parts of the Chase, and to remove which various methods have been tried, a rotary

dise in advance of the plough-share being most efficacious. As this, however, rather retards progress where the land is free from bilberry roots, it has been found more economical in practice to have this obstacle cleared away by labourers, before the soil is cultivated. The second plot, being tolerably free from heather, &c., on the surface, had been twice cultivated, or scuffled, instead of being ploughed, and then harrowed four or five times; the intention being to plant rape or turnip shortly, as was also the next plot, which, from the fact of its being found in small high-backed lands, about four feet across, and tolerably free from heather, no doubt had in former years—perhaps during the last century—been under culture. It was originally intended to have put this in oats; but the weather interfered, and the land was not quite ready for sowing in time. The fourth plot was untouched until the first week in April, when it was double dug with the implement described as used for the first plot, then harrowed and manured, and planted with potatoes. The sorts used were white rocks, and red regents; the breadth planted with these being about 150 acres, which received a dressing of $8\frac{1}{2}$ cwt. of Proctor and Ryland's potato manure, and 2 cwt. of salt per acre; and it is intended to apply about 50 cwt. of lime per acre, and harrow the same in previous to moulding up the potatoes. The next plot had been cultivated until two or three years ago. In the interval it had laid waste, and was a mass of couch grass, several hundred loads of which had been brought to the surface with the cultivator, collected, and burnt; but much yet remained to be disposed of. The portion in oats was the last walked over. This had been ploughed, in the autumn, six inches deep, with the four-furrow plough; and, although the oats were not sown until May 9th, there is every probability of a fair crop—at least of straw.

After the inspection the company partook of luncheon in a wooden shed, on the spot, under the presidency of Mr. McClean, who, after giving the health of the Queen, proposed Prosperity to the Midland Farmers' Club.

Mr. Wise, the president, responded, thanking Mr. McClean for the pleasure he had afforded the members, and for his hospitable entertainment, as well as for the practical lesson he had taught agriculturists generally as to the reclamation of large tracts of waste land by steam-power.

Mr. McCLEAN hoped the Club would favour him with another visit in July, 1872, when he would show them the results in the crops, and also lay an account of the expenditure before them.

Mr. MASTEN referred to the approaching visit of the Royal Agricultural Society to the county, and the benefits to be derived from inspecting the trials of the implements, which would shortly commence; he urged those present to assist in freeing the Local Committee from the liabilities they had undertaken in connection with the exhibition.

Mr. MAY stated his decided conviction, after ten years' trial, that steam cultivation was, in his case, a success, he having been able to dispense with four horses out of thirteen; while, on such soils as his, a rather strong loam on marl (where not too much of the subsoil was brought up at once), he considered the yield of wheat was increased.

Mr. BRAWN regarded the reclamation of tracts of waste land as of great national importance, and as a much more desirable method of employing the surplus agricultural labour of Dorsetshire, than encouraging men to emigrate. He also commended the scheme to those who were complaining of the high price of meat, in which he was seconded by Mr. WINTERTON.

After a few remarks from Mr. Wm. FOWLER, the party returned to the carriages, and the heavy storm which had been threatening, came down during the whole of the return journey.

PRIZE HORSES.—Major Barlow has given the following names: to the Islington four-year-old by Seneschal, *Treyolhan*; to the Guildford four-year-old by Hunting Horn, *Beckford*; and to the Guildford yearling by Dalesman, *Guildford*. These are all prize horses, as the six shown this season from Hasketon have all taken first honours.

THE ROYAL AGRICULTURAL SOCIETY OF IRELAND.

The monthly meeting of the council was held in Sackville-street, Dublin.

Sir GEORGE HODSON, Bart., occupied the chair.

The CHAIRMAN said he had been requested by the local committee to submit the following resolution, which had been unanimously adopted by them: "That at the next show the council of the Society be requested to sanction an arrangement contemplated by this committee, to have a separate enclosure and a separate jumping ground."

Mr. WADE explained that this matter had been fully considered by the local committee, and it was for the council to decide if they approved of the change. The jumping ground was distinct from the show. The resolution could be carried out by the Society declining to take any part in the arrangements of the jumping yard, and giving the local committee permission to take out the horses for jumping, or retaining the control of the premises connected with the show, which they always had; but at the same time to allow the committee to reap whatever benefit they could therefrom. There were considerable expenses connected with the jumping which would have to be met by the committee, for which they had no funds available; but it appeared to him that it would be fair that those who joined in this sport should pay for their amusement. The council would also have to decide whether members who went into the jumping ground would have to pay like the general public. Another matter was, whether tickets for the show should not be issued at prices, to be subsequently fixed, available for the entire premises. In the first place he moved that the council grant the request of the local committee, to make a second charge for entering the jumping ground.

The CHAIRMAN observed that it struck him as the Royal Dublin Society had waived their right to hold their show this year, making a second charge would be a little sharp practice upon the arrangements which had been already made by that body.

Sir PERCY NUGENT said there was no doubt there would be a question raised as to that.

Mr. MACFARLANE observed that there would be a charge made for reserved seats.

Mr. WADE said that always had been done. At the English shows the jumping ground was entirely separated from the ordinary show. At the Manchester show the jumping yard was fenced off from the rest of the premises. The only thing required was to permit the horses out of the general show-yard into the jumping ground.

The Hon. Mr. TRENCH inquired if the public were required to pay twice.

Mr. WADE replied in the affirmative.

Mr. PURDON mentioned that £500 would be expended in the erection of the stand.

Mr. WADE stated that the resolution, if adopted, would not come into operation until Wednesday.

Mr. MILLWARD concurred that it was right that people should pay for the accommodation of a stand; it was a pity to make a second charge into the jumping ground.

Mr. PURDON said it was only following the example of the Manchester show. They paid first for going into the general exhibition, next to the jumping ground, and also for getting on the stand.

Mr. WALDRON disapproved of having a second charge. If a party went there with some ladies, and that so many charges were made, in addition to driving out, he feared they would have a select audience.

Mr. VESY believed the ground would be as full as possible if a charge of 1s. was made for going into the jumping ground.

The Rev. Mr. BAGOT remarked that they were only asking to do what had been done at the English royal shows. The local committee had voted £500 for the show, and they were most anxious to meet the council in every way. They were very anxious to get Stephen's-green, but from the legal difficulties which had arisen they could not do so. On holding it outside they had lost the probability of getting £300 from the

corporation. In making the financial arrangements they did the best they could. As this was to be a separate show, and having voted a large sum to carry it out, all that they asked was that the council would give them power to charge, if they thought fit, for seeing the jumping.

Sir PERCY NUGENT believed the ground would be empty if they made a double charge.

The Rev. Mr. BAGOT said it was entirely a matter of finance. The contract already amounted to £4,000; and if the committee had not thought it the best thing to do, they would not have adopted the resolution. The point was discussed at their last meeting, as to whether or not they would have a stand.

Mr. PURDON stated that the great difficulty experienced in the Stephen's-green show was, that parties insisted on getting inside the ring. If there was no separate charge they would have a thousand or five thousand persons forcing their way in there, so that they might as well give up the jumping altogether.

The Rev. Mr. BAGOT observed that they would take care to make it worth while for parties to pay the extra charge for going in.

Mr. WADE mentioned that it was not incumbent on the local committee to have jumping at all.

Mr. TOWNSEND seconded Mr. Wade's motion, which was adopted.

The other matters contained in the resolution passed by the committee were also passed. Communications were received from the Bandon Farming Association and the County Cork Agricultural Society, requesting to be affiliated to the parent society. The requests were acceded to, and the secretary was directed to furnish the necessary information in reference thereto.

A letter was read from Mr. Henry Trench, offering to give a prize, value £10, for the best machine for cutting and making turf.

On the motion of the Rev. Mr. BAGOT, the offer was accepted.

The Secretary was ordered to advertise for proposals for holding the society's show for 1872 in the province of Ulster.

The half-yearly meeting was held at two o'clock. Mr. Lefroy in the chair. The half-yearly report was read as follows: Your council, in submitting the report of the society's transactions during the past half year, are happy to state that there has been a fair accession of members during that period, although a more active co-operation on the part of those interested in the promotion of agriculture in Ireland is most anxiously to be desired. The annual exhibition of your society to which has been added a special horse show, will be held in the first week in August next, in Dublin, for the province of Leinster, under the presidency of his Royal Highness the Prince of Wales. Your council have to report that, in consequence of legal difficulties having arisen, the results of which might possibly have interfered with the holding of the exhibition in Stephen's-green, the intention to do so has been abandoned, and the consent of the trustees of the Pembroke estate has been obtained for the use of a large plot of ground most suitable for the purpose, adjacent to the railway station at Lansdowne-road. A trial of mowing machines and other haymaking implements will be held early in the month of June on the grounds above referred to. The local committee are unremitting in their endeavours to render the undertaking in every way attractive. The prize-sheet has been considerably augmented, and additional inducements have been held out to tenant-farmers to compete in the several classes set apart for them. In anticipation of a very large attendance of visitors, your council have decided on complying with the suggestions that the exhibition should open on Tuesday and continue until Friday, thus adding one more day to the time usually occupied by the show. The social condition of the labouring classes continue to occupy the attention of your council. They are happy to state that the competition for the provincial gold medals for newly-erected and improved labourers' cottages has increased in this year, as well

as for drainage and the reclamation of waste lands. The following is the report of analyses made by Dr. Apjohn during the past year: "Dear sir,—During the year 1870 I have made 56 analyses for members of the Royal Agricultural Society: the substances reported on being 3 oilcakes, 2 waters, 1 sample of Cambridge coprolites, 3 soils, 1 specimen of sulphate of potash, 8 phospho guanos, 16 guanos, and 22 superphosphates. The superphosphates and the phospho guanos (a name given to superphosphates to which ammonia has been added) were generally well made, and contained, as a mean, 17.49 per cent. of bi-phosphate, corresponding to 27 of phosphate of lime made soluble. The results obtained in analysing 11 of the 16 guanos are deserving of special attention, being materially different from those which genuine Peruvian guano was, until recently, accustomed to yield. I subjoin, in a tabular form, the amount of the phosphate of lime and of the ammonia occurring in each :

No.	Phosphate of Lime.	Ammonia.
1	19.04	11.28
2	23.90	10.74
3	15.36	10.20
4	16.80	11.01
5	19.20	10.71
6	15.76	11.11
7	24.00	10.40
8	27.36	9.79
9	25.71	10.74
10	21.00	10.20
11	20.50	12.10
Mean	20.72	10.80

The inspection of this table is quite sufficient to show that the article at present sold as Peruvian guano is much inferior in quality to the guano of same name which until recently was found in the European market. The latter included about 22 per cent. of phosphate of lime, and was capable of yielding, on an average, 16 per cent. of ammonia; while the main results for phosphate of lime and ammonia of the guanos in the above table are only 20.72 per cent. of phosphate of lime, and 10.74 per cent. of ammonia. In fact, a ton of such guano is less valuable than a ton of the Peruvian guano with which, until lately, farmers were supplied by no less a sum than £3 1s. 10d. It is obvious, therefore, that henceforward it will not be safe to purchase what purports to be Peruvian guano, unless it be first analysed, and valued in accordance with its composition and the prices of its valuable constituents, which may be deducted from the present state of the manure market. And here I may mention for the information of the members of the Royal Agricultural Society that I have recently materially modified my method of estimating the values of manures. The multipliers which I have long been in the habit of using at one time correctly gave the money values; but, in consequence of the substitution at present generally made of coprolites and mineral phosphates for bones, the price of the phosphate of lime necessary for making superphosphates has been greatly reduced, and, as a consequence, the former method of estimation gives results for money values much higher than the prices at which the superphosphates can be purchased. Notwithstanding this, my former method of estimation served an important purpose; for, though not absolutely true, it gave results which were relatively correct, and thus served as an important guide to farmers in the selection of the fertilising applications which they required. There can, however, be no doubt that if, from accurate analysis first made, we can deduce not only relative, but absolute values, the communication of such information must be valuable in a high degree to all persons engaged in tillage farming, and who are under the necessity of laying in annually a stock of artificial manures. I have now merely to say that I have maturely reconsidered this question of money values, and have arrived at simple rules, which I shall give, without attempting to explain the processes by which they were obtained. They will, I think, be found very easy of application, and are at present perfectly correct: that is, they give the prices at which manures are sold by respectable manufacturers. The manure market, too, has become very steady, and I do not think that the rules will, for a considerable time, require to undergo any alteration.

RULES FOR ESTIMATING MONEY VALUES OF PHOSPHATIC MANURES.—Let us suppose that a superphosphate on analysis is found to contain: A lbs. per cent. of insoluble phosphate of lime; B lbs. per cent. of biphosphate; and C lbs. per cent. of ammonia; then the money value of such manures will be in shillings, given by the following rules:

1. A by 2.22 is the value of the insoluble phosphate in a ton.
 2. B by 6.56 is the value of the biphosphate in a ton.
 3. C by 15 is the value of the ammonia in a ton.
- And hence the money value of one ton of manure is A by 2.22 + B by 6.56 + C by 15.

EXAMPLE.

Insoluble phosphate of lime 12 } These quantities of phospho-
 Biphosphate of lime ... 17 } phosphate, biphosphate, and
 Ammonia... .. 2.5 } ammonia are often found
 in a phosphatic manure.

- Rule 1. 12 by 2.22 = 26s. 7d. = £1 6 7
 2. 17 by 6.56 = 111s. 1d. = £5 11 1
 3. 2.5 by 15 = 37s. 6d. = £1 17 6

Money value of a ton £5 15 2

I may mention that if the insoluble phosphate of lime is composed of coprolites of mineral phosphates, it is considered to be inactive as a manure; for though phosphate of lime is present, from its insolubility it can scarcely exercise any fertilizing influence. If, however, the insoluble phosphate be bone earth, or the phosphate of lime which is found in a guano, it should be valued by Rule 1, above given. I am, dear sir, faithfully yours,
 JAMES APJOHN.

South Hill, Blackrock, May 16, 1871.
 Captain Thornhill.

In accordance with our ninth rule, the entire Council now go out of office, but are eligible for re-election. A correct list of those members whose subscriptions have been paid previously to the 1st of April has been prepared, and forwarded to each member entitled to receive it.

The following gentlemen have been recommended to form a finance committee for the current year: Joseph Kincaid, Wm. Donnelly, C.B., Phineas Riall, Hon. Charles J. Trench, Hans. H. Woods, Charles C. Vesey, H. F. MacFarlane, J. M. Royle, C. U. Townsend.

Annexed is a statement of the receipts and expenditure during the year:

ABSTRACT OF ACCOUNTS FOR 1870.

To balance to credit from last account	£651 15 0
Subscriptions received from the 27th April, 1870, to 20th April, 1871, inclusive	1,033 2 0
Interest on £5,355 5s. 9d. in Three per Cent. Stock for one year to April, 1871	164 15 3
Cash from Local Committee of Ballinasloe Show	500 0 0
Lord Blaney's donation for 1870	10 0 0
One and a-half year's rent of Agricultural Club to 1st of May, 1870 (less taxes, &c.)	81 11 4
	<hr/> £2,491 3 7

CIRCULAR.

ESTABLISHMENT—

By Premiums to Local Societies	£264 5 0
Medals for the year...	200 3 6
Secretary's Salary	250 0 0
Chemist's do.	100 0 0
Accountant's do.	80 0 0
Hall Porter's Wages	26 0 0
Rent and Insurance of Premises (less taxes)	135 7 2
Remittance to the Committee of the British Association on the treatment of Sewage	5 5 0
Secretary's Expenses to Oxford Show	14 17 0
Printing, Stationery, and Advertising	75 11 7
Postage and Carriage of Parcels	19 13 2
Repairs of Offices and Sundries	16 16 11
	<hr/> £1,187 19 4

BALLINASLOE SHOW—

Prizes paid at Ballinasloe Show	£690	5	0
Judges' Expenses	124	11	0
Director, Stewards, &c. ...	22	9	3
Secretary and Accountant ...	13	10	0
Veterinary Surgeon's Fees ...	5	0	0
Clerk of the Yard	20	17	0
Drawings of the Show Yard ...	2	10	0
Badges, &c.	3	1	11
Printing and Advertising ...	36	10	9
Sundries	4	0	7
	£922	15	6

Judges of Cottages and Drainage	13	17	10
Balance in Bank	£316	10	11
in Secretary's Hands	50	0	0
	366	10	11
	£2,491	3	7

Examined, compared with vouchers, and found correct this 24th day of May, 1871.

WM. DONNELLY, C.B., } Members of Finance
PHINEAS RIALL, } Committee.
GEORGE HODSON, Baronet, Chairman.

Sir GEORGE HODSON moved the adoption of the report, and in doing so observed that it was unnecessary for him to make any particular observation thereon, as it explained itself. He thought the society and the public ought to express their gratitude and thanks to the trustees of the Pembroke estates for giving them the ground at Ball's-bridge free of cost for the holding of the show.

Sir PERCY NUGENT seconded the resolution, which was put to the meeting, and unanimously adopted.

Sir GEORGE HODSON moved the thanks of the society to the trustees of the Pembroke estates, and Mr. John E. Vernon, for consenting to allow to the society the use of the ground at Ball's-bridge for the holding of the exhibition in August.

Mr. HARRIS seconded the motion, which was passed unanimously.

Mr. PURDON next moved the thanks of the society to the Commissioners of St. Stephen's Green for the facilities which they had afforded for holding the show in the Green.

Mr. ROBERTSON seconded the resolution, which was carried.

A ballot was then gone into for the election of fifty members of the council, Messrs. Millward, Purdon, and Robertson having been appointed scrutineers, the ballot closed at four o'clock, when the following gentlemen were elected:—

- | | |
|--------------------------|------------------------|
| Sir George Hodson, Bart. | Sir John Power, Bart. |
| Major R. W. Borrowes. | Hon. C. J. Treach. |
| R. C. Wade. | Laurence Waldron. |
| Rev. R. W. Bagot. | Viscount Powerscourt. |
| Richard Chaloner. | Leopold Cust. |
| Sir Allen Walsh, Bart. | Wm. Donnelly, C.B. |
| William Owen. | Denis Kirwan. |
| James Robertson. | John G. Coddington. |
| Dawson A. Milward. | Hon. L. H. K. Harman. |
| Edward Purdon. | G. A. Rochfort Boyd. |
| Viscount Mouck. | Lord Lurgan. |
| J. M. Royle. | Sir R. Musgrave, Bart. |
| Phineas Riall. | Joseph Kincaid. |
| Sir Robert Paul, Bart. | R. M. Carden. |
| John La Touche. | John Borthwick. |
| Hon. Bowes Daly. | P. J. Newton. |
| N. M. Archdall. | A. L. Tottenham. |
| C. U. Townsend. | Malachi S. Hussey. |
| W. Fetherstown. | Baron de Robeck. |
| Sir Percy Nugent, Bart. | Marquis of Kildare. |
| General Hall, C.B. | Major Barton. |
| R. G. Cosby. | Seymour Mowbray. |
| H. J. MacFarlane. | E. J. Smith. |
| Hans H. Woods. | Michael Cahill. |
| Colonel C. C. Vesey. | Hugh Harris. |

Sir George Hodson having been called to the second Chair,

The REV. MR. BAGOT moved that the marked thanks of the Society be given to Mr. Lefroy for his dignified conduct in the Chair.

Mr. TOWNSEND seconded the resolution, which was unanimously adopted.

Mr. LEFROY expressed his acknowledgments for the compliment that had been paid him, adding that he was always extremely gratified to have an opportunity of doing anything to promote the objects of so valuable and useful a Society (Hear, hear).

The proceedings then terminated.

THE HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.

The monthly meeting of the directors was held on June 7, in their chambers, George IV. Bridge. Mr. Lawson in the chair.

The minute of the special committee appointed to consider and report on the chemical department of the Society, with the view of affording the benefit of chemical investigation to the agriculturists all over the country, referred to in the proceedings of the directors on the 3rd May, was again read.

The board approved of the following suggestions, and resolved to act upon them as opportunity occurs, in any rearrangement of the chemical department:—1. That the chemist should have his laboratory at the head-quarters of the Society in Edinburgh, and reside there. 2. That in fixing the salary of the chemist, the scale of prices for analysis should be revised, with the view of reducing the rates. 3. That the field experiments carried on by the Society should have the chemist's special attention. The publication of the results to be periodical, and under his entire charge and control.

A motion by Sir Thomas Buchan Hepburn—"That a committee be appointed to consider how far it may be possible or desirable to prepare a short account of the present state of chemistry as applied to practical agriculture"—was, after some discussion, referred to the present committee on the chemical department—namely, Professor Anderson, convener; Sir Thomas Buchan Hepburn of Smeaton, Bart.; Professor Balfour; Professor Wilson; Messrs. Stephens, Redbrae; Russell, Pilmuir; Harvey, Whittingham Mains; Melvin, Bonnington; Goodlet, Bolshan; Hope, Fenton Barns; Gray, Southfield; Dickson, Corstorphine; Binnie, Seton Mains; Scot-Skirving, Camptoun; with the addition of Professor Douglas MacLagan.

The following is the petition adopted at last board meeting, and since presented by Sir Alexander Gibson-Maitland to the House of Commons:—Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled, the Petition of the Highland and Agricultural Society of Scotland, incorporated by Royal Charter: Sheweth—That your petitioners, as representing the proprietors and occupiers of land in Scotland, have taken a deep interest in the working of the Gun Tax Act:—That, according to the interpretation of the Board of Inland Revenue, crows and wood pigeons do not come within the term 'vermin' in the exemption clause for the purposes of the Gun Licence Act, and that before any person can shoot such birds he must be provided with a gun licence—That crows and wood pigeons being very injurious to the interests of agriculture, great numbers of them require to be annually destroyed by the proprietors and occupiers of land, who employ a number of persons for that purpose, and your petitioners consider that if a gun licence is required for each it would entail a heavy and unfair expense—Your petitioners therefore humbly pray that crows and wood pigeons may be declared to be vermin under the exemption clause of the Gun Tax Act, so as not to require a licence for the purpose of killing them when authority in writing has been given by the owner or occupier of the land.

(Signed) ROBERT RUSSELL, Chairman of Directors' Meeting.
Edinburgh, 3rd May, 1871.

On the motion of Mr. Scot-Skirving, Camptoun, it was resolved to appoint a committee with power to form a collection of entomological specimens. The following were named: Professor Wilson, Professor Wyville Thomson, Mr. Wilson, Eddington Mains; Mr. Scot-Skirving, Camptoun; Mr. Russell, Pilmuir; Mr. Hardie, Old Cambus. Mr. Scot-Skirving to be convener.

CANON GIRDLESTONE AND THE LABOURER.

At the meeting of the Halberton Benefit Clubs, on Whit-Monday, Canon GIRDLESTONE, the chairman at one of the dinners, said: One thing, he thought, should be altered; he was a practical man and liked to give them his advice, not in a peremptory or dictatorial spirit, and the advice at any rate was worth considering. He would wish to see in this Club, if possible, a large amount provided for old age, for no one could value more than he did the relief which such a Society could afford to those who were sick, and the power of drying up to a certain extent the tears of the widow by making some provision for the decent interment of her husband. When he saw aged men and women almost exclusively dependent on the miserable pittance doled out by the Poor Law, it made him wish that the rules of their Society should be so altered that every member of a family who attained the maximum age should have provided for such a weekly or monthly income as would make his declining days comfortable and happy. He threw out the hint for their consideration, simply as his advice derived from observation of a class to which they themselves belonged. There were one or two ways in which the agricultural labourers—the class he was especially addressing—might better themselves, and one was by co-operative farms. If a certain number of them were to take a farm (and this was no theory, being in operation in other parts of England), and manage it, each one who had an interest in it and no work elsewhere could do a certain amount of work on the farm, and the profits would be shared amongst them according to the amount each invested. They would thus have the means for making adequate provision for old age, and the effect would be to inculcate habits of economy and industry, such as would tend more than anything else to raise the tone and character of the agricultural population. He would go one step further and direct their attention to co-operative stores. There were now naval, military, and civil service co-operative stores—to the latter some members of his family in London belonged. The result was that whatever they bought, were it butter, meat, clothing, or anything they might name, they got it purer and less adulterated, at a price much less than it could be purchased at shops, so by investing their savings in co-operative stores they would not only get the advantage of having things much better and cheaper, but also share in the profits which such societies had been the means of obtaining. He also advocated their investments being made in the Post-office Savings Banks, which were as safe as the Bank of England. They knew him too well to suppose that he meant that an agricultural labourer with a wife and family could save; but his remarks applied more to young men who did not require all the wages they received. They could not be too independent. The more independent they were the better would be their position in life, and they would escape the poverty with which the agricultural labourer had been for so long a time overpowered. Now, they were obliged to take anything offered them; but if they acted up to what he had stated, they would be able to say, "I have a nest egg, and am not dependent on your bounty; I will go and search out a better livelihood." They would thus find that, instead of being obliged to take the terms offered them, they would be able respectfully and in a Christian spirit and language to make terms for themselves. He was happy to say there were many farmers in the parish who had always been alive to the truth of that principle, and he hoped that many who were at first not alive to it had since been converted. It was remarkable what a change in this respect had come over the country. Three or four years ago, wherever he showed his face among the farmers, squires, or members of Parliament, he was almost hissed out of his shoes, but now he had become quite a popular man—such a change had "come over the spirit of their dream." They saw the labourers would be independent, and they were making ready to meet the coming storm. Last November he received a special invitation to go down from

Bristol to Newton Abbot to an agricultural meeting attended by peers, members of Parliament, and farmers, and nothing could be more hearty than the reception he received, and the compliments paid to him by the Earl of Devon were such as his (the Canon's) modesty would not allow him to repeat in that room. He mentioned this to show how people's minds had changed. There was another subject to which he would direct their attention—that was education. For God's sake, let them not neglect the education of their children, and think that simple accounts were all that would profit them. This world was a race, depend upon it, and the prize is his that runs it, and they must bring up their children by education in order to get a prize in that race which has become so fast and rapid. He had many times been asked why he was not a member of the Halberton School Boards. He had been earnestly requested by many farmers in the parish to allow himself to be placed in nomination, and no doubt by the aid of the cumulative vote his election would have been secured. He, however, declined the honour because there was a person in the parish (Dr. Merson) who added M.D. to the end of his name, who wore a good coat and fared sumptuously every day, and he (the Canon) should not wonder whether he would not be ashamed to shake hands with all the friends whom he (the Canon) saw around him. That individual told him (the Canon) to his face in public vestry that he was "a liar," and therefore he made up his mind, as chairman of the vestry, to meet him there, yet he declined to sit on a Board with a man who used such language as that. He was bound to affirm that there was not a single labourer in the neighbourhood who was not too well educated and too well mannered to make use of such language as that to him, and it would be well for Dr. Merson if the first thing he did when on the Education Board were to lay the foundation of a school for teaching good manners and instruction to himself. He (the Canon) had no objection to an Education Board, and he had always been liberal, though sincere, in religion, politics, or education. He had never wished to restrict education to a sect or party, and had always given the right hand of fellowship to those who differed in politics or religion from himself. He had no objection to an Education Board, and there was not one of five members on the Halberton School Board except the individual whose name he had mentioned with whom he could not consistently act. All I have done for you, my agricultural friends—continued the speaker—is to rouse the country in your behalf, and that I believe I have done pretty well. I have just come from London where I have held converse with noble lords and members of Parliament, and there is no subject in the minds of our legislature at the present moment creating more attention than the condition of the agricultural labourer. I have endeavoured, and with no small success, to rouse public feeling on your behalf, and the consequence is they know more about you than they did before. I hope and trust the agricultural labourer will have bestowed upon him before long that which is given to others in cities and towns, namely, the political franchise. It must come before long, and you must be prepared to discharge the duties which will then devolve upon you. There is not one of you probably aware that on July 26, 1869, an Act (32, 33, Vic.) was passed, which provided that every single person in the country who inhabits a rateable tenement—no matter whether it is rated in the rate book, or whether it be paid by the owner or occupier—the occupier of every rateable tenement in this, and every other parish in England, has just as much right to speak and vote at every parish-meeting and vestry as any person in the country. Why should you, labourers, upon the sweat of whose brow the cultivation of the soil really depends, be ignored? If when those privileges are conferred upon you, you do not make a diligent use of them, the fault is not theirs but your own. When I was at an agricultural meeting at Newton Abbot, no man could be more popular; but supposing I had shown my face at one in Halberton, I should have been scared as one having wool on his back, and proclaimed

amongst them a black sheep. In conclusion he urged an improvement in the condition of the peasantry of this country—their having better houses to live in, better wages and clothes, more economical habits—a “nest egg” in the savings’ bank, something to fall back upon, instead of relying on the miserable pittance of the Poor Law. He would say that it was on this kind of improvement of the agricultural population of this country, in his belief, depended the real prosperity and safety of our land.

[The *Western Times* says in comment on this address that it is to be regretted that the Canon made a reference to his difference with the farmers, because the work which he has taken in hand, and to which he is certainly devoting himself with great zeal and energy, ought to command the united services of every member of the agricultural interest—landlord, tenant, and labourer. Hard words have certainly passed between them, and farmers as a class are not very ceremonious

in turning over the leaves of their vocabulary to select the daintiest word for an occasion. But the rev. gentleman ought not to forget that in praying God to soften the hearts of the farmers, he represented them before their labourers as men of hard and relentless nature, and that to the disposition of the farmers rather than to the law of the market was to be attributed the rate of wages paid at Halberton. The rev. gentleman has practically abandoned this line of argument. He is now very properly, and with great ability, urging on the labourers the duty of helping themselves by thrift, by forethought, and by the education of their children, to leave those who come after them in their rank of life in a better condition than the labourer at present enjoys. All this is practically an abandonment by the rev. Canon of the imputation of hard heartedness, and if he would only withdraw the imputation, parties might shake hands all round, and harmony would be restored to Halberton.]

THE AGRICULTURAL LABOURER.

TO THE EDITOR OF THE MARK LANE EXPRESS.

DEAR SIR,—Would you kindly insert the following memorial and rules in the columns of your valuable paper; for by so doing you would be greatly advancing the cause of the agricultural labourer.—I am, yours obediently,

THOMAS STRANGE.

To the Lords, Ladies, Gentlemen, and Landed Proprietors of Herefordshire, Salop, and South West of England.

We, the North Herefordshire and South Salop Agricultural Labourers’ Improvement Society, desire with due respect to approach you, and while thanking you for what has been done in the improvement of the dwellings of the poor, earnestly, but respectfully, call your attention to the condition of many cottages at the present time, for we fear they are calculated to increase wretchedness, squalor, and immorality. We would solicit your attention, likewise, to the desirability in all cases, where practicable, of allowing the cottager to rent direct from the landlord, but should this not be convenient, then let him hold it of the farmer with a twelvemonths’ taking and six months’ notice to quit. We are also anxious to have cottages containing not less than three sleeping rooms, a well or pump, suitable conveniences, and a pigsty. We are very anxious to improve our condition, and we further believe that you sympathise with us, we therefore respectfully ask you to take this subject into your serious consideration of allowing on every farm above one hundred acres, where cottages are built, land sufficient for the cottagers to keep a cow, which land they shall rent direct from the landlord. So desirous are we of this privilege, that if you measured the land and supplied the timber from your timber yards, we would gladly put up the rails and sheds ourselves, and we should feel it to be the greatest boon bestowed upon a poor man with a wife and family. We would likewise respectfully call your attention to the great want of land for allotments in this part of England, and ask you to please grant us this privilege, that in every parish, township, or hamlet that there be land sufficient for every cottager not keeping a cow to rent from a quarter to half an acre of land according to family, which they shall rent from the landlord and pay a just and equitable rent for. We respectfully call the attention of landlords and tenant farmers to the wages question, which is at the present time very unsatisfactory, and we should gratefully and sincerely thank you if you would give all the able men in your employment 15s. per week cash, with the privilege of working overtime, hours being from six to six, the same ratio of wages being paid for overtime. And lastly, in connection with this society,

we have an emigration club, on behalf of which we respectfully seek your patronage and support; many of our surplus population desire to emigrate, but in consequence of the low scale of wages are unable to save sufficient money to pay for their passage. In order to help those who are *bonâ fide* agricultural labourers we would thank you for a donation or yearly subscription, for by so doing you would greatly advance the interest of the labourer and secure the grateful thanks of this society.—We have the honour to be, on behalf of the officers and members of the above society, your obedient servants,

D. RODNEY MURRAY, Rectory, Brampton Bryan, Hon. President.

THOMAS STRANGE, Adforton, Vice-President and Corresponding Secretary.

RULES OF THE NORTH HEREFORDSHIRE AND SOUTH SALOP AGRICULTURAL LABOURERS’ SOCIETY.

1st. That this society be called the North Herefordshire and South Shropshire Agricultural Labourers’ Improvement Society, and in connection with it shall be the North Herefordshire and South Shropshire Agricultural Labourers’ Emigration Society.

2nd. That the president, secretary, and treasurer be elected annually.

3rd. That a sub-committee be formed in every parish or township, who shall elect a treasurer and secretary for their respective parishes, who shall do the work of inscribing the names and collect the moneys the first and third Mondays in every month.

4th. That after the sub-committees are chosen, then a grand committee shall be chosen from the sub-committees, one or two to be elected by the members of the sub-committees, or two from each committee, the grand committee to do the general district business.

5th. That this society give as much attention to the improvement of the English labourer as to the emigration scheme.

That the committees shall always consist of two agricultural labourers to one of every other class.

6th. That all may be allowed to join this society with or without paying, but only those shall be allowed to vote or emigrate who pay, the pay being one penny per week.

7th. That at the Christmas of each year the names of all persons belonging to this society shall be given in to the general committee, when a ballot shall take place, and those obtaining the greatest number of votes shall be sent out early in the spring of each year. Should these fail from any un-

foreseen circumstance, those who polled the next greatest number, and so on.

8th. That the number sent be always determined by the state of the funds.

9th. If any person neglect paying his subscription for a period of not less than two months, he shall forfeit all benefit arising from voting on emigration.

10th. That any person while in this society committing any criminal offence shall not hold office in this society.

11th. That no meeting shall be legal unless all the members of the grand committee have been duly summoned to attend.

12th. That the accounts be examined quarterly.

13th. That the meetings be held quarterly in summer, and monthly or bi-monthly in winter.

14th. That we, as a society, do all we can to induce other districts to form like societies.

15th. That every member do all he can to induce non-members to join this society.

16th. That the names of the sub-committee be not made

known, only those of the treasurer and secretary. These two shall in all cases where practicable be men independent of outside influences. That all members shall have the privilege of attending a sub-committee meeting, but the grand committee shall be closed to all except the G. M. members.

17th. Should any member be balloted, and he have so large a family that the funds would not meet the expenditure, then the money should be put by for his benefit until he can earn sufficient to go.

18th. That it be always left to the grand committee to say what help shall be given to each family.

19th. That it shall be the duty of each family sent out to refund as soon as possible the aid afforded him, so that those who subscribe who are left behind shall have the privilege of going.

D. R. MURRAY, Hon. President.
 THOMAS STRANGE, Vice-President and
 Corresponding Secretary.
 JOHN FARMER, Treasurer.
 R. LAWRENCE, District Secretary.

THE ESSEX AGRICULTURAL ASSOCIATION.

MEETING AT ROMFORD.

Noctis pluit tota, or in common parlance it rained very hard on Wednesday night. *Redona! spectacula manat*, or the Essex show opened on the Thursday morning—which gradually ripened into warm really mid-summer weather. The holiday was consequently pretty generally observed, and what with an admirable parade ground, and sundry companion exhibitions of dogs, poultry, and flowers, the success of the occasion seemed to be assured. To the show proper, moreover, some additional emphasis was given by Mr. McIntosh's offer of 100 gs. for the best Shorthorn; and as most of the cattle and horse classes were fairly well filled, a journey to Romford would look to be well warranted. Nevertheless, the inspection of an Essex agricultural meeting, as at present conducted, is not altogether a satisfactory business. There is a studied confusion of classes, a curious admixture of numbers and names which tend to render the thing something of a problem, only to be solved through the courtesy of a steward or a judge, who places his book at your disposal. A strong majority of the entries are entered over and over again, as for instance 248 is also 262, as further he is 319 and 362. The animal should of course carry all this information attached to his head where the figures are apt to become confounded, and as now he wins a second prize and then a first, it would require a much smarter system of prize-placarding to make his merits accurately known than would look to be at the command of the management. The secret or main cause of these somewhat hazy proceedings is to be found in the fact that the Essex Agricultural Association is still to a certain extent a *limited* Company. The natives are content in the first instance with beating each other; thence to venture step by step into more general competition, but with a goodly proportion of premiums insured in the outset for the direction and its friends. All this naturally tends to make matters pleasant, but it at the same times gives a feeble and local character to a meeting, which, as it strikes us, might take far higher rank. So recently as last Christmas it is said somebody was busy in obtaining further support to the proposition for throwing the Society open, but it suddenly appeared they were doing quite as well as they wished to do, although everybody would like to win an All-England prize, in addition to any more homely

distinction. Hence that wondrous Book of Numbers, known as an Essex catalogue; hence

Would they climb yet fear to fall.

Although really when put into comparison with Norfolk or Suffolk, if their hearts fail them, they might as well climb not at all. In Suffolk they now often offer higher prizes than they do in Essex, and Suffolk, and Norfolk, are open to everybody. At the dinner the proposal for establishing an Eastern Counties Association was again broached.

In a very creditable display of Shorthorns we shall altogether decline to wind our way through the intricacies of petty and public appraisal, but leaving this to the judges and stewards arrive at once at the grand total of all such sifting and selecting. There were thus left in for the Challenge Cup Mr. R. Stratton's Master Glanville (the All-England prize yearling bull), Mr. R. Stratton's Fair Rosalie and Innocence (the All-England prize pair of yearling heifers), Lord Braybrooke's Memory (the best cow), Lord Exeter's Telemachus (the All-England prize bull), Mr. Bradburn's Miss Chesterfield; Mr. Chaplin's Maid of Honour (the prize county two-year-old heifer), Mr. MacIntosh's Charmer 13th (the prize yearling heifer), and Mr. Tippler's Cambridge Duke (the prize county bull). Of Mr. Stratton's lot Master Glanville took a second prize and Innocence a high commendation at Guildford, and though good enough in their way they will never be quite first-class animals, as they were, none of them, ever really "in it" for the Cup. In a capital class, far away the best county entry, of Shorthorn cows, Lord Braybrooke's Memory had still an unmistakable lead, as she is lengthy and bloodlike, with a good back, a nice head, and clean neck, and altogether of a fine and really cow-like character. Her second here was a useful but much plainer cow, rather lumpy about her quarters, the property of Mr. Clayden, who is fast getting up another herd, and there were two or three well-merited commendations in the class. So far Modesty promised to have some opening for the Cup, but she was quickly eclipsed by Telemachus, Lord Exeter's prize bull, which we had seen at Rugby on Tuesday, and, with the Warwickshire show only over on Wednesday, only landed at Romford by special

train with Mr. Garne's and Mr. Bradburn's entries on Thursday morning. With a better day to show himself, and a better ring to show him in, Telemachus, despite his travels, looked even to more advantage than at Rugby; and, although the judges went through the form of examining and comparing over again, it was manifest that nothing had a chance against him for the Cup. With plenty of "appearance" and style, he is a wonderfully true-framed bull, deep, level, and square, while he can move, and, though well-fleshed, has been by no means overdone. Still, he has been known for some time in the prize-ring, having, as a two-year-old, taken first prizes at the shows of the Lincolnshire, the Warwickshire, and Northamptonshire Societies. He is now just a month or so over three years old, so that he will be in the all-aged class at Wolverhampton, where Telemachus is very sure to earn some further distinction. The Wolverhampton cow, Miss Chesterfield, had already been well beaten in the bull, cow, and offspring class; and many had preferred Mr. Clayden's Captain Knightley to Cambridge Duke 3rd when they met in the county class, where it was no doubt a close thing between the two. The Knightley, however, is but a plain bull at best, while there is a deal of character about the Cambridge Duke, who was bred by Mr. Bates at Preston Hall. Mr. Lintou did not send on his white bull, Lord Irwin, nor did we catch a sight of Bythis; so that beyond Mr. Stratton, Lord Exeter had little but the county to contend against. Mr. McIntosh, however, made an entry for his own Cup, and here, naturally enough, the hopes of the Society centred. But the Charmer, though neat and bloodlike, is short forward, with little promise of lengthening out into a grand cow, and if £100 or £500 would not buy her, the award was never really in doubt; while it must be satisfactory to Mr. McIntosh to see his Challenge Cup on its inauguration won by so worthy a champion of the breed.

There was nothing very particular amongst the other highly-bred Essex Shorthorns, of whom, indeed, the Shorthorns "without pedigree" had quite the call for merit. In a class of these "common" cow of six entries in all, the judges appended four commendations to the award of the two prizes; while the yearling heifers were almost as good. There were also two or three very sweet dairy cows, and here and there a particularly good Alderney to be found in the eight or nine classes of Channel Island cattle. We said of Bandboy, on seeing him at Guildford, that "he placed himself, being a beautiful blood-like bull, bred from Mr. Dancy's herd," and the judges at Romford, both Channel Island authorities, pronounced Bandboy to be one of the best bulls ever seen. Again, we called especial attention to Duchess, the second prize in the cow class at Guildford, as "a very sweet Island-bred heifer, purchased by Mr. Gilbey at Oxford, where she was commended," and the judges here in the outset declared her to be the pick of the sort, with an admirable udder, although we believe they ultimately placed Mr. Tower's cow before her in a not otherwise very strong entry of cows. The yearling heifers again made but a poor show, saving Lord Braybrook's first, and consequently Mr. Beadel's Lily, the best of a precisely similar class, both especially smart heifers. Amongst the others, Mrs. Cromwell showed a home-bred one of immense size, which was highly commended, and, like most of the others, shown over and over again. Thanks to Mr. Gilbey's liberality, the classes were given in duplicate, and hence it occasionally happened that an animal which should have been in competition was not brought out in its turn, and the judges were accordingly hunted up to go through the thing once more. As it seems on the face of it, Mr. Gilbey's should have been simply champion prizes for the best bull, best cow, and

best heifer in any of the classes, and there would have been an end of it. But that mysterious Book of Numbers would not of course sanction any such simplicity of arrangement, and hence that labyrinth of classes from which stewards, judges, and exhibitors struggled so gamely to extricate themselves.

In our notice of the mysteries of Saffron Walden last year we complained of the management of the horse ring, and this year there was little if any improvement. "If woman won't she won't, and there's an end on't;" and if it be almost as hopeless to expect any move in the right direction from those who have no go in them, and it would be well to find some post more suitable to the abilities of the gentleman who has the conduct of the ring where the riding horses are shown; for he is either a very poor showman or labours under the idea that the exhibition is got up especially for his edification and that of the judges. For instance, the horses were only numbered on the near side of the head, which was invariably towards himself and the judges; while in very few instances were the smallest of rosettes, which denote the prizes, attached to the winners' heads. After watching class after class in this fashion, we told one of the judges they had it all to themselves, and that those outside knew little or nothing of what was going on. He was kind enough to say he would speak about it, and we believe he did, but there was no improvement. Now what could have been easier than to put the rosettes on the side of the heads of the winners, and have just sent them once round with their numbers towards the spectators? There will always be some confusion while horses are entered in several classes, but the number of the class stuck on a board in the centre of the ring, while they are before the judges, would greatly correct this; and if the number from the side of the head were hung on the chest from a string round the neck, after the manner of the Royal Agricultural Society, it would serve both judges and the public, no matter whichever way the horses went round the ring. Why spoil all the pleasure of a good show, merely through indifference to such *important trifles* to any spectator who really takes an interest in the exhibition? As a show of horses, the riding classes were much stronger than last year, while the agricultural classes, for which the Society is more famous, were well represented; and many a Punch figured in the list well known as a prize taker, and added fresh laurels to those brows that, judging by their sleek fat carcasses, they do not live by the sweat of. Many a good-looking one could not pass the veterinarian, and we imagine that some of these pampered, over-topped animals, as bad on the pins as the Norfolk giant, are fit for nothing but the show-yard. We must say we should like to see a little less beef and more compact frames, with better limbs and feet, which some of the non-stickers to old fashions, we are glad to hear, are going in for.

The hero of the day among the stallions was Bismarck, a fine grown but rather flashy horse, as well as being high on the leg, and by no means a model of a cart horse. He distinguished himself last year at Harleston, and was third at Oxford to Oxford Emperor, whom at Romford he now defeated; and again in the All England cart stallions did Bismarck prove prime minister, Mr. Boby's Prince Royal, the prize horse at the Bath and West of England meeting, being the highly commended; while another West-country hero, and another Emperor, a very good limbed Suffolk, was proclaimed the best of all the two-year-olds; but he is said to be out of a *bay* mare. Oxford Emperor has not improved as much as might have been expected from him as a two-year-old; while to show the eccentricities

of judging it may be stated here that at the Woodbridge stallion show in the spring Cup-Bearer took the first prize, Prince Royal the second, Oxford Emperor the third, and Bismarck was highly commended!

The mares were better represented than the horses, old Matchett still being proclaimed the queen in very good company. In the fillies under four years old Mr. Thompson's The Despised came in for the prize, and again in the two-year-olds, as well as in the pairs with her stable companion, Briton. Some judges, not only in cart horses, but with hunters, give prizes merely because "they are such big 'uns, and cannot get away from them," as they say; and we think The Despised comes in for her prizes as Miss Bouncer, at the young ladies' seminary, came in for the largest piece of pudding. We do not believe in big 'uns without they are really well-made, either biped or quadruped, and as a rule would rather go for a medium size. Had The Despised filly been made after the fashion of her owner's gelding, a remarkably clever deep active horse without being over-topped, with both shoulders and forelegs we think we should have seen her beauties; but we really think the first bench of judges that passed her over altogether were about right after all. Although there were several good-looking amongst the mares and foals, the doctor could not recommend one for the second prize, so it was withheld; and in the plough mares, the second, again, was not awarded.

We have said that the nags were better represented here than at Saffron Walden, through Mr. Barker, the well-known Essex dealer, sending some of his string. Still, taken as a lot, of thorough-bred stallions, hunters, or hackneys, with an exception occasionally, there was nothing particularly good. Kettlebrun and Mainstone were shown as extra stock, and did not compete for prizes. Young Toxophilite, the prize stallion, though powerful, even made, and big limbed, has not a shoulder or withers adapted for riding purposes; and Brennus, though an useful horse enough, does not quite look up to the old Hasketon form; but then he is only just out of work. Little Ben is neat enough for anything, and full of symmetry down to the knee and hock—further we won't go. The other entries were Volunteer, Knight Templar, Benham Squire, and Huntsman. Mr. Barker, with four strings to his bow, carried off the hunting gelding prize with a thick-set, thorough-bred looking chesnut, with strong shoulders, and who went more like an old plater than a hunter, though by far the best in the class. The second to him, Whalebone, showed some breed, but looked leggy and tucked-up for an aged horse. Nell Cook, a second prize taker at Islington to Mr. McIntosh's clever little horse, Voltigeur, like many a pride of the village, looked almost handsome among her country consins, though in London society we passed her as a strong, useful mare, and nothing more. The second was a ewe-necked, Blacklock-headed mare, by Frogmore, with good action, and that, for want of better company at Saffron Walden, gained the ribbons in several classes, though she is anything but a prize animal to look at; if she can still go down with the wooden idols, which have been worshipped long enough. She is not a weight carrier, but yet she gained a commendation in the heavies. Planet the first in the top weights, is a neat compact horse, very taking to look at, and a fair mover, but with his shoulder a little too far into his neck, which is of the shortest.

In the hackneys last year the set-to for the colours was between Mr. Simpson and Mr. Gilbey, as it was this year again. At Saffron Walden Mr. Gilbey was first, but he now played second to the second at Saffron Walden, a weight-carrying hack that can rattle along somewhat after the Norfolk trotter fashion. Sweetheart is a beautiful hack that re-

minds us of Quadroon, if not a much improved animal in form and action, for like Sir Roger, as we are not going to be "caught," we will not swear to our memory here.

In the three-year-old mares or geldings, we preferred Mr. Tabor's Peony to the winner, as having more depth, length of shoulder, and being better proportioned. It was a near thing with Mr. Viekerman's two two-year-olds, one by Amsterdam and the other by Mainstone; had Mr. Reeves' filly been a better mover she might have stood a chance with them. In the four-year-old hacks there was a nice cobby hack to the fore, closely followed by Mr. Hurley's bay and Mr. Simpson's brown cob. The remainder will be found in the prize list.

It really seemed somewhat absurd at the first blush of it to summon three full-grown gentlemen all the way from Wilts, Oxford, and Dorset, to place the mere handful of sheep they had got together at Romford; but luckily something more was found for idle hands to do amongst the pigs, or this distinguished trio would have been out for a holiday indeed. In many of the sheep classes there was no competition whatever, or a man competed against himself, but we believe most of the premiums were duly awarded. Lord Braybrooke's shearing Southdown is a particularly stylish blood-like sheep, but over-shadowed by the more substantial merits of Mr. Boby's two-shear, although age for age we should take the shearing. Mr. Clayden's ewes are small, but neat and of good type, and Lord Braybrooke's wethers rather delicate. Mr. Giblin has the Cotswolds all to himself, and his two-shear ram is a very showy, broad sheep; with his ewes and lambs also full of merit. They seem, further, to have an Oxford Down flock at Bardfield, the only other exhibitor of this variety being Mr. Thompson, of Thorpe, who enters some sheep bred, we greatly regret to see, "from the stock of the late Mr. C. Howard," an announcement we hope to be able to contradict at the earliest possible opportunity. There were a few Hampshire and Suffolk Downs, over which it would be idle to dwell, although the sheep looked to have taken a deal of judging—often enough, as we should imagine, on the consideration as to whether the premiums should be awarded or withheld?

With the exception of the fat pig premium the Duckerings won all the All-England prizes for both large and small breeds with the whites, which have already been about this season at Glasgow, Guildford, and Rugby. These included the famous Topsey, in which class of small sows it was impossible to say from the placard whether Duckerings or the Wheelers were second. The Cirencester College also sent on some of their Berkshires, and, indeed, since the death of Mr. Fisher Hobbs Essex would promise to be more famous for Berkshires than any other breed. Mr. Griggs is here again deservedly successful with pigs, which, like his prize boar, unite length and size with coat and quality; while his two pens of sows and pigs were as good in their way as anything on the ground. Then Mr. Clayden shows Berkshires of very fine quality; but the small black Essex pigs, if we are to take the best boar as a sample, have sadly degenerated since the time of the Boxted supremacy. Mr. Stearn had only one entry, an old boar bred from Brandeston by Mr. Biddell, and Mr. Sexton took a second prize. So far Suffolk looks to be out of form this season, while the Duckerings make sad havoc amongst local celebrities. Indeed, to be quite safe in this section, the conditions should specify the premiums as open to All-England, Lincolnshire excepted.

Our own opinion as to the bad policy of withdrawing all prizes for implements is so well known that we shall prefer to let a county paper speak to the way in which this non-recognition system is working in Essex:

"The exhibition of implements certainly cannot be considered equal to what it has been for the last two or three years. The number of entries were very much lower than either at Saffron Walden or Colchester, while the character of the display was also inferior. This is probably to be accounted for partly by the fact that no prizes were offered in this department, many of the exhibitors feeling somewhat aggrieved at this. We know it is argued that manufacturers attend with their implements on these occasions as a matter of business. Granted that they do, but it should also be borne in mind that they go to considerable expense and trouble in attending and, further, that this part of the show is generally one of the most attractive of any, not only to practical agriculturists, but to the public generally. Therefore we think it would be well for the committee to inquire into this, and not to let the implement department fall off, but to encourage it in every possible way, by offering two or three prizes. It is not so much the money value of the prize that the exhibitors consider, but it is the honour and distinction that is given to the fortunate winners." We fear that the implement show at Romford was not under the circumstances very "attractive", although the following list of exhibitors includes some of our most prominent firms:—Garrett and Sons, Leiston; Britain, Pash; Carey, Rochford; Burrell, Thetford; Catchpool and Thompson, Colchester; Woods, Cocksedge, and Warner, Stowmarket; Davey, Paxman and Co., Colchester; Wedlake, Hornchurch; Coleman and Morton, Chelmsford; Turner, Ipswich; Eddington, Chelmsford; Maynard, Whittleford; Bradford and Co., Manchester; Ward and Silver, Melford; Smyth and Sons, Peasenhall; Boby, Bury St. Edmunds; Mabbett and Pink, Romford; Burgess and Key, London; Darby, Little Waltham; Foster and Sons, Witham; Page and Girling, Suffolk; Pertwee, Boreham; Harrison and Coleman, Chelmsford; Peene, Braintree; Cottis and Sons, Epping; J. Warren, Maldon; Hitchcock, Lavenham; Murton and Turner, Kenninghall; Townsend, Wimbish; Dodge, London; A. Lyon, London; Hills, Sudbury; Day, Son, and Hewitt, London; Bell and Co., London; Basset and Co., London; Baker, Wisbeach; Godfrey and Jordan, Chelmsford; Le Butt, Bury St. Edmunds; Mortlock, South Hackney; Symington and Atterton, Halstead; Meeson, Rochford; Tidmarsh, Stratford; Rands and Jeckell, Ipswich; King, Coggeshall; Catt and Son, Ipswich; Hart, Sudbury.

PRIZE LIST.

JUDGES.

Cart-horses: J. Manning, Oringbury; G. M. Sexton, Wherstead Hall, Ipswich; G. Street, Mauldon, Amptihill.
Riding-horses: J. Bennett, Rugby; Y. K. Graham, Edgbaston, Birmingham; G. Weston, Bryanston-street, London.
Cattle: W. Ladds, Ellington, Hunts; Stiles Rich, The Cedars, Fearnall Heath, Worcester; W. Sanday, Radcliffe-on-Trent, Notts.
Channel Islands Cattle: J. Dumbrell, Ditchling, Hurstpierpoint; H. Middleton, Cuttslowe, Oxford.
Sheep and Pigs: H. Fookes, Whitechurch, Blandford; E. Little, Lantall, Chippenham; W. Newton, Campsfield, Woodstock.
Veterinary Inspector: R. Hunt, Edgbaston, Birmingham.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallion.—First prize, £20, E. Emson, Littlebury (Peer of the Realm); second of £10, J. Ray, Great Pettit's Farm, Romford (Young Princee).
Cart stallion, open to all England.—Prize, £25, W. Wilson, Baylham Hall (Bismarek). Very highly commended: I. Rist, Tattingstone (Oxford Emperor).

Stallion, open to all England.—Prize, £25, W. Wilson (Bismarek). Highly commended: C. Boby, Alton Hall, Stutton (Prince Royal).

Entire two-year old colt.—First prize, £15, G. D. Badham, Bulmer, Tye (Emperor); second of £10, J. Piggot, Beckingham Hall (Patriot).

Entire two-year old colt, open to all England.—Prize, £15, G. D. Badham (Emperor). Highly commended: J. Piggot (Patriot).

Yearling colt.—Prize, £7, G. D. Badham. No other entry.

Cart mare.—First prize, £8, G. Cant, Myland; second of £5, D. A. Green, Donyland-place (Duchess).

Cart mare, open to all England.—Prize, £10, R. Capon, Dennington (Matchet). Highly commended: W. Bott, Broomfield (Diamond); G. Cant. Commended: J. Warth, jun., Sutton, Isle of Ely (Diamond).

Three-year old filly.—Prize, £5, J. Quilhampton, Goldhanger (Blue Roan).

Three-year-old filly, open to all England.—Prize, £10, W. Thompson, jun., Thorpe, Colchester (The Despised).

Gelding.—Prize, £5, W. Thompson, jun. (Briton).

Two-year-old filly.—First prize, £8, W. Thompson, jun. (The Despised); second of £5, J. Fenn, Ardeleigh (Duchess).

Yearling filly.—Second prize, £2, W. and H. Havers, Ingatstone (Blossom).

Mare and foal.—Prize, £12, W. Bott, Broomfield (Diamond).

Mare and foal, open to all England.—Prize, £12, Executors of T. Capon, Dennington, Suffolk (Matchet).

Foal.—First prize, £5, G. Cant, Myland; second of £3, D. A. Green. Highly commended: W. Bott.

Plough mares.—Prize, £10, D. A. Green (Depper). Second prize withheld.

Plough horses or mares, open to all England.—Prize, £10, W. Thompson, jun. (Briton and The Despised). Highly commended: D. A. Green (Depper and Darby).

Team of four, to all England.—Prize, £25, D. A. Green (Depper, Darby, Brock, Captain).

RIDING AND COACHING.

Thoroughbred stallion, open to all England.—Prize, £25, H. D. Raimecock, Waltons, Ashdon (Young Toxophilite).

Stallion, thoroughbred or otherwise, open to all England.—Prize, £22, H. D. Raimecock (Young Toxophilite).

Hunting gelding.—First prize, £10, P. C. Baker, Westlands, Ingatstone (Tom); second of £5, O. Perry, Harlow (Whalebone).

Hunting mare.—First prize, £10, Sir A. Neave, Bart., Dagnum Park (Nell Cook); second of £5, B. Sparrow, Gosfield-place.

Weight-carrying hunters, open to all England.—Prize, £15, P. C. Barker (Planet). Highly commended: B. Sparrow.

Hackney mare, not exceeding fifteen hands one inch.—First prize, £10, J. J. Simpson, Heybridge Hall; second of £5, W. Gilbey, Hargrave Park, Stansted (Sweetheart).

Hackney gelding, not exceeding fifteen hands one inch.—Prize, £10, E. Helme, Hornchurch Lodge (Ceaser).

Four-year-old hunter, mare or gelding.—Prize, £6, J. Christy, Boyton Hall.

Four-year-old hack, mare or gelding.—Prize, £6, G. D. Badham, Bulmer Tye.

Three-year-old Mare or Gelding.—Prize, £6, B. Sparrow, Gosfield Place. Commended: J. E. Tabor, Boeking (Poony); S. Reeve, Ingatstone Hall (Fireawcy).

Two-year-old mare or gelding.—First prize, £6, C. R. Vickerman, Thoby Priory, Brentwood (Curacoa).

Yearling colt or filly.—Prize, £5, C. Benson, Hanningfield.
Brood Mare, with Foal.—First prize, £10, G. Simson, Galleywood (Lady Gay); second of £5, J. Lott, jun., Chobham Manor Farm, Stratford.

Foal.—Prize, £5, T. Lambert, Castle Farm, Ongar.

Cob, between 13 and 14 hands.—Prize, £6, J. Garnett, South-street, Romford (Eggy). Highly commended: T. Mashiter, Priests, Romford (Wanderer). Commended: T. Newman, Great Bardfield.

Pony, under 13 hands.—First prize, £4, W. Gilbey, (Maroon); second of £2, D. Robertson, Avey Hall (Welsh). Commended: E. Conder, Elm Hurst, Romford (Topsey).

Pony, not exceeding 13 hands. Open to all England.—

Prize, £10 10s., G. M. Sexton, Wherstead Hall, Suffolk (Matchless). Highly commended: D. Robertson (Dunrobin); W. Gilbey, (Maroon). Commended: J. Raven, East Ham, Barking (Tommy).

CATTLE.

SHORTHORNS.

Bull.—First prize, £20, W. Tippler, Roxwell (Cambridge Duke 3rd); second, £12, J. Clayden, Littlebury (Captain Knightley).

Bull, any age (open to all England).—Prize, £20, The Marquis of Exeter, Burligh Park, Northamptonshire (Telemachus). Highly commended: J. Upson, Rivenhall (Prince Lincoln).

Bull, two years old.—First prize, £15, C. Sturgeon, South Ockendon Hall (Lord Alexander 2nd); second, £10, J. Pertwee, Boreham (Sir Thomas Bates).

Yearling bull.—First prize, £10, J. Upson (Prince Lincoln); second, £7, C. Sturgeon (Oxford Thorndale Darlington).

Yearling bull (open to all England).—Prize, £15, R. Stratton, Burderop, Swindon (Master Glanville).

Bull calf.—First prize, £6, R. H. Crabb, Great Baddow; second, £4, A. P. Clear, Maldon.

Shorthorn cow.—First prize, £15, Lord Braybrooke, Audley End (Memory); second, £10, J. Clayden (Eregone). Highly commended: C. Barnard, Harlow Bury (Echo). Commended: R. H. Crabb (Roxwell Belle); C. Barnard (Rose).

Shorthorn heifer.—First prize, £10, J. R. Chaplin, Ridwell (Maid of Honor); second, £6, C. Barnard (Coronella). Commended: J. Clayden (Gertrude), and R. H. Crabb (Miss Pearl).

Yearling Shorthorn heifer.—First prize, £7, D. McIntosh, Havering Park (Charmar 13th); second of £5, R. H. Crabb (Kirkee 7th). Highly commended: C. Barnard, Harlow Bury (Thorndale's Sugar-plum). Commended: C. Barnard (Golden Butterfly); R. H. Crabb; J. Clayden (Bracelet).

Shorthorn heifer.—First prize, £6, R. H. Crabb (Queen of the May); second of £4, C. Barnard (Strawberry). Commended: Lord Braybrooke, Audley End (Regret).

Bull, cow, and calf, their offspring, open to all England.—Prize, £25, J. Clayden, Littlebury (Captain Knightly, Grace Costa, General Knightly).

Yearling bull and pair of yearling heifers, open to all England.—Prize, £20, R. Stratton, Burderop, Swindon (Master Glanville, Fair Rosalie, and Innocence). Commended: J. Clayden (Silent, Bracelet, and Archduke Knightly).

Havering Park Challenge Cup, best pure-bred Shorthorn.—Prize, 100 guineas, the Marquis of Exeter (Telemachus).

SHORTHORNS WITHOUT PEDIGREE.

Cow.—First prize, £8, J. Upson, Rivenhall (The Sort); second of £5, R. H. Crabb, Great Baddow. Highly commended: W. Sworder, Tawney Hall. Commended: W. Bott, Broomfield; G. H. Cant, Myland; T. Mashiter, Romford.

Heifer.—Prize, £6, D. A. Green, Donyland Place.

Yearling Heifer.—First prize, £5, J. Oxley Parker, Woodham Mortimer Place; second of £3, J. Upson (Neatness 111). The class commended.

Heifer.—Prize, £3, W. Sworder.

DAIRY CATTLE.

Cow.—First prize, £8, Lord Braybrooke, Audley End (Memento); second of £5, G. H. Cant, Myland (Cherry).

Cow, thorough-bred or otherwise. Open to all England.—First prize, £10, W. Bradburn, Wolverhampton (Miss Chesterfield); second of £5, Lord Braybrooke, Audley End (Memento).

FAT CATTLE.

Fat ox or steer.—Prize, £5, J. Brown, Little Hallingbury Hall.

Fat cow or heifer.—Prize £5, C. Swan, Colechester.

CHANNEL ISLAND BREEDS.

Bull.—Prize, £5, W. J. Beadel, Springfield Lyons. Highly commended: Mrs. Cornell, Wenden Hall.

Bull.—Prize, £5, W. Gilbey (Banboy). Highly commended: C. J. H. Tower, Weald Hall.

Cow.—Prize, £5, C. J. H. Tower. Highly commended: Lord Braybrooke (Holly). Commended: J. Fraser, Hornchurch.

Heifer.—Prize, £4, W. J. Beadel (Sandon). Highly commended: Major C. Russell, Stubbers, Ockenham.

Yearling heifer.—Prize, £4, Lord Braybrooke. Highly commended: W. Gilbey (Banlass).

Bull, must have served cows.—Prize, £10, W. Gilbey (Banboy). Highly commended: W. J. Beadel.

Cow, in-milk or in-calf.—Prize, £10, W. Gilbey (Duchess). Highly commended: J. Fraser. Commended: W. Gilbey (Banshee).

Heifer, in-calf or in-milk.—Prize, £10, W. J. Beadel (Lily). Highly commended: Lord Braybrooke.

SHEEP.

Southdown ram.—First prize, £10, J. Clayden, Littlebury; second of £5, Lord Braybrooke, Audley End.

Shortwooled ram, open to all England.—Prize £10, C. Boby, Alton Hall, Stutton. Specially commended: J. Giblin, Little Bardfield.

Shearling Southdown ram.—First prize, £10, and second of £4, Lord Braybrooke.

Shearling shortwooled ram.—Prize £8, Messrs. Nockolds and King, Safron Walden.

Five shearling pure Down ewes.—First prize, £7, and second of £5, J. Clayden.

Ram, Cotswold, Leicester, or Lincoln.—Prize £7, J. Giblin, Ram, Oxford or Shropshire.—Prize £7, J. Giblin.

Longwooled ram, open to all England.—Prize £10, J. Giblin.

Five shearling ewes, Oxford or Shropshire.—First prize, £5, and second of £3, W. Thompson, jun., Colchester.

Five longwooled shearling ewes.—Prize, £5, J. Giblin.

Five ewes and lambs.—Prize, £6, J. Giblin.

Five fat shearling shortwooled wethers.—First prize, £5, Lord Braybrooke; second of £3, W. Sworder, Tawney Hall.

Five fat shearling Hampshire wethers, open to all England.—First prize withheld; second of £3, W. Sworder.

Five fat shearling, crossbreds, or longwooled wethers.—First prize, £5, and second of £3, D. A. Green, Donyland Place.

Five fat shearling crossbred wethers, open to all England.—First prize, £5, and second of £3, D. A. Green.

PIGS.

Boar, large breed.—First prize, £5, and second of £3, G. Griggs, Romford.

Boar, large breed, open to all England.—First prize, £10, Messrs. Duckering and Sons, Kirton Lindsey; second of £5, T. H. Everett, Bridgham, Thetford (Brutus). Highly commended: G. Griggs (Prince); C. Sturgeon, South Ockendon Hall (Berkshire).

Boar, large breed.—First prize, £5, D. Robertson, Aveley Hall; second of £3, G. Griggs.

Boar, small breed.—First prize, £5, J. S. Lescher, Boyles Court, South Weald; second of £3, W. Bott, Broomfield.

Boar, small breed, open to all England.—First prize, £10, Messrs. Duckering and Sons; second of £5, G. M. Sexton, Wherstead Hall (Bothwell). Highly commended: T. Taylor, Pool Farm, Taunton (Puzzler).

Boar, small breed, not exceeding 12 months.—First prize, £5, G. Griggs (Commodore Nutt); second of £3, J. A. Williams, The Brownings, Chigwell (Napoleon).

Sow in pig.—First prize, £5, G. Griggs, Romford (Queen of the East); second of £3, G. Griggs (Miss Hopeful). Highly commended: J. A. Williams, The Brownings, Chigwell. Commended: G. Griggs (Duchess).

Sow, small breed, open to all England.—Prize, £4, Messrs. Duckering and Sons; prize, £4, R. Swanwick, Royal Agricultural College, Cirencester. Commended: Messrs. Duckering and Sons; Messrs. Wheeler and Sons, Long Compton, Shipston-on-Stour (Ace of Hearts). The two prizes divided.

Sow, small breed, open to all England.—First prize, £5, Messrs. Duckering and Sons; second of £3, Messrs. Wheeler and Sons (Lucy). Highly commended: W. Hope, Dagenham (Aunt Hannah); G. M. Sexton, Wherstead Hall (Hannah). Commended: G. M. Sexton; G. Griggs (White Rose).

Sow and pigs.—First prize, £5, G. Griggs (Queen Bess); second of £3, G. Griggs (Picture).

Three sow pigs of same litter.—First prize, £5, J. Clayden; second of £3, J. Pertwee, Boreham.

Fat pig, open to all England.—Prize, £5 5s., Messrs.

Wheeler and Sons (King Lear). Highly commended: Messrs. Duckering and Sons.

At the dinner, the Chairman, Mr. McINTOSH, was very glad to see the number of animals that entered for his challenge cup. For the honour of the county of Essex he should like to have won the cup, and he should always do his part, as he hoped the men of Essex generally would do their part, and come forward another year and endeavour to get the cup back into Essex and keep it there. As they could not keep it in Essex this year, he was glad to think it had gone into such good hands as the Marquis of Exeter. The competition for the cup included representatives from Yorkshire, Northamptonshire, and other great counties, and he believed, and he was told by the judges, that it had been a very close contest, his own animal being beaten by only a very little. They were not going to be disheartened in Essex by the cup being taken from them—they should wish success to any county that took it from them, and all they should ask them was to take care of the cup and give them another chance of winning it.

Mr. BENNETT, a judge of the riding horses, said that the show, although perhaps in many points not quite equal to some shows he had attended, yet contained many very good animals indeed, some of them being very much superior to what he had seen in Essex and many other parts before. He would suggest to breeders the importance of getting a little more blood in their horses.

Mr. FOKES, one of the judges of sheep and pigs, wished he could congratulate them on the show of sheep but he could not. He hoped they would have a better show next year, for he had not had sufficient work to do in that department. There was a wonderfully good show of pigs—indeed it was the best he had ever seen at a local show.

Mr. J. CLAYDEN proposed "The County Members." He believed that the county members, to whom the agriculturists were much indebted, were desirous in every way to assist them, but he was sorry to see that on a late occasion when his friend Mr. Clare Sewell Read, the member for Norfolk, brought forward a very important motion, with reference to the importation of infected cattle into the country, a matter of vast import to the consumers, there was a "count out,"

which county members ought not to have allowed. He was sure they regretted it as much as he did, and that they would do better another time.

Mr. JOHNSTON, M.P., whose name was coupled with the toast, said, with reference to the "count out" spoken of by Mr. Clayden, as far as he could count, there were only 19 members, independent of the Government, present at the time, and of those 19 he was glad to say that a very good proportion were members for the Eastern Counties. He made the remark at the time that if it had been an exciting party squabble, they should have had the House crowded from floor to ceiling; but as it was only a question of the agricultural interest and the food of 30,000,000 people, they were counted out with about 30 members. The next night on which the House sat, the very thing happened that he had spoken of—they had an exciting party squabble, and from midnight until daylight streamed in at the windows, 400 men sat discussing whether they should sit next day at 2 o'clock or 4 o'clock—for three hours they were discussing whether they should discuss another matter for two hours next day. Under such circumstances, he was very glad that the toast to which he had to respond was not "The House of Commons," but "The County Members." The question had been mooted of forming an Eastern Counties' Agricultural Association. It might be said that Essex did very well as it was; but being about equally connected with Norfolk, Suffolk, and Essex, he could not help saying that, as far as he was personally concerned, any such proposal would suit his book uncommonly well.

Sir H. SELWIN IBBETSON, M.P., referring to the "count out," asked Mr. Clayden to bear testimony that he (Sir Henry) had never been backward in his attention to this matter; but he acknowledged that he was in fault in not being in the House on the occasion in question. He had asked Mr. Read if he intended bringing this motion on, and he replied that it was on the paper so late, and he was so ignorant of whether there was to be a morning sitting, that he did not think it would come on. He (Sir Henry) accordingly extended his Whitsun Holiday; but he admitted now that he ought not to have done so—he candidly and honestly confessed that he ought to have been in his place in the House, but they all knew that he was absent from no lack of interest in the matter.

THE WARWICKSHIRE AGRICULTURAL SOCIETY.

MEETING AT RUGBY.

Beyond its famous school and "stopping" station there is not much to be said in favour of Rugby; as, indeed, it would seem to be a town by which everybody goes, and where nobody stays. With, then, the many pleasant sites at its disposal, such as Leamington, Stratford, Warwick, or Birmingham, it looked like something of a mistake on the part of the management to take the Warwickshire Society into such a corner of the county, even on the plea of finding fresh fields and pastures new. The experiment of bringing forward the meeting from the autumn to the early summer was consequently tested under not the most encouraging auspices, as there was a certain slackness about the proceedings and a very obvious mediocrity of material in the show itself, which we should be inclined to attribute less to time than place. The very road up through that dull hilly bit of street was dispiriting enough, while the people who lounged about on the ground were clearly thinking a deal more of their dinner than of the merits of the animals on exhibition. It is seldom that we have seen the doings of the judges followed with so little interest. The very horses failed to attract much attention, although this is a very "horsey" district, but then there was not much to see here, and Messrs. Cookson and Thurnall only awarded some of the prizes in their classes "upon compulsion;" not but that

occasionally a really nice horse was paraded, such as the prize stallion Mogador, who never looked better; and a very taking nag he is, especially handsome and blood-like, and with the power of King Tom, relieved by a bit of fashion which he inherits on his dam's side from Orlando. Mogador's only opponent, the highly commended Jupiter, a beautifully bred horse, by Weatherbit out of a Birdcatcher mare, is still a short hack-looking animal, with a pretty head and bad cramped action. The third entry of hunter-stallions was old Cannobie, a well known stallion in these parts, having been bred by Lord John Scott, by whom the horse was given to the stud-groom Hemming some years since. Cannobie duly reached the show-ground on Tuesday morning, when he reared up and died in an instant of, as it was announced, disease of the brain. He was eighteen years old, and the sire of a vast deal of hunting stock in the Shires. And of this hunting stock there was a sad confusion of classes at Rugby, with endless conditions and restrictions, and as a natural result, but limited entries. Surely it would be better to arrange for two good classes, say of four-year-old and all-aged horses, than to fritter away the interest of what should be so attractive a section of the show. The best hunter from the Warwickshire, the North Warwickshire, the Atherstone, Pytchley, Biester, Quorn, Duke of Grafton's, and Mr.

Tailby—why not throw it open at once?—was Mr. Gale's Monarch, a fair, useful horse enough, and a frequent winner, where the company, as at Rugby, was not of any extraordinary merit. The best hunter, the property of a tenant-farmer within the limits of the same countries, was a wooden-looking chesnut by Rochester, with a horse of more character bred by Mr. Berry Congreve put second, and Mr. John Bennett's smart son of Artillery, a really charming horse in action, and a winner over a country, quite unnoticed. There were a number of other premiums, in some cases with single entries, and with little worth notice beyond Messrs. Gilbert and Glover's very neat hacks, and a clever pony shown by Mr. Umbers, that looked to be the best of the lot, though the prize-list says otherwise.

With only one other in competition, and that one disqualified, Mr. Manning's white-legged horse had a walk over for the cart stallion premium; while in many of the other classes of horses for agricultural purposes the entries were often as limited, and the merit less noticeable. Still the judges could not always agree, and Mr. Spencer was called in to decide which was the better mare of the two—Lord Warwick's or Mr. Beale's entry. The white-legged one from the Castle has a really beautiful forehead, with plenty of quality and fine action, but she is very bad on her forelegs; and so the Brockhurst mare, far better below, but common enough, and with a shocking neck put on about as wrong as it could be, was eventually pronounced the superior as the more serviceable of the pair. The extra stock included a half-Arab grey stallion, with a long, flourishing, Russian pedigree on one side of his head, flashy, flat-catching action, and of no particular use or purpose in his appearance. It is difficult to understand why such an animal should have been kept entire.

Mr. How sent on his team of Shorthorns from Guildford, and took the cow prize with Windsor's Butterfly, the two-year-old heifer with Vesper Queen, and the yearling premium with Verona, the closest competition seeming to be amongst the two-year-olds, where Mr. Angerstein showed a very taking lengthy heifer, bred at Brauehes, which had certainly some months' advantage in age, but was very near upon calving. Mr. Angerstein, who now gives the sportsmen of the Shires an off day's gallop with his stag-hounds, is also getting up a Shorthorn herd at Ashby, having of late been a free buyer from Lady Pigot, and taken on John Ward's son as his manager. Amongst the others Mr. Furness showed a nice milking sort of cow, called Joyous, bred by Mr. Bland at Coleby, and Mr. George Garne, who is coming again, his deep and stylish Duchess of Airdrie; but some of "the ruck" from Dunchurch, Lindsey, and Kenilworth were curious specimens of the improved Shorthorn. By far away the best bull or the best beast in the show was Lord Exeter's Telemachus, a good, true, and stylish animal, well furnished, and of fine quality, who showed a deal of promise at Sleaford and other meetings in the autumn of last year, but he had little to beat at Rugby, the Royal Butterfly having worn badly, and showing plenty of weak places. The few two-year-olds were a common plain lot, but Mr. Mumford sent a "breedy" yearling from Chilton, distinguished by a famous coat and touch, as not over-marked for show, and we fancied him more than the one put above him on the list. Mr. Beale's couple of country-side cows with their great bags were preferred to Lord Chesham's highly-bred Alderneys for "dairy purposes" on the plea of quantity rather than quality; but anyhow, the Latimer ladies should have taken second from the other poor things put above them, or there is no virtue in cream or butter. However, a caution as to something "suitable to the district," whatever that might happen to mean, seemed to decide it. Lord Exeter showed a pair of young

white steers, the one said to be of Burghley and the other of Booth blood; and there were three Longhorns shown in two classes, with Warwickshire, be it remembered, as the home of the Longhorn and Mr. Chapman as his champion. The Herefords, however, do worse hereabouts, with two entries in three classes; while the judges were induced to give Mr. Baldwin's mean bull-calf a second prize, and his heifer a first. Considering the cost at which the Luddington herd was established the white-faces can scarcely be said to have succeeded in Warwickshire.

The sheep show was small, and in many respects an echo of Guildford. Thus the Kilkenny Cotswolds were again in force, and Mr. Wallis' two second best Oxfords at the West of England Meeting now first, but Mr. Milton Druce made no entry, and Mr. Treadwell changed his sheep in the interim for one not so smart in his character. Mr. Turner also sent in some fresh Leicesters, with Mr. Marris as his only competitor, and the premiums most equitably divided. As we anticipated, the awards over the Shropshire sheep in Surrey the other day have already come to be disputed. Thus Lord Chesham's beautiful pen of ewes, with size, quality, and breeding, were now put before Mr. Baker's entries, though at Guildford the award was precisely the other way, with, we believe, much the same sheep in competition. Again, Lord Chesham here takes first for shearing rams, but Mr. Baker's Guildford prize ram died soon after that meeting, so that any correction here is not so clear. With a few other exhibitors of Shropshires the struggle for supremacy was altogether between these two flocks, and over the old class of only three entries an umpire had to be called. The first prize was awarded unanimously enough to a great well-grown sheep, bred by the late Lord Ayleston, one of the judges also going for a ram of Mr. Baker's own breeding as second-best, and the other for Lord Chesham's entry. The choice was between a somewhat coarse, useful, old-fashioned sort, and the smarter neater type of the more modern Shropshires, which Mr. Mansell preferred, and Mr. Newton, the referee, was of the same opinion, as were most of the Shropshire breeders on the ground. But it is difficult, so far, to hold to any very particular line over such a country.

Mr. Hicken, of Dunchurch, had some very noticeable success against the Duckerings and others with his white pigs, which it appears are of Messrs. Howard's sort. In fact, his boar in the old class, and the sire of his two young prize pigs, was bred at Bedford, but the judges here preferred an entry of Mr. Walker's, larger and coarser, with a thick but bad curly coat on his back. The best boar on the ground, however, was a particularly clever white of the small breed, very handsome and symmetrical, who had previously to this crowning distinction proved himself the best of an excellent class, with the Duckerings showing their own whites and Mr. Crisp's black (the second prize), Mr. Turner some of the Fisher Hobbs' Essex, and Mr. Walker a pig bred by the renowned Mr. Eden, of Manchester, so that almost every good sort of small pig was here represented. The winner was bred by Mr. Umbers. Mr. Humphrey beat Lord Chesham and Mr. Spencer for Berkshires; Messrs. Wheeler's sort had some further success, and the Northorpe pigs, as usual, commanded frequent mention on the prize list. In fact, the pigs, large and small, whites and blacks, made up the best section of the Warwickshire Show.

There were also premiums for cheese and implements, in which department the following firms were exhibitors: Richmond and Chandler, Manchester; Penney and Co., Lincoln; Humphries, Pershore; Barrows and Stewart, Bambury; Pinfold, Rugby; Glover, Warwick; Edmunds, Rugby; Ball and Sons, Rothwell; Baker,

Compton; Matterson, Huxley, and Watson, Coventry; Fuller and Simpson, Leamington; Glover and Sons, Warwick; Ball, North Kilworth, Rugby; Corbett, Shrewsbury; Amies and Barford, Peterborough; Woods, Cocksedge, and Warner, Stowmarket; Bradford and Co., Fleet-street, London; Mellard and Co. Rugeley; Beach, and Co., Dudley; Mann, Leamington; Aleock, Rugby; Day, Son, and Hewett, Dorset-street London; Kelham, Rugby; Dodge, Upper Thames-street, London; and True-love, Hinckley.

There was, we are told, a very large attendance on the Wednesday, when we can only trust that so preposterous a charge as one shilling for such a catalogue was reduced to a more generally available price. Catalogues should be to some extent advertisements, and it is very bad policy to put these out of the common reach.

PRIZE LIST.

JUDGES.

Cattle and Agricultural Horses: C. Hellaby, Brancote Hall, Atherstone; R. J. Newton, Campsfield Farm, Woodstock. Hunters and Hack: J. Cookson, Neasham Hall, Darlington; H. Thurnhall, Royston. Sheep and Pigs: T. Mansell, Ergall Park, Wellington, Salop; J. Tomkinson, Hall Field, Ashbourne. Cheese: T. Kemp, Warwick. Implements: J. Hemsley, Shelton, Newark; J. Toone, High Cross, Lutterworth.

C A T T L E.

SHORTHORNS.

Bull, above three years old.—First prize, £10, and extra prize of £10, the Marquis of Exeter, Burghey Park, Stamford (Telemachus).

Bull, over twenty months and under three years old.—First prize, £10, W. Bradburn, Wednesfield (White Satin); second, £5, R. Robins, Kenilworth (Red Martyr).

Bull, over ten and under twenty months old.—First prize, £8, C. A. Barnes, Charleywood, Herts (Lord Eglinton); second, £4, J. A. Mumford, Chilton, Thame (Caballer).

Cow, in milk, above three years old.—First prize, £6, and extra prize £10, J. Hough, Broughton, Huntingdon (Windsor Butterfly); second, £3, W. Bradburn (Red Rose). Highly commended: M. W. Furness, Rugby (Joyous).

Heifer, under three years old, in milk or in calf.—First prize, £6, J. Hough (Vesper Queen); second, £3, J. W. N. Angerstein, Ashby Lodge, Rugby (Lady of Branches). Commended: W. Bradburn (Miss Rose).

Heifer, under two years old.—First prize, £6, J. How (Verona); second, £3, C. A. Barnes (Royal Duchess). Highly commended: C. A. Barnes (Lady Adela).

HEREFORDS.

Bull above three years old.—No entry. Bull above ten months and under three years old.—Second prize, £3, J. Baldwin, Luddington. One entry.

Cow, in milk, above three years old.—No entry. Heifer, in milk or in calf, under three years old.—Prize, £6, J. Baldwin. One entry.

LONGHORNS.

Bull not exceeding four years old.—Prize, £5, R. H. Chapman, Upton, Nuneaton.

Cow or heifer, in milk.—Second prize, £3, J. H. Burbery, Kenilworth Chase.

Bull for breeding purposes, of any pure breed.—No entry. Pair of steers, of any breed, under three years old.—No entry.

FOR DAIRY PURPOSES.

Pair of cows in milk, which have been used in the dairy for the last two seasons.—First prize, £10, J. Beale, Wolvey Grange; second, £5, J. Pearman, Radford Semele.

Pair of Shorthorn steers, under two years old.—Prize, £5, Marquis of Exeter.

Cow or heifer of the Channel Islands breed.—No entry.

S H E E P.

LICESTERS.

Shearling ram.—First prize, £6, G. Turner, jun., Alexton Hall, Uppingham; second, £3, T. Marris, Uliceby Chase, Lincolnshire.

Two-shear ram.—First prize, £6, T. Marris; second, £3, G. Turner, jun.

Pen of five shearing ewes.—No entry.

OTHER LONG-WOOLLED SHEEP.

Shearling ram.—No award, only one competitor.

Two-shear ram.—First prize, £6, J. Wheeler and Sons, Long Compton; second, £3, J. Wheeler and Sons.

Pen of five shearing ewes.—No entry.

COTSWOLDS.

Shearling ram.—First prize, £6, Executors of the late J. Godwin, Troy Farm, Somerton; second, £3, Executors of the late T. Gillett, Kilkenny Farm, Farrington.

Two-shear ram.—First prize, £6, Executors of the late T. Gillett; second, £3, Executors of the late J. Godwin.

Pen of five shearing ewes.—No entry.

SHROPSHIRE.

Shearling ram.—First prize, £6, Lord Chesham, Latimer; second, £3, W. Baker, Moor Barns, Atherstone.

Two-shear ram.—First prize, £6, W. Baker; second, £3, Lord Chesham.

Pen of five shearing ewes.—First prize, £5, Lord Chesham; second, £2, W. Baker. Highly commended: W. Baker.

OTHER SHORT-WOOLLED SHEEP.

Shearling ram.—Prize, £5, G. Wallis, Old Shifford, Bampton, Farrington.

Two-shear ram.—Prize, £5, G. Wallis.

Short-wooled tup, being the property of, although not bred by, a member, and to be used this season in the county.—No entry.

LOCAL PRIZE.

Pen of five ewes, with their lambs in the yard.—Prize, £5, Executors of the late T. Gillett.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallion.—First prize, £20, J. Manning, Oringbury; second, not awarded.

Mare, with a foal at her foot.—First prize, £10, J. E. Parsons, Charwelton, Daventry; second, £5, R. Robins, Kenilworth.

Gelding, under three years old.—Prize, £5, W. Fairbrother, Barton Dassett.

Filly, under three years old.—Prize, £5, R. Timms, Braunston.

Cart gelding, above four years old.—Prize, £5, W. Fairbrother. Highly commended: J. N. Norman, Harboro' Magna.

Cart mare, above four years old.—Prize, £5, J. A. Beale, Broekhurst. Commended: The Earl of Warwick, Warwick Castle.

Pair of horses used at G.O. ploughing during the present season.—Prize, £5, the Earl of Warwick.

HUNTERS.

Stallion best adapted for hunting purposes.—Prize, £15, A. Walker, Rugby (Mogador). Highly commended: A. Over, Rugby (Jupiter).

Hunter that has been ridden in the past season with the Warwickshire, North Warwickshire, Atherstone, Pytchley, Bicester, Quorn, Duke of Grafton's, or Mr. Tailby's hounds.—First prize, £15, S. Gale, Caons Ashby (Monarch); second, £5, J. E. Parsons (The Duke).

Hunter, four years old and upwards.—First prize, £15, S. Catters, Binley (by Retriever); second, £5, W. Fairbrother.

Four years old gelding or filly, the property of a tenant-farmer farming not less than 100 acres of land, and residing within the limits of the Warwickshire or North Warwickshire Hunts, and to have been in his possession not less than twelve months.—Prize, £5, E. Knott, Fenny Compton.

Half-bred two years old colt or filly, the property of, and bred by, a member.—Prize, £5, J. Pearman, Radford Semele.

Half-bred mare (with foal at her foot, by a thoroughbred horse), the property of a farmer occupying not less than 100 acres of land, rented or his own property, residing in the country hunted by the Warwickshire hounds.—J. Pearman (disqualified).

Half-bred mare (with a foal at her foot, by a thoroughbred horse), the property of a farmer occupying not less than 100 acres of land, rented or his own property, residing in the country hunted by the North Warwickshire hounds.—Prize, £3, W. Driver, Caledon House, Coventry.

Mare best calculated to breed hunters (with a foal at her foot), the property of a person whose income is derived from the occupation of a rented farm, and who is a member of the Society. Foal by a thoroughbred horse.—Not sufficient number of entries.

Hunter, belonging to a tenant-farmer, residing in Warwickshire, North Warwickshire, Atherstone, Pytchley, or Mr. Taillly's hunts, which has been his property for six months previous to the 1st of June, 1871, and has been ridden to hounds during this season.—First prize, £25, C. A. Pratt, Sheuton, Nuneaton (Flirt); second, £12 10s., W. Rose, Offchurch (The Rover); third, £7 10s., T. H. Montgomery, Bourton.

HACKNEYS AND PONIES.

Hackney, exceeding 15 hands high.—Prize, £10, T. Gilbert, Swinford Lodge, Rugby.

Hackney, not exceeding 15 hands high.—Prize, £10, J. T. Glover, Warwick.

Pony, above 13, and not exceeding 14 hands high.—Prize, £5, S. Gale.

Pony, above 12, and not exceeding 13 hands high.—Prize, £5, W. Walker, Hillmorton.

Hackney, exceeding 15 hands high, belonging to a Warwickshire farmer, which has been his property for six months prior to June 1st, 1871.—Prize, £10, J. Gibbs, Cutler's Farm, Wootton Wawen.

Cob, not exceeding 14 hands, the property of the exhibitor for six months prior to June 1st.—No entry.

PIGS.

Boar of the large breed (except Berkshire) under eighteen months.—First prize, £3, J. Hicken, Dunchurch; second, £2, J. Hicken. Commended: W. Walker, Stockley Park, Anslow.

Boar of the large breed (except Berkshire) above eighteen months.—First prize, £3, M. Walker, Stockley Park, Anslow; second, £2, R. E. Duckering and Sons, Northope, Kirton Lindsey. Commended: R. E. Duckering and Sons.

Boar of the small breed, under eighteen months old.—First prize, £3, and extra prize, £1, E. Umbers, jun., Wappenbury; second, £2, R. E. Duckering and Sons. Highly commended: J. Wheeler and Sons. Commended: Duckering and Son and G. Turner, jun.

Boar of the small breed, above eighteen months old.—First prize, £3, and second, £2, R. E. Duckering and Son.

Boar of the Berkshire breed, under eighteen months old.—First prize, £3, J. Spencer, Villiers Hill, Kenilworth; second, £2, H. Humfrey, Kingstone Farm, Strivenham.

Boar of the Berkshire breed, under eighteen months old.—First prize, £3, H. Humfrey.

Breeding sow, suckling pigs of her own farrow, and in milk at the time of show, of the large breed (except Berkshire).—First prize, £3, J. Hicken; second of £2, R. E. Duckering and Sons, Northope; extra of £4, J. Hicken.

Breeding sow, of the small breed, suckling pigs of her own farrow, and in milk at the time of show.—First prize, £3, J. Wheeler and Sons; second of £2, E. Umbers.

Berkshire sow, suckling pigs of her own farrow, and in milk at the time of show.—First prize, £3, H. Humfrey; second of £2, Lord Chesham.

Best breeding pigs, of one farrow of 1871, of large breed.—Prize, £2, R. E. Duckering and Son. Highly commended: J. Hicken.

Breeding pigs, of one farrow of 1871, of small breed.—Prize, £2, J. Wheeler and Sons.

Breeding pigs, of one farrow of 1871, of Berkshire breed.—Prize, £2, J. Wheeler and Sons.

Sow, of any breed, suckling pigs of her own farrow, and in milk at the time of show.—Prize, £2, J. Hicken.

CHEESE.

Three cheeses, not less than 70lbs. each, the property of the exhibitor, a member, and made from his own dairy in 1871; and a medal to the dairymaid.—Prize, £5, G. Gibbons, Tunley Farm, Bath. Highly commended: J. Harris, Fletchamstead, Coventry.

Three cheeses, not exceeding 50lbs. each, the property of the exhibitor, a member, and made from his own dairy in 1871; and a medal to the dairymaid.—Prize, £5, M. Walker, Stockley Park, Anslow. Highly commended: G. Gibbons.

IMPLEMENTS.

The sum of £50 given at the discretion of the judges as under:

Richmond and Chandler, Salford, Manchester, £2, for chaff-cutting machine.

Humphries, Pershore, £3, for thrashing machine and dresser.

Edmunds, Rugby, £3, for collection of implements.

Ball and Sons, Rothwell, £2 for combined potato, ridge plough, and horse hoe; and £2 for combined double plough and subsoil plough.

Matterson, Huxley, and Watson, Coventry, £5 for collection of implements.

W. Glover and Sons, Warwick, £5 for collection of implements, £3 for waggon, and £2 for drill.

Ball, North Kilworth, Rugby, £5 for collection of carts, and £2 for combined double plough and subsoil plough.

Corbet, Perseverance Ironworks, Shrewsbury, £2 for combined winnowing machine and sack elevator.

Amies and Barford, Peterborough, £5 for corn mill, and £5 for dressing machine.

Woods, Cocksedge, and Warner, Stourmarket, £2 for horse gear.

Mellard and Co., Trent Foundry, Rugeley, Staffordshire, £2 for sheep rack.

For the best farm gate, complete, at a cost not exceeding £1 5s., first prize £5, W. Ivens, Harborough Parva, Rugby.

At the dinner, Mr. NEWDEGATE, M.P., said: There is in the philosophical Radicalism of the present day an objection to every one of those elements of independence which form the ground work of English freedom, whether in the service, or in Parliament, or in the State, or in the Church. This philosophical Radicalism has had its full development in the Government of France, and I ask you whether you admire that example? They will tell you that this philosophical view of freedom is classical, that it is that of ancient Greece and Rome. But I ask you where are those empires now? It is the Saxon element of England which has attained the development upon which is founded English freedom, and I shall ever as your representative stand stilly and sternly for the maintenance of our Saxon freedom. I stand before you first as a magistrate and then as a county member, one whom these philosophical Radicals have taunted as one of the "great unpaid." They are more cautious now, but they used to speak of the great body of the working-classes as the "great unwashed," and except that it were for the good understanding that exists between the great unpaid and the great unwashed, how should we have secured the peace and the freedom and the prosperity which has existed in England to the admiration of the world? But there would be a gap between the great unpaid—as these philosophical Radicals call us—and the great unwashed were it not for the middle class of which I see such a noble specimen before me. The English farmer is a medium by which the two extremes of society are combined. He is intellectually the oak of the English constitution and of the English mind, and long may it stand sturdily to brave the battle and the breeze! When trouble comes—and perhaps looming in the distance there is a dark cloud larger than a man's hand—may the oak shelter the poor and defend the feeble! Long may there be that union between classes which this Society so eminently represents! Long may these meetings be graced by the presence of the ladies of England! and it is curious, but I was reading the other day a list of seven or eight French *savants*, leaders of the intellect of France, who had been driven to England by the sad storm which has devastated their own country, and three at least of them had shown their appreciation of English homes, by marrying English women. This is a tribute paid to the women of England by the leading intellects of France. Alas! we have seen in Paris that women—who are a blessing to mankind—debased, degraded, and uneducated, become fiends. Let us by this contrast learn to be proud that we are English sons of English ladies.

Mr. JOHN HARDY, M.P., said: When I got into the show-yard the Chairman said my stock was not fat enough. I did not know what fitness was until I came to Rugby. This must be a land overflowing with fatness.

Mr. CALDECOTT, the chairman: And not with milk.

ROYAL CORNWALL AGRICULTURAL SOCIETY.

MEETING AT TRURO.

The real business of the Tuesday consisted of the judging of the implements for the Rodd Memorial and Society's prizes. That part of the work which had the most attraction for the public was the trials of mowers and of double ploughs, and these were attended by a large assemblage. Mowers by nine makers were selected for trial, but only eight put in an appearance. They were as follows: Howard's, Burgess and Key's, Lewis and Hoole's, Brenton's, Samuelson's, Oatey's, Wood's, Picksley and Sims'. The trial took place in a small field at the head of Daniell-street, and the stewards and judges made the most of an awkwardly-shaped trial-ground. In double-furrow ploughs, the competitors were Messrs. Howard, Fowler, and Davey. The land was very hard and stiff to get through, but the work was admirably done. The trials of implements took place under the superintendence of Mr. Trethewey, director of the exhibition, and Mr. Davis, steward of implements.

Perhaps never was there collected here a show of cattle of greater average excellence. The Devons, the Shorthorns, and the Herefords were in point of quality nearly all good. The little Jersey cows, too, were of the best of their kind. The greatest praise, however, was reserved for the Devons and the Shorthorns as favourite breeds, many of Messrs. Hosken's and Mr. Farthing's entries having been already out this year at Guildford. The Herefords were tolerably well represented. Though not a favourite breed in the county they are in repute with a few breeders, who believe they have a peculiar value in certain districts. The Leicester sheep, as might have been expected, muster most strongly; while the judges were so pleased with the show of pigs that they highly commended every class. The Berkshire and the small breeds were represented by some remarkably good animals, and they were by far the most numerous, as apparently now the favourite breeds. There were also a few capital specimens of the large breeds. There was a very fair show of horses; the best, undoubtedly, that has ever been seen in Cornwall. There was no district of the county unrepresented, while there were many from the most distant parts of the adjoining county. Only two classes were thinly represented, those of three-year-old geldings for agricultural purposes and three-year-old geldings or fillies bred by tenant farmers in Cornwall. The challenge cup, value 60 guineas, for the best three-year-old gelding or filly, bred by a tenant farmer of Cornwall, goes again to Mr. John Paull, whose property it thus becomes.

PRIZE LIST.

JUDGES.

DEVONS AND HEREFORDS: Mr. Newberry, Plympton; Mr. Snow, Braunton, Barnstaple.
 SHORTHORNS, JERSEYS, AND PIGS: Mr. Corner, Torweston; Mr. Morris, Maisemaun, Gloucester.
 SHEEP: Mr. Potter, Collumpton; Mr. Nicolls, Altarnun; Mr. J. Hodder, Emeston, Modbury.
 HORSES: Mr. Digby Collins, Newton Park, Callington; Mr. Warne Raddall, South Petherwin; Mr. Anstey, Menabilly Farm.

CATTLE.

DEVONS.

Bulls above three years old.—First prize, Viscount Falmouth (Narcissus); second, T. Julian, Creed (Duke of Cornwall); third, W. Earthing, Stowey Court, Bridgwater (Sir

George). Highly commended: H. Benny, Ladoek (Mousehole). Commended: W. Clark, St. Ewe (Captain).

Bulls above two and not exceeding three years old.—First prize, Viscount Falmouth (Jonquil); second, R. H. Marshall, Mawgan; third, H. Davey, Penhole House, Northhill (Marquis of Lorne).

Bulls not exceeding two years old.—First prize, Viscount Falmouth; second, W. P. Vosper, Saltram, Plympton. Highly commended: Viscount Falmouth (Kingeraft), and J. Jackman, Hexworthy. Commended: H. Benny, Ladoek, and J. Mason, St. Clements.

Cows above three years old.—First prize, W. Farthing; second, T. Julian; third, J. Tremain, Philleigh. Highly commended: J. Tremain, and T. Julian.

Heifers not exceeding three years old.—First prize, J. Mason, St. Clements; second, T. Julian.

Heifers not exceeding two years old.—First prize, W. Farthing; second, Rev. S. N. Kingdon, Bridgerule, Holsworthy; third, Viscount Falmouth. Highly commended: T. Julian. Commended: J. Mason.

SHORTHORNS.

Bulls above three years old.—First prize, T. Blamey, jun., Veyan (Majesty); second, R. Tremain, Trethurffe, Ladoek (Townley Grand Duke); third, J. Thomas, Gerrans (Duke of Roseland).

Bulls above two and not exceeding three years old.—First prize, E. Bolitho, Trewidden, Penzance (Orion); second, Cardell and Martyn, Colan and St. Ender; third, Sir F. M. Williams, Bart., M.P., Goonvrea, Perranarworthal. Highly commended: J. Gill, Probus.

Bulls not exceeding two years old.—First prize, Hosken and Son, Hayle (Prince Frederick 3rd); second, Tremain and Giles Williams, Philleigh and Ruanlanihorne; third, Hosken and Son (Knight of Penwith).

Cows above three years old.—First prize, Hosken and Son (Butterfly); second, Whitford, St. Erme.

Heifers not exceeding three years old.—First prize, Hosken and Son (Countess of Oxford); second, Hosken and Son (Miss Ada 2nd); third, M. H. Williams, Tredrea. Highly commended: Sir F. M. Williams.

Heifers not exceeding two years old.—First prize, Hosken and Son, Hayle; second, Hosken and Son; third, Hosken and Son.

HEREFORDS.

Bulls above three years old, 1871.—First prize, G. and W. E. Lobb, Lawhitton; second, W. Grose, Penpont, Wadebridge.

Bulls above two and not exceeding three years old.—First prize, J. Paull, Ruanlanihorne; second, Olver, Philleigh. Commended, Olver.

Bulls not exceeding two years old.—First prize, W. Grose, Penpont, Wadebridge; second, J. Paull.

Cows above three years old.—First prize, J. Sydney Davey, Redruth; second, R. S. Olver, St. Mahyn. Highly commended, W. R. Grose, Penpont, Wadebridge.

Heifers not exceeding three years old.—First prize, Olver; second, J. Paull. Highly commended, G. and W. E. Lobb. Commended, W. N. Grose (for two heifers).

CHANNEL ISLAND.

Cows above three years old.—First prize, J. Sydney Davey; second, Gatley, St. Erme; third, J. Brown, Truro. Highly commended, Sydney Davey; and F. Cragoe, Kea.

Heifers not exceeding three years old.—First prize, R. Rendle, Catel Farm, Guernsey; second, Gatley, St. Erme; third, R. Rendle. Highly commended, R. Rendle.

SHEEP.

LEICESTERS.

Yearling rams.—First prize, J. Tremain, Philleigh; second, G. Turner, Cadbury, Tiverton; third, J. Gould, Bampfyld Lodge, Poltimore.

Old rams.—First prize, G. Turner; second, J. Gould; third, J. Tremain.

Yearling ewes.—First prize, J. Tremain; second, J. Gould; third, J. Mason.

LINCOLNS.

Yearling rams.—First prize, T. M. Cardell, Colan; second, T. M. Cardell.

Old rams.—First prize, T. M. Cardell; second, T. M. Cardell.

COTWOLDS.

Yearling rams.—First prize, Gatley, St. Erme; second, Gatley.

Old rams.—First prize, Gatley; second, Gatley.

SOUTH HAMPS.

Yearling rams.—First prize, J. Badoock, Bearscombe, Kingsbridge; second, G. Martyn, Trewen, Camelford.

Old rams.—First prize, J. Badoock; second, A. C. Clarke, St. Budeaux.

DARTMOORS.

Yearling rams.—First prize, J. Drew, Artiscoombe; second, R. Palmer, Radge, Tavistock.

Old rams.—First prize, R. May, Grendon, Tavistock; second, T. Square, South Brenton, Tavistock.

SHROPSHIRE DOWNS.

Yearling rams.—First and second prizes, Viscount Falmouth.

Old rams.—First prize, Viscount Falmouth; second, J. Sydney Davey.

Yearling ewes.—First and second prizes, Viscount Falmouth.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallions.—First prize, G. Jeffrey, Lidford, Devon; second, H. Laity, Crowan (Goldfinder); third, J. Down, Black Torrington, Devon (Morning Star). Highly commended: Reynolds, Perranzabuloe, (Young Oxford)

Mares.—First prize, E. Cragoe, Kea; second, Gatley, St. Erme; third, G. E. Elliott, Swilley Farm, Plymouth. Highly commended: J. Merthyr. Commended: G. E. Elliott.

Three-year-old Geldings.—No entry.

Three-year-old Fillies.—First prize, J. Tremain; second, Gill, Tregassa, St. Erme.

HACKS AND HUNTERS.

Stallions.—First prize, T. K. Bickell, Tavistock (Hunting Horn); second, H. Laity, Crowan (Mouraviel).

Mares.—First prize, Viscount Falmouth, Tregothnan; second, Viscount Falmouth; third, Rd. Cleave, Advent, Camelford.

Three-year-old Geldings.—First prize, Viscount Falmouth; second, Colonel Tremayne, Carelew.

Three-year-old Fillies.—First prize, J. Gill, St. Erme; second, S. Hendy, Wendron.

Cob not less than 14 hands or more than 14 hands 3 in.—First prize, E. James, Newlyn.

Three-year-old Gelding or Filly.—First prize, J. Paull, Ruanlanhorne.

Two-year-old Gelding or Filly.—First prize, W. Rowse, Bodmin; second, Lawry, Probus. Highly commended: Thompson, Cuby.

Ponies not exceeding 13½ hands.—First prize, J. Magor, St. Columb.

PIGS.

Boars, large breed.—First prize, Sydney Davey; second, Sydney Davey.

Sows, large breed.—Prize, J. Ball, Plynt's Barn, Truro.

Boars exceeding 12 months, small breed.—First prize, W. M. Ware, Newham House, Helston; second, R. Roskelly, St. Enoder.

Boars not exceeding 12 months, small breed.—First prize, W. M. Ware, Helston; second, J. Vereoc, Ladock; third, Hendy, Trenowth, Probus. Highly commended: W. James, Probus.

Sows, small breed.—First prize, Hendy; second, Whitford, Erme; third, Hendy. Highly commended: Rd. Gill, St. Sthen. The class commended.

All pens of two breeding sows not exceeding 12 months old.—First prize, Sir F. M. Williams, Bart., M.P.; second, Sir F. M. Williams; third, Sir F. W. Williams.

The above prizes are subject to the approval of the council to decide if those which were Berkshire pigs should be considered a small breed.

SPECIAL PRIZES.

The best bull in the yard, Lord Falmouth (Devon); the best cow or heifer, Walter Farthing (Devon); the best ram, G. Turner (Leicester); best pen of ewes, J. Tremaine (Leicesters).

IMPLEMENT S.

JUDGES.—Messrs. J. Sobey, J. Stephens, and N. Rosevear, jun.

THE RODD MEMORIAL PRIZES.

PREPARATION OF THE GROUND.

Best double-furrow plough.—J. and F. Howard, Bedford.

Best cultivator.—J. Davey, Crafthole.

Best set of harrows.—Larkworthy, Worcester, on Messrs. Plimsaul's stand.

Best set of seed harrows.—Messrs. Howard.

Best chain harrow.—Cambridge and Parham, Bristol.

CULTIVATION OF CROPS.

Best corn drill for small occupation in hilly districts.—Brenton, Polbathie.

Best turnip and mangel wurzel drill, for ridge or flat, depositing manure with seed.—Brenton.

Best general manure distributor.—Brenton.

Best horse-hoe for green crops, on the ridge and flat, adapted to work horizontally along the side of the hill.—J. Davey.

HARVESTING CROPS AND PREPARING FOR MARKET.

Best mowing machine.—First prize, Samuelson and Co., Banbury; second prize divided between Burgess and Key and Brenton. Highly commended: Picketsley and Sims.

Best haymaking machine.—Messrs. Howard.

Best horse-rake for collecting hay or corn, having a mode of delivery more or less self-acting.—Davey.

Best winnowing machine, which will also be convertible into a simple blower.—Brenton.

SOCIETY'S PRIZES.

Collection of the best and most improved agricultural implements and machines manufactured in the county.—First prize, Brenton; second, Davey; third, Oatey, Wadebridge.

Best cooking apparatus.—Barnicoat, Merthyr.

Best sheep-feeding hurdle-rack.—Brenton.

Best field gate.—Cambridge and Parham.

At the dinner, the MAYOR said the Society was born in Truro, and Truro was proud of it. It was a proud thing for them to hear as they did that the show on the grounds that day was superior to that of the Bath and West of England, which had recently enlarged its boundaries. They had heard recently about a certain Roger Tielborne going away ten stone and coming back twenty-six, but he thought the increased proportions of that Society would not throw any difficulty in the way of recognising it, and giving it its rightful claims.

Mr. MORRIS, one of the judges, said he had seen as good a lot of Shorthorns on the ground that day as he ever wished to see again, and the Society must have been proud to have such animals to show, and he thought it would be very difficult to find any animals to beat them.

Mr. COLLINS said the horses and dogs in the show were far above the average. The sporting dogs were superior to what he had seen in the Crystal Palace show. Then, as to the horses, he saw a half-bred two-year-old such as he had never seen in his life before. Although the size was a little under what they might hope for, the quality was as good as they could wish to see at any county show.

Mr. T. OLVER said he never saw better animals exhibited in any other county in England; or such a fine collection of various breeds of animals as had been brought together that day.

THE FRENCH PRIZES OF HONOUR.—Eight of the French Departmental prizes of honour for 1871, have now been announced. They are as follows: Ile-et-Vilaine, M. Després, the Guerche; Isère, the Marquis de Monteynard, Senain; Seine-et-Marne, M. Caille, Crisnoy; Sarthe, M. Coartillier, Préigné; Gers, M. Alfred de la Lavergne, Montréal; Gard, M. Causse, Massereau; Doubs, M. Cécnot, Noël-Cernaux; Meuse, M. Radouan, Remenecourt. The district agricultural shows organised in former years by the French Government will not take place in 1871.

THE THORNE AGRICULTURAL SOCIETY.

The entries are rather smaller than for the year previous, the total number of entries ranging from 1,030 to 1,040. Those for horses, as also for dogs, are in excess of last year. Poultry and pigeons are about the average; whilst cattle, sheep, and pigs also remain about the same. Rabbits are rather less; but for butter, eggs, and flowers there is a slight improvement. Of course, the largest number of any kind shown is in the horses. The exhibition of cattle is not as large as one might expect. The number on the present occasion only included 34 entries. Neither are sheep or pigs, either as to number or quality, a very favourable show. The number of entries for the former was 29, and for the latter 37. Of the sheep the pick of the lots were the long-woolled rams of any age. Of the pigs, the sows, gilts, and stores were the most taking, though none could be reckoned of extra quality. Of the assortment of agricultural implements there were 206 articles exhibited, comprising almost everything calculated to be of use on the farm or in the garden.

P R I Z E L I S T .

J U D G E S .

DRAUGHT HORSES: Mr. S. Wormald, Cawood Castle, Selby; Mr. J. Wressell, Crow Grange, Beaford Driffield; Mr. W. Roberts, Nockton, Lincoln. **HUNTERS, NAGS, &c.:** Mr. E. Godfrey, Thealby, Brigg; Mr. T. Smith, Gringley, Bawtry; Mr. J. Everatt, Langhton, Gainsboro'. **CATTLE:** Mr. T. Dodds, Wakefield; Mr. G. Angus, Beeford Grange, Driffield; Mr. J. Abraham, Owersby House, Market Rasen.

I M P L E M E N T S .

Agricultural implements, manufactured by exhibitor.—Prize, £3 3s. and the Society's Medals, B. Sanderson, Thorne.
Assortment of implements.—Prize, £5 5s. and the Society's Medals, J. Glew, Howden.
Four-wheel carriage, manufactured by exhibitor.—Prize, £2 2s. and the Society's Medals, Smith and Son, Doncaster.
Two-wheel carriage, manufactured by exhibitor.—Prize £2 2s. and the Society's Medals, Tuckering and Co., Beverley.

H O R S E S .

Agricultural mare and foal (eight competitors).—First prize, M. Askren, Levels; second, W. Bramley, Amcotts. Commended: R. C. Workman, Alnholme.
Agricultural yearling colt or filly.—First prize, F. Turner, Armathorpe; second, W. Bramley, Amcotts.
Agricultural two years old gelding or filly.—First prize, W. Bramley; second, J. Coulman, Thorne. Commended: G. Wood, Hayfield.
Agricultural three years old gelding or filly.—First prize, T. Black, Thorne; second, T. J. Brown, Althorpe. Commended: H. Robinson, Conisbro'.
Pair of draught horses for agriculture.—First prize, W. Tennant, Barlow; second, E. Conlman, Plains House.
Pair of draught horses adapted for light soils.—First prize, T. J. Brown; second, J. Coulman.
Agricultural gelding or mare, any age.—First prize, W. Stephenson, Althorpe; second, S. Barker, Marr.
Hunting mare and foal.—First prize, M. Askren, Thorne; second, W. Glentworth, Goole.
Hunting yearling colt or filly.—First and second prizes, W. Toder, Retford.
Hunting two years old gelding or filly.—First prize, J. Stubbs, Wheatley; second, R. Bramley, Airmyn.
Hunting three years old gelding or filly.—First prize, F. Clater, East Retford; second, J. Moore, Sealm Park, Selby.
Hunting gelding or mare.—Prize, A. J. Brown, North Elmsall.
Carriage mare and foal.—First prize, J. Reader, Holme; second, W. H. Brown, Belton.
Carriage yearling colt or filly.—First prize, J. Coulman; second, J. Shillito, Wrangbrook.
Carriage two years old gelding or filly.—First prize, J. Coulman; second, W. B. Houlden, Brantou.

Carriage gelding or mare.—First prize, J. Reader; second, W. Brockton, Tudworth Green.

Roadster mare and foal.—First prize, G. Goody, Thorne; second, W. Whaley, Thorne.

Roadster yearling colt or filly.—First prize, J. Bladworth, Whitgift; second, E. Ellis, Bentley. Commended: J. F. Watson, Crowle.

Roadster two years old gelding or filly.—First prize, J. F. Watson; second, P. Holme, Sykehouse.

Roadster three years old gelding or filly.—First prize, T. J. Brown, Althorpe; second, J. and G. Brown, Epworth.

Roadster gelding or mare.—First prize, E. Charlesworth, Bradford; second, E. Winter, Goodeop. Highly commended: E. Benson, Butterwick. Commended: P. East, Sandtoft.

Weight-carrying cob, any age or sex.—First prize, J. H. Smith, Shipton; second, E. Francis, Hatfield. Highly commended: J. Axe, Doncaster.

Lady's hackney, any age or sex.—First prize, J. Reader; second, Rev. J. Cross, Appleby Vicarage.

Pony, not exceeding 14 hands.—First prize, Harrison, Everton, Bawtry; second, J. M. Frudd, Sleaford.

Pony, not exceeding 12 hands.—First prize, T. Cook, Fishlake; second, J. Lockwood, Kelfield.

C A T T L E .

Bull-calf.—First prize, T. Clayton, Bodles, Doncaster; second, T. Crowcroft, Carr Grange.

Bull, under two-years-old.—First prize, G. Mann, Seawby; second, J. Brown, Rossington Hall.

Bull, any age.—First prize, J. H. Sunderland, Billingley; second, J. Brown. Highly commended: H. Crossley, Halifax.

Cow, in-calf or milk.—First prize, G. Mann; second, H. Crossley. Highly commended: J. Dickinson, Partridge Hill; and C. Brown, West Butterwick.

Heifer, in-calf or milk.—First prize, H. Crossley; second, J. Lee, Rossington.

Pair of calves, under 18 months old.—First prize, J. F. Watson; second, F. Harrison, Thorne. Highly commended: M. Askren, Thorne.

Cottager's Cow, in-calf or milk.—First prize, G. Temperton, Thorne; second, R. Lambert, Thorne.

S H E E P .

One shear long-woolled ram.—No first prize awarded; second, J. Howarth, Hatfield.

Long-woolled ram, any age.—First prize, J. Shillito, Wrangbrook; second, R. C. Workman, Alnholme.

Five long-woolled ewes.—First prize, J. Winder, Newton; second, M. Askren, Levels.

Five long-woolled gimmers.—First prize, T. B. Dalton, Seawby, Brigg; second, Wm. Hart, Fimingley.

Five long-woolled rams.—First prize, T. B. Dalton; second, M. Askren, Thorne. Highly commended: G. Robinson, Hightfield House, Brigg.

P I G S .

Boar, any breed.—First prize, Messrs. Duckering, Northorpe; second, C. Roberts, Wakefield.

Sow, any breed.—First prize, C. Roberts; second, Messrs. Duckering, and C. Roberts, Wakefield (equal).

Open gilt, any age.—First prize, C. F. Hallas, Huddersfield; second, Messrs. Duckering. Highly commended: C. Roberts.

Two store pigs.—First prize, C. F. Hallas; second, Messrs. Duckering. Highly commended: J. Hallas, Huddersfield.

Cottager's pigs.—First prize, R. Fillingham, Hatfield; second, P. Hurst, Awkley; third, G. Holgate, Hatfield, Woodhouse.

B U T T E R A N D E G G S .

A pound of butter.—First prize, Miss M. Watson, Belton; second, Miss S. J. Greenfield, Belton; third, Mrs. G. Bassingdale, Belton; fourth, Mrs. Wilson, Awkley. Highly commended: G. Temperton, Thorne; Miss Haycroft, Routh, near Beverley; Mrs. J. E. Tattersall, Thorne; Miss Whaley, The Grange; Mrs. Coulman, Thorne. Commended: Mrs. G. Watson, Fishlake.

Twelve eggs.—First prize, Miss S. Barker, Marr; second, J. Powell, Bradford. Highly commended: J. Thresh, Bradford. Commended: F. Casson, Thorne; C. Deuby, Goole.

THE HORSE SHOW AT THE AGRICULTURAL HALL, ISLINGTON.

With half-a-crown the turnstiles could be set grating at nine o'clock on the Saturday morning for a peep at the eighth show of horses, and as the judging did not commence until ten, it gave ample time for a look round—a great improvement this on last year, when the public were kept waiting outside until the horses were before the judges. The Hall was as spruce, trim, and sweet as usual, while with the assistance of canvass, plain and coloured, the heat and glare of the sun was diminished, affording more agreeable accommodation for man and horse. Then the ring was free from jumping accessories and intruders, so that everyone had a fair chance of seeing the horses, which were numbered on the chest, after the fashion of the Royal Agricultural Society's Show, and came in in order, without any delay. Lord Coventry, Mr. George Lane Fox, and Colonel Kingscote, commenced with the weight-carrying hunters up to fifteen stone, a class not so numerous or anything like so good as that of last year, many of them being unworthy the name of hunter. The prizes being £60, £30, and £20, in lieu of £80, £40, and £20, might have something to do with the quality. Iris, the favourite horse of Mr. Austruther Thomson, and the one he has been immortalized on by Grant, it will be remembered when second to Sir Watkins's grand horse Expectation last year, never showed to less advantage, as he came straight away from Eife by rail into the Hall and looked tucked up and scared, in fact was not himself at all. To make amends, and for another shy, John Pye got him this time in the best of trim, and accustomed to the circle, for the horse never looked better, and his strong going and grand hind-leg action was generally admired, as his right to first honours we did not hear questioned; not so with The Yankee, the first at Birmingham last year, a common beast that cannot get his knee away from his heavy pointed shoulder, and who is more entitled to a collar than a third-class hunting prize; while the second Loxley is a compact, active looking horse that we fancy we have met somewhere before. Behind these were the well-known prizetakers, Borderer and Banner Bearer, both much improved since last year, and that we hope to see meet in the open to decide their differences. Mr. A. Thomson's Crown Prince is a hunting-like horse, but not so strong a goer as Iris. Col. P. Dougall's The Czar a slack-joined horse, but with action and quality. Then Mr. Jonas Webb's Statesman and Mr. J. P. Pitt's Colonel have hunting form, the latter being a deep-framed, compact horse; while Blackthorn, though not looking up to the weight, and rather wide and split up behind, still was all over like getting across country. Mr. Sutton's Progress is a taking horse at a glance, but has not hunting shoulders or action; Mr. J. Musgrave's Marmalade, a sweet name, had rather a washy look, but was still second-prize horse in the hunters without condition as to weight, where Montrose, a good-tempered, nicely framed horse, but a bit of a peacock, who did not walk was first, and Mr. Sanders' The Farmer third—his owner also having two other smart ones in the class, Luxury and Tip Top. The Farmer, like many others, was entered in two classes, and in the hunters not exceeding fifteen-two was first for the £40, but having won £15 in the previous class was disqualified; though Coxcomb was first as a light-weight hunter, and first as a ladies' horse last year, and not disqualified, it would prevent confusion if horses were kept to one entry. Mr. Morlaunt's Teubury could move, and the Hon. A. P. Hood's Hurricane looked like

going for jumping races, while Mr. B. Jonson's Elastic had breed and action, and Mr. Smith's Gayland, and Mr. Myer's Peacock good form; but Lord Yarborough's Esca, though a little high on the leg, was quite a gentleman that looked like leaving many of his companions behind over a country, and among them the sensation horse of the class, Mr. Wellitt's Loiterer, the great mistake of 1870, of whom, when he won the 100-guinea hunter prize at Wakefield, we said, "with his action he was nothing but a neat gig horse," and this we stick to. If any hunting man with an eye to action will watch the black legs of Loiterer as he goes round the circle in walk, trot, or gallop, and then make an affidavit to the best of his belief that Loiterer's is hunting action, we will consider whether it is advisable to indict him for perjury, or hand him over to the care of his mother. Last year, according to the catalogue, he was "a remarkably clever hunter—has been broken to harness—price two hundred and seventy guineas;" and in this year's entry, "Has been exhibited six times, and has won six prizes, amounting to £250; has carried a lady with bounds during the last season—price four hundred guineas." And with this in their hands, Lord Coventry, Mr. Geo. Lane Fox, and Colonel Kingscote order him out of the ring, and for which we worship them; for though neat enough for anything, with his action as a hunter we believe Loiterer to be as thorough an impostor as Beechwood, Master of Arts, or Voyageur, that bench after bench of judges, fond of the game of follow my leader, went on pouring prize money into the coffers of their owners. For hunters not exceeding 15.2, we have said that The Farmer was disqualified; so the first place went to Mr. D. McIntosh's Voltigeur, a very clever little horse, and not unknown to Islington and other rings as a prize-taker. Sir Arundell Neave took second honours with Nell Cook, a strong, useful mare, and the others were but common ones. In the four-year-olds, Captain Barlow, with a compact, deep, powerful, hunting-like horse, of sixteen hands high, by Seneschal, was first, and a nice-framed one of Mr. Booth's Brandsby, second; while about the easiest goer of the lot was Mr. Battam's Tavistock, but his back and shoulders were not quite up to the mark. Mr. Stephenson's Nobility and Mr. Thomas's Jenny were of fair form, and could go. There was an entry of thirteen, but the others were not remarkable for anything out of the common, so the Hasketon horse won as he liked, and afterwards the Gold Cup, as the best horse in any of the hunting classes, having Iris, Montrose, and Voltigeur against him. He is a grand horse of his age, and much fancied; of course he is raw at present, but he is sure to fine, and with riding and pulling together may in six years get his hind legs under him, and go as well as Iris, but never better. The old horse looked well and no mistake, but we doubt if he was as a four-year-old so grand a horse as the Hasketon gelding.

Ten thorough-bred stallions came in the ring to compete for the fifty and gold medal—Sincerity, a second-prize taker at Oxford and Wakefield; Blackdown, shown at the Oxford, though wrong in the shoulders; Cambuscan; Master Barwell, by Nutbourne, but nothing like so good as his sire in form; Suspicion, Midsummer, Suffolk Littlecote, Watchman, and Vivier, from which the judges selected, we think, the three best by a long way—viz., Cambuscan, Suffolk, and Sincerity, which are very useful

horses, but not without faults; but Cambuscan is the least faulty. He is sixteen hands, with length, quality, good form and looks, as well as being very muscular and hardy; if he falls off anywhere it is below the knee and in the ankles. Then Suffolk, with quality, has a fine hunting forehead and a capital back, but is a shorter horse than Cambuscan, and more faulty below the knee; while, by the side of the two, Sincerity looks coarse and coachy, which nobody can deny.

Lord Coventry, Mr. Fox, and Col. Kingscote having gone through their task in a careful and workmanlike manner and without pottering, resigned the ring to Captains Bastard and Whitmore, Mr. Craven being an absentee. They began with the riding horses, "*fine action and quality essential*," but notwithstanding this condition with few exceptions they were a very common lot. Prince Imperial is a light washy horse, but a very elegant mover; Marvel is very neat and quick. Anita, by Oulston, of fair form but with straight marching action. Mr. Mavor showed Elegance, who was only so in action and not in frame; and Mr. Beart a clever cobby hack, but scarcely up to the conditions. Surely putting Queen of Trumps, a light elegant stepping park hack, as a first-class weight carrying roadster or cover hack was a mistake, while there were three or four in the class also better adapted for the purpose than the Prince of Wales' Delight. There was a meJey in the park hacks and ladies' horses, as there generally is; but darkness coming on with a thunderstorm we could not see much of them, though D. Sheward handled Blue Blazes very nicely, as he did several others. Still, dark as it was, we could catch the Grecian bend in the apparently self-willed Squire's back—a horse that the Birmingham judges preferred to one of the most perfect ladies' horses we have seen for some time, manners and all taken into consideration. There were some capital cobs, and a few good trappers, but it is not a strong show.

P R I Z E L I S T.

HUNTERS AND THOROUGH-BRED STALLIONS.

JUDGES.—Lord Coventry, Mr. George Lane Fox, and Colonel Kingscote.

Weight carriers up to 15 stone.—First prize, £60 to J. Anstruther Thonson. Atherstone (Iris); second, £30, to G. Van Wart, Edgbaston, Birmingham (Loxley); third, £20, to T. Percival, Wansford (The Yankee).

Without condition as to weight.—First prize, £50, to Capt. Greville, Beaufort Gardens (Moutrose); second, £25, to J. M. T. Musgrave, Beverley (Mamadale); third, £15, to Henry Sanders, Brampton Hill, Northampton (The Farmer); highly commended Lord Yarborough's Esca.

Without condition as to weight, and not exceeding 15.2 hands.—First prize, £40, to D. MacIntosh, Romford (Voltip); second, £20, to Sir A. Neave, Romford (Nell Cook). Highly commended: I. Lampard, Steylesbury, Wilts (Newton).

Four years old.—First prize, £50 and the gold cup, to Frederick Barlow, Hasketon (Brown gelding); second, £25, to J. Booth, Killyby (Brandsby); highly commended, G. B. Battam's Tavistock.

STALLIONS.

Thoroughbred.—Prize of £50 and the Agricultural Hall medal, Lord Stamford, Enville Hall (Cambuscan); highly commended, T. Sharpe, Horncastle (Suffolk).

RIDING HORSES.

JUDGES.—Captain Bastard and Captain Whitmore.

Fine action and quality essential, of any height exceeding 15.2.—First prize, £20, F. Haines, Oxford-road, Ealing (Prince Imperial); second, £10, T. D. Murray, Jun., Carlton Club (Marvel); third, £5, J. B. Baillie, Leys Castle, Inverness (Anita). Highly commended: R. Beart, Rainham (Norfolk Hero).

Cover Hacks and Roadsters, weight carriers, not exceeding 15.2.—First prize, £15, Capt. Fitzgerald, Gloucester Crescent, Hyde Park (Queen of Trumps); second, £10, H.R.H. the Prince of Wales (Delight); third, £5, H. J. Buck, Cressage, Shropshire (Princess Louise).

PARK HACKS AND LADIES' HORSES.

Not exceeding 15 hands 2 inches.—First prize, £20, to C. Vansittart, 1, Lower Belgrave Street (Blue Blazes); second, £10, to T. Percival (The Squire); third, £5, to Mrs. Fitzmaurice, 40, Gloucester Place (Duke). Highly commended: C. Dames, Chigwell (Langford), and W. L. Eyre, Driffild (Ouida).

Not exceeding 15 hands 1 inch.—First prize, £20, to G. Garnell (Brunette); second, £10, to the Earl of Rosslyn, Dunmow, Essex (The Bank); third, £5, to Lord Chelsea, Woodrising, Norfolk (Mistletoe). Highly commended: W. Gilbey (Lily), and L. J. Doxat (Moonstone).

PARK COBS.—HIGH STEPPERS.

Not exceeding 14 hands 2 inches.—First prize, £20, to Mrs. Fitzmaurice (The Colonel); second, £10, to C. Gates, Thetford (Cheerful); third, £5, S. Lang, Whitechurch, Tavistock (Chicken Hazard). Highly commended: H. Frisby (Dunstan), and J. Garnham (Black Bess).

HARNESS HORSES.

Not exceeding 15 hands 2 inches.—First prize, £15, Walter Gilbey, Stanstead (Lily); second, £10, W. and G. Salter (Defiance); extra prize of £5, T. Worthington, Derby (Duchess); highly commended, H. Frisby, James-street, Buckingham Gate (Dainty and Puzzle); the whole class commended.

Not exceeding 14 hands 2 inches.—First prize, £15, J. Garnham (Black Bess); second, £10, H. Frisby (Dusty); third, £5, withheld for want of merit. Pairs: Pair of phaeton horses with park action, W. Gilbey (Lily and Lilie), and the Agricultural Hall Medal, Mrs. Fitzmaurice; highly commended, H. Frisby (Dazzle).

PONIES.

Not exceeding 13 hands 3 inches, in single harness.—First prize, £15, T. Maystons, Silver-street, Notting Hill (Beauty); second, £8, T. L. Gellibrand, Hornsey (Sultan); third, £5, C. Bernard, Stamford Hill (Forester). Pair of ponies, not exceeding 14 hands 2 inches, Lord Hopetoun (Jack and Jill); Agricultural Hall Medal, A. Subervielle, Lancaster Gate (Mexico and Puebla).

Not less than 15 hands, for getting Roadster Trotters.—First prize, £30 and the Agricultural Hall Medal, J. Grant, Woodbridge (Fire King); second, £15, J. Abel, Norwich (Young Phenomenon); highly commended, J. Dearlove, Wisbeach (Young Shales); second, £15, C. Groucock, Stanfield Hall, Norfolk (Hero).

Not exceeding 13 hands 3 inches, for getting Ponies.—First prize, £10 and the Agricultural Hall Medal, C. Groucock (King Arthur); and Agricultural Hall Medal, Lord Hopetoun (Jack).

Tandem Horses or Ponies.—Prize, £5, C. Groucock (Tom and Pass).

Animals of extraordinary merit, not qualified to compete in any of the classes.—Prize, £10, Sir S. Lukenan (Moskaloika).

There were some premiums given on Friday for jumping, trotting, and so forth, a ludicrous business that is not worth criticising or recording, as the following opinions of our sporting contemporaries will show:

Of course the jumping is in as great force as ever—so much so as to be a perfect nuisance, making it almost impossible for an exhibitor who does not wish to make a mountebank of himself or his groom to show his horse's action in the ring. Men apparently ride worse and fall off more than ever—though Miss Milliard, Mrs. Radcliffe, and some other ladies performed very well; so that those who go there to see a burlesque on horsemanship are sent away rejoicing. The catalogue is as inaccurate as usual, and the pedigrees of some horses must have been evolved from the inner consciousness of the owners, for no such animals as the sires are known to the world at large. On the whole it is one of the slowest and most uninteresting shows we ever remember at the Agricultural Hall. An inspection of the horses themselves told us that there was an immense deal of chaff for very little good grain amongst them.—*The Field*.

That it improves, as a show, we can scarcely admit; and it strikes us that every year it becomes more and more a medium for passing "screws," notwithstanding the veterinary certificates that are produced.—*The Sporting Gazette*.

O B I T U A R Y.

DEATH OF MR SAMUEL JONAS.

This well-known agriculturist died at Chrishall Grange, Essex, on Thursday, June 1st, in the 69th year of his age, having been for some time in declining health. Mr. Jonas was born at Great Thurlow in Suffolk, on September 27th, 1802. It is, however, with the county of Cambridge that his name is more identified as "Sam Jonas of Ickleton," where he farmed extensively for many years. He was, moreover, the agricultural historian of the county, as the author of the prize essay on the farming of Cambridgeshire, a paper which of course appeared in the Journal of the Royal Agricultural Society, and an especial favourite of the then editor, Mr. Pusey, by whom it was often cited as an example of what such an essay should be. Mr. Jonas was also instrumental in establishing the Saffron Walden Agricultural Society, now merged into the Essex, while he was from the first a prominent member of the Council of the Royal Agricultural Society, where he was for years on most of the sub or really working committees, as well as a steward of stock at many of the shows. Mr. Jonas was equally distinguished as a leading man at the meetings of the Protection Society—a cause of which he was a most energetic and determined supporter. He wrote a good deal at the time, in maintenance of the principles he so warmly advocated and so conscientiously believed in. Although he fought a losing battle, he retained the friendship of many good men he here first became acquainted with. They saw and appreciated how thoroughly he was in earnest. Mr. Jonas was for some years a Director of the Royal Farmers' Insurance Company; and was, in fact, ever ready to take his part in promoting the interests and watching over the welfare of his brother farmers. About fourteen years since he left Ickleton, and took in hand about three thousand acres of land at Chrishall Grange, near Saffron Walden. The largest portion of this extensive holding, when first engaged on by him, was in as exhausted and as foul a state as it was possible to imagine. It was truly uphill work. His proverbial energy and determination, however, brought it round; and we believe we are justified in saying that, for the spirited manner in which he cultivated his land, and the large sums he expended in food for stock and artificial manures, Mr. Jonas will rank worthily with Mr. Hudson of Castle Acre, and other such eminent English farmers. As one of these he was repeatedly invited to contest the county, and his energy and ability would have, no doubt, told in the House of Commons as elsewhere.

DEATH OF MR. R. EASTWOOD.—We regret to announce the death, of Mr. R. Eastwood, of Thorneyholme, near Whitewell, Clitheroe, until recently the agent to Colonel Towneley, for whom he acted several years. Mr. Eastwood was also the owner of Butterly, winner of the Oaks; and among other good horses, he bred Lord Hawthorn from his brood mare Lady Alice Hawthorn, The Sawyer, and Rejoinder. Mr. Eastwood's career as a Shorthorn breeder dates back to 1843, two or three years after his father died. His first essay was hardly to his mind, and he got rid of everything, and started afresh from Mr. Henry Watson's sale. "Which do you come for?" said the late Earl Ducie, when they encountered each other going the rounds on the Walkeringham sale morning. "Well, my lord, that's hardly a fair question," was the rejoinder. "But if you like, as I'm pretty certain we're both after the same two cows, we'll each write their names on a slip of paper." And write them they did, and both wrote "Buttercup" and "Princess Royal," and it was settled that his lordship would not oppose Mr. Eastwood for the former, which he bought for 130 gs. His lordship was equally pleased with his own purchase. Looking round the herd at Tortworth, some years after, with Mr. Eastwood and

Mr. Knowles, he stopped at each of them and said, "There's that dreadful tribe again." But when his companion brought him up with, "Well, my lord, how much for the whole of them?" he only laughed, and said, "I knew what you'd be at in a minute or two; you'll not have them." Mr. Eastwood had been to Killerby from the very first, and his next step on getting Buttercup home was to hire its red Jeweller, a son of Necklace. He was rather a short bull, with a bad head and a light neck, but with capital sides and quality. His hirer was confidently assured in the North Riding that it would be "destruction to your herd to use such a brute;" but he wisely chose to rely on his own judgment in the matter. Harlsonio, of Lax blood, had died just before of cancer in the nose, and therefore Jeweller had no rival for the love of Buttercup, and Butterly was the issue. Bessy, half-sister to Buttercup, calved Frederick, by Lax's Duke, and thus these two crosses produced the pair from which Master Butterly and Royal Butterly sprang. Neither Frederick nor Butterly were born when, in 1848, Mr. Eastwood sold his herd of twenty to Colonel Towneley, and when Frederick did come, it was in twinning with Dot. For many years Mr. Eastwood contented himself with watching the progress of the Towneley herd under Culshaw; but, like an old coachman, he still liked to hear the crack of his own whip, and a small, but terribly select, herd of about fifteen, with Rosette as its Lady-patrons, gradually sprung up again at the Hodder side; to be again dispersed only a few months back.

SALE OF MR. DERHAM'S SHORTHORNS,

AT PALMER'S GREEN, SOUTHGATE, ON WEDNESDAY,
MAY 31ST, 1871.

BY MR. THORNTON.

City men often find relaxation from city toils in country life and a little farming, bringing with them the taste and knowledge imbibed in early life and school-boy days to the town, and at the first opportunity practising what they learnt and saw in childhood. Many good stocks in the vicinity of large towns are brought out in this manner, and although it may not be done so extensively in this country, we believe that on the other side of the Atlantic many of the best farmers are, or were, city men. The herd at Palmer's Green was bred in this manner. Mr. Derham, a native of the Bolland country, in Lancashire, which Col. Towneley, Mr. Eastwood, and Mr. Peel have made so famous for good stock, brought to the south several good animals, among them Mr. John Peel's bull Bismarek, a son of Hengist, from one of the Bridget or Bliss tribe. This bull, bought when a yearling, has been kept and used, leaving some thick-fleshed fine heifers from cows purchased of Mr. George Bland and Mr. John Clayden. The bull, however, had grown into a "mountain" of beef, and although of immense substance and thickness of flesh, was too heavy for use, and he went only at 53 gs., a few pounds, as some thought, under butcher's price.

The 28 Shorthorns, a calf being withdrawn, averaged £43 4s. 4d., and the 18 females made within a few pence of £46 each. The Daisy cows also sold well; but the horse trade was not brisk. The pigs, however, sold, if anything, higher in comparison than the Shorthorns; for the 18 head, ranging from two to nine months old, the majority being young ones, made just £50. The first of the Shorthorn cows was Lady Braybrooke, a sweet-headed, good cow, heavy in calf, bred by Mr. Clayden. She returned very nearly to her old home, as Mr. J. B. B. Elliott, of Chesterford Park, bought her at 40 gs. Her heifer, Lady Andley, by Bismarek, was good enough for Australia, and went to Mr. E. K. Cox cheap at 30 gs. Lot 3, Aearia, of Mr. Bland's breeding, and Mr. Booth's Knight Errant made the same price as lot 1; but Lady Lucy Thorndale, a very fine roan cow, was more sought, and, after some keen competition from Mr. Clayden, Mr.

Cock, of Barnet, and Mr. Williamson, fell eventually to Mr. Williamson at 83 gs. Colleen Bawn, one of the short-pedigree Booth-bred cows, rather thin-fleshed, a heavy milker, and a capital bull-breeder, made also a good price, going to Mr. Hugh Aylmer at 82 gs. Lot 6, Bloomer, of the Certainty tribe, a fine cow, with square, thick hind-quarters, had been torn in calving, and this accident, although said not to be detrimental, caused her to go very cheap at 39 gs. to Mr. H. Carr. Lot 9, Katie Thorndale, by Costa out of Lady Lucy Thorndale, was a very sweet massive white heifer; and after biddings from the Australians, she was at last secured by Mr. Cock, to remain in England, for 110 gs. Mr. E. A. Fawcett took Lady Florence at 41 gs., and Capt. Robinson gave 40 gs. for Roan Empress, another daughter of Bismarck. Lady Eleanor, a good white in-calf two-year-old, was bought for Mr. Longbourne, at 34 gs. Rosedale, a yearling out of Lady Lucy Thorndale, was also purchased by Mr. W. Williamson at 65 gs., and Mr. H. C. Pole Gell gave 20 gs. for a bonny little calf out of Bloomer. Mr. Angerstein, jun., also got two nice heifers. The bulls averaged £38, Colleen Bawn's sons making the two best prices—Danny Mann going to Australia at 50 gs., and The Doctor to Mr. Williamson at 71 gs. The dairy cows sold high, an in-calf heifer by Bismarck out of a fine large Yorkshire cow making the good price of 37½ gs., her dam going to Mr. E. B. Booth for 33 gs., and a large roan cow was bought by Mr. Dunham of Hendon for 31 gs.

SUMMARY.

	Average.	Total.
18 Cows . .	£45 19 4 . .	£827 8 0
10 Bulls . .	38 5 6 . .	382 14 6
28	£43 4 4	£1,210 2 6

SALE OF THE LANGTON AND HINTON FLOCKS.

—The second sale of live and dead farming stock, the property of the late Squire Farquharson, took place at Langton on Wednesday, when Mr. T. Ensor submitted to public competition the Langton and Hinton Flocks, consisting of 300 two-tooth, 400 four-tooth, 330 six-tooth, 220 old ewes, 500 chilver hogs, 60 wether hogs, 20 fat ewes, 600 chilver lambs, and 500 wether lambs; these, together with 32 rams, 24 ram lambs, 7 cart horses, and about 180 lots of waggons, carts, and agricultural implements, formed one of the most important sales ever held in that part of the county, and, as might reasonably be expected, drew together a very large number of agriculturists and breeders from all parts of Dorset, Somerset, Hants, and Devon. The care and attention which for many years has been bestowed on the Langton and Hinton Flocks, so as to maintain those desirable qualities for which the Southdowns are so much esteemed, and the great experience and good judgment in breeding from the most celebrated flocks, such as those of the Duke of Richmond, Lord Walsingham, the late Mr. J. Webb, Mr. Ellman, Mr. H. Boys, Mr. H. Fooke's, and Mr. Goringe, was shown in the condition, symmetry, and quality of the sheep. The sale commenced with the agricultural implements, which, in addition to those generally in use, consisted of one of McCormack's reapers, fitted with Burgess and Key's platform; an American Eagle mowing machine, and a Burgess and Key's mowing machine. The attendance at the commencement was limited to a few of the agriculturists and dealers of the neighbourhood, the weather not promising very fair for out-door gathering, and towards one o'clock the sale ground began rapidly to fill. The sale of the sheep, which were penned in Church Field, on the left-hand side of the road leading from Blandford to Langton, began shortly after two o'clock, with the two-tooth ewes of the Langton flock. The sheep were offered in lots of 20 each. The results of the sale were as follows: Six-tooth ewes, 43s. to 57s.; four-teeth, 45s. to 47s.; old ewes, 60s. to 61s.; chilver hogs, 45s. to 49s.; wethers, 50s.; fat ewes, 59s.; chilver lambs, 21s. to 26s. The Langton flock realised £2,765, the Hinton flock between £1,800 and £1,900.

THE IMPLEMENT TRIALS AT GUILDFORD.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—To my surprise I find you do me great injustice in your issue of the 5th instant. Speaking of the hay-making trials at Guildford, you state: "W. Brenton, of Cornwall, showed one of his Nonpareil Mowers and Combined Machines. Although alleged to be well adapted for uneven ground, having indiarubber buffers or collars fitted between the pole and the frame, so as to prevent any jar on the horses' necks, yet it appeared to labour much in its work, and required a second man to follow and aid with the rake." The remark that my machine appeared to labour when at work I will pass over. Professor Coleman has set that point at rest in his report on my machine in the Bath and West of England Society's Journal, June, 1870. But the statement that a second man was required to follow on with a rake, I must, in justice to myself, utterly deny. There was no second man in attendance with a rake; there was no rake used at all. As the error into which you have somehow fallen in this matter is calculated to materially damage me, will you do me the justice to insert this letter?

I am, sir, your obedient servant,

WM. BRENTON.

*East Cornwall Implement Works, Polbathic,
St. Germans, June 16, 1871.*

[As "An Exploring Visitor" said last week, "some better arrangements require to be made;" and of course where there are no prizes awarded reports are liable to continual correction from the exhibitors.—EDITOR M.L.E.]

THE PIG SHOW AT GUILDFORD.

SIR,—When I was at Romford I asked Mr. Charles Duckering the history of the pen-marking affair, and found his father had made the marks to facilitate the feeding, as they had such a number of entries in the show. As far as the pens being recognised by the judges goes, they consider it could not have the least effect, for it is the custom there as at most other shows, for the attendant to show the pigs out for the judges, and no judge of pigs comes into a show-yard who does not know the Duckerings perfectly well by sight, without the trouble of looking for marks on the pens. Besides, there was entry after entry of theirs marked when there could be no question as to such being placed first, while these were marks plain enough to be seen from the opposite sheds. No one could argue but that it was a mistake to mark the pens before the judges came round, still any one personally acquainted with Mr. Smith, Mr. Moon, or the Duckerings, knows it would require a great stretch of the imagination to fancy any of them to be dishonourably implicated in such a matter.

Yours very truly,

HEBER HUMFREY.

Kingstone Farm, Shrivensham, Berks, June 17th, 1871.

THE HEREFORDS AT GUILDFORD.—In our report we said, when speaking of the all-aged class of bulls, that "the second-prize bull, Theodore, was merely commended at Taunton, but placed higher in the absence of any competition at Southampton, where we spoke of him as a very bad one—an opinion we do not see any reason to alter, as he is noticeable neither for growth nor breeding." The owner of this animal, Mr. Nathaniel Benjafield, of Shorts Green Farm, Motcombe, Shaftesbury, writes in the most gentlemanly tone to say that this is not true, as his bull was *highly* commended at Taunton!

HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.

A general meeting was held in the Society's Hall, George IV. Bridge, Sir JAMES GARDINER BAIRD, Bart., in the chair.

One hundred and ninety-four new members were elected.

Mr. MURRAY, of Dollerie, moved the adoption of the bye-law No. 2, altered as follows: "That proprietors farming the whole of their own lands, whose assessment on the valuation-roll does not exceed £500 per annum, and all tenant-farmers, office-bearers of local agricultural associations, resident agricultural factors, land-stewards, foresters, agricultural-implement makers, and veterinary surgeons, none of them being also owners of land to an extent exceeding £500 per annum, shall pay at admission, and afterwards annually in advance, the sum of ten shillings, with the option and power of redeeming the same by payment of five guineas, as the purchase of a life-subscription, and which life-subscription may be so purchased, under deduction of any annual payments that the member may have previously made, with this limitation, that at no time shall a member have the power of redeeming the annual payments for a less sum than £3." The alteration was agreed to.

Mr. KINLOCH, jr., of Gilmerton, said he had to report that he had been given to understand that the arrangements for the next show at Perth were progressing satisfactorily. The following was a comparative statement of the entries:

	Perth, 1871.	Perth, 1861.
Cattle	380	335
Horses	180	155
Sheep	639	616
Swine	60	77
Poultry	290	360
Dairy produce	50	91
Implements	1,500	850
	3,120	2,181

Mr. KINLOCH said he had to state the result of what the directors had agreed to in reference to the following motion, which was proposed by Mr. Munro, and seconded by Mr. Ord, last January: "That a class of implements for competitive trial be annually fixed on, the implements to be exhibited at the show, and the trial to be held at the time of year best suited for testing the strength of the implements and the work performed. That the trial be extended over a longer time than has hitherto been the practice, and that it be remitted to the directors to make arrangements with the manufacturers as to the manner in which the trials may be most satisfactorily carried out." Mr. Munro was kind enough to withdraw his motion on the assurance being given that the subject would receive the consideration of the directors. The directors sent the matter to the General Show Committee and to the Machinery Committee. These committees had had a meeting with Mr. Munro, and at that meeting they went over the whole of the ground on which the present system was founded, which was embodied in a report and approved of by the society in January, 1862. They resolved unanimously to adhere to the present system, but they agreed, as an experiment—and only as an experiment, which they did not all approve of—to recommend that it would be competent for the Local Committee of the General Show to select any description of machinery for special trial, the competition to be held when and where they might appoint. One year the implements chosen might be reaping machines; another, potato lifters; another, double-furrow ploughs; and so on. The directors undertook to give prizes for the competition, but they washed their hands altogether of the competition otherwise. They had very good reasons for doing that, inasmuch as they found it exceedingly difficult to manage on previous occasions. The report of the committee was approved of by the directors, and it was remitted to Mr. Menzies to submit the matter to the Local Committee at Perth. He did so last week, and he had told him that the Local Committee at Perth declined the responsibility of choosing the implements, but they were willing to do so with the aid of the Machinery Committee. The

Local Committee also undertook the management of the competition.

Dr. ANDERSON, having referred to some analyses of manures,

Mr. HARVEY (Whittingham) asked if the directors had any report to make from the special committee appointed in regard to the chemical department?

Mr. MENZIES said with regard to the minutes of the special committee on the Chemical Department that the board approved of the following suggestions, and resolved to act upon them as opportunity occurred, in any re-arrangement of the Chemical Department: "1. That the chemist should have his laboratory at the head-quarters of the society in Edinburgh, and reside there. 2. That in fixing the salary of the chemist the scale of prices for analyses should be revised, with the view of reducing the rates. 3. That the field experiments carried on by the society should have the chemist's special attention. The publication of the results to be periodical, and under his entire charge and control."

Mr. HARVEY wished to know when the re-arrangement was likely to occur? The minute said "When an opportunity occurs." He had been speaking about it for the last ten years. In other ten years he might be somewhere else.

Mr. HUNTER (Thurston) said if Mr. Harvey wanted the re-arrangement made at once he had better bring forward a vote of censure on the chemist of the society.

Mr. HARVEY: That is not what I mean at all.

A long discussion followed, but no resolution was put on the subject.

Mr. MENZIES reported that the following premiums had been awarded since the general meeting in January: 1. The gold medal or £10 to A. H. Church, Professor of Chemistry, Royal Agricultural College, Cirencester, for a Report on the Cultivation of Sugar Beet; 2. The gold medal or £10 to W. J. Moscrop, agent for the Earl of Zetland, Oliver, Richmond, Yorkshire, for a Report on the Best Modes of Housing Fattening Cattle.

Professor WILSON laid on the table the following memorandum as to ploughing at Dunmore by Thompson's traction engine and Gray's balance plough, on 28th February: "The ploughing took place in a large field in Dunmore Park, which had lain about forty years in grass, and was nearly level. The soil was a strong clay, and in good order for ploughing. The engine is of 8-horse power, and weighs 7½ tons, with vertical boiler and cylinders. It runs on three wheels, with india-rubber tyres, each two feet broad, and covers a space of seven feet wide. The steam-gauge when the engine was drawing the plough indicated a pressure of from 120 lbs. to 125 lbs. per square inch. Five cwt. of coal and 700 gallons of water are stated to be consumed in a day of nine hours. The plough is a balance plough, made by Gray of Uddingstone, and is the first of the kind which has been constructed. The plough had three mouldboards. The engine travels on the unploughed land, dragging the plough behind it. The length of furrow was 12½ chains, or 275 yards. The furrows made by the plough were 6 inches deep by nearly 9½ inches broad, and were fairly turned, considering that the ploughmen had not much experience of the work. A heading 20 yards wide was left at each end of the field for turning the engine. To travel the distance of 275 yards and to turn the engine, and attach it to the plough ready for the return journey, occupied a space of eight minutes; and this required considerable activity on the part of the engine-driver when turning the engine. The engine was driven by one man, with a boy to attend to the fire and watch the pressure and water-gauges. The engine carried a supply of coals sufficient for four hours' work, and four hours' supply of water. The plough was steered by one man, whose duty also was to hook and unhook the engine to the plough at the commencement and end of each journey. At the rate at which the engine and plough were working—viz., 3 furrows, 28 inches wide, and 275 yards long, or 214 square yards, in eight minutes, the

time required to plough an imperial acre was within a small fraction of three hours; and supposing the plough to work nine hours a day, which, taking the average length of days in the ploughing season is a full allowance, it would turn over three imperial acres per day, or about what three pairs of horses would have done. It was observed that while the three ploughs turn over a space of 28 inches wide, the engine-wheels cover a space of 7 feet wide, so that the wheels of the engine pass three times over the land before it is turned by the plough. It was also noticed that the engine passing over the land depressed the surface about 1½ inch, and the soil was also compressed to this extent. The Highland Society's self-registering dynamometer, made by Messrs. Easton, Amos, and Anderson, of London, was tried on the engine and three-furrow plough, and indicated a draught of 21 cwt. A common swing plough, drawn by two horses, was tried to ascertain the difference in draught on the land in its natural state and where the engine had passed over, and it was found that the land, where compressed by the engine, required an additional power equal to the draught of 1 cwt., the single plough making 6 cwt. on the unpressed land, and 7 cwt. on that which the engine had passed over. The committee were desirous of seeing the engine and plough at work on stubble or ploughed land, but Lord Dunmore had no field on which it could be shown. The committee would also wish to see the engine and plough tried in a field with a considerable slope. Lord Dunmore handed to the committee the following statement of the cost of his apparatus and of the daily expenditure in working it:

Cost of engine, 8-horse power	£700	0	0
Cost of ploughs, 3-furrow	70	0	0
Cost of water-tank	30	0	0
	<hr/>		
	£800	0	0
Interest on 8-horse power engine at 5 per cent....	£35	0	0
Depreciation in value and wear and tear, 7 per cent.	49	0	0
	<hr/>		
	£84	0	0
Allowing engine to be under steam 4 days a week =208 days, which gives 8s. 1d. as daily cost for engine	£0	8	1
Ploughs, cost £70, at 5 per cent. on outlay, and 5 per cent. for wear and tear=£7 per annum, and for 100 working days that would be 1s. 5d. per diem	0	1	5
Tank would cost £30, which at 10 per cent.=£2 per annum, would give for 100 days	0	0	7
Engine driver's wages at 24s. for 6 days	0	4	0
Boy, at 1s. per diem	0	1	0
Ploughman, at 2s. 6d. per diem.....	0	2	6
Coal, at 4d. per cwt., 5 cwt.	0	1	8
Oil and waste	0	0	6
	<hr/>		
	£0	19	9

Autumn stubbles in ten hours' ploughing, we could do 7 acres easily—equal to 2s. 9d. per acre; spring ploughing 1ea, 5 acres—equal to 3s. 10d. The committee cannot close their minute without an expression of thanks to Lord Dunmore for his kindness when they went to inspect his lordship's apparatus, and the gratification that it gave them to see his lordship interesting himself in such an important subject as steam cultivation, in which they trust he may be successful.

Professor WILSON submitted the undernoted report on Fiskens system of steam tillage: Having, together with Professor Macquorn Rankine, been appointed by the Society as a deputation to inspect the working of the "Fiskens system" of steam tillage, we proceeded (April 10th) to the farm of Offer-ton Hall, near Sunderland, in the occupation of Mr. H. McLaren, where the "system" has been in operation during the past winter; 440 acres, we were informed, having been ploughed or cultivated on the farm since October last. Professor Macquorn Rankine was unfortunately unable to attend. The farm is of an undulating surface of about 500 acres in extent, and lying on the magnesian limestone. The fields appeared to have been deeply tilled, and the soils, of varying textures, were in a dry and friable condition. When wet their tenacity would be

greatly increased. There were no stones or other obstacles met with while the work was under our observation. Before giving the results of our inspection, it will be well briefly to describe the peculiarities of the "Fiskens system" of working, as, although it has been before the public for several years, from various circumstances it has not hitherto taken a prominent position in the competitive trials of steam tillage which have from time to time been held. The "system" differs materially from the other "roundabout" modes of applying steam power to tillage purposes. The engine which gives off the power may be placed in any convenient spot adjoining the land to be ploughed, on a roadway, or by a spring of water for instance, and the power given off is conveyed by means of a light hemp rope (½ in. diameter) travelling at a high velocity—say 25 to 45 miles per hour—round the area to be operated upon, and communicating with two windlasses placed on opposite sides (headlands) of the land to be tilled. This high velocity, when communicated to the windlasses, is, by a simple mechanical arrangement, reduced to any desired speed—say two to three miles per hour. This change of velocity being necessarily associated with the corresponding increase of tension of the ropes in the exact ratio of the rate of reduction of velocity (less, of course, the amount consumed by friction, &c.). Thus an initial velocity of thirty miles an hour, when reduced at the windlass to two miles an hour, would correspond to an increase of tension (hauling power) equal to the rate of reduction—or 15 to 1. A strain or pull of 1 cwt. on the hemp travelling rope at the engine is therefore increased to a strain of 15 cwt. on the hauling rope (steel wire) working between the windlasses. In the transmission of power from the engine to the working implement a loss will always take place, greater or less in proportion to the extensibility and elasticity of the travelling rope, and to the friction of the various moving parts of the engine and tackle. The implement—whether plough, cultivator, or harrows—is drawn by the steel wire rope backwards and forwards between the windlasses at any speed that may be desired. The mechanical arrangements of the windlasses enable the man in charge to haul them forward at the end of each "bout," and also to stop and start the implement at work the required distance with perfect precision, without communicating with the engine-driver. Owing to some delays in reaching the farm we found the work already commenced on a 14-acre field, of an irregular parallelogram shape, with a slight but increasing gradient along the line of working. The engine was placed near the entrance, and close to a water-source, from which it pumped its own supply. The engine was one of Clayton and Shuttleworth's 12 horse-power double cylinder traction engines, with 8.25 in. cylinders, and a 12 in. stroke, and having a "grooved" fly-wheel 5 feet in diameter, round and by which the travelling rope was driven at the same speed as that of the periphery of the wheel itself. The engine consumed about 1½ cwt. of coal per hour when at full work. The "travelling" rope was half an inch in diameter, and made of the best Manila hemp expressly for the work, in lengths of 250 yards, each length weighing about 112lbs. Five lengths were required for the field. The rope, 1,250 yards in length, and weighing about 5 cwt., was carried round the field at a height of about 3 feet from the ground on light porters, with friction pulleys placed at distances apart of 50 yards on the tight and 30 yards on the slack side of the windlass. The proper tension of the rope was regulated by a tightening pulley under the control of the engine-driver. While at work we timed the speed of the travelling rope, and found it varying from 35 to 40 miles an hour. The 'hauling' rope was of steel wire ½ thick, and 800 yards long, equal to a straight draft (furrow) of nearly 400 yards long. The implement at work was one of Fowler's reversing cultivators, working 7 times, and covering a breadth of 6 feet, and set at a depth of 8, increasing to 11 inches. The field had been steam-ploughed with a 10 by 8 furrow in autumn, and was now being cultivated for potatoes. The distance between the windlasses (headlands) was about 200 yards, and the average length of furrow was 190 yards. The double "bout," including the turning at both ends, took from 4½ to 5 minutes, according to the depth of working, giving a working rate of about 2 acres per hour. (The wire hauling rope, we noticed, was allowed to trail on the ground, Mr. McLaren considering that the friction and extra wear-and-tear of rope was not equivalent to the cost of porters and attendants.) The work was done in a

perfectly satisfactory manner; no hitch or difficulty was experienced in any of the movements of the implement or of the machinery. The fly-wheel made from 180 to 200 revolutions per minute, and the pressure increased from 60lbs. to 75lbs. per square inch, as the depth of working was increased. Every part of the machinery appeared to be under perfect and immediate control. At our request, the cultivator was stopped several times while working 11 inches depth, and started immediately, without any apparent difficulty or strain on the machinery. The number of persons engaged was four—two windlass men, one ploughman, one engine-man. From these data it is seen that (at 70 lb. pressure) the engine was giving off a power equal to about twenty horses while the cultivator was at its work. Not having any means (dynamometer or friction "breaks") at our command to see how this power was consumed—that is to say, divided between the working of the engine itself, of the "travelling," and of the "hauling" rope, and of the windlasses, we could only obtain information from our Mr. McLaren, who gave us the following as the result of his practical observations: The engine, when working at the rate of 160 revolutions per minute, required a pressure of 8 lbs. per square inch to set its own parts in motion, and an increasing pressure of 12 lb. per square inch, or 20 lb. in all, to give motion to the full length (1,600 yards) of the "travelling" rope. This would be equivalent to a consumption of rather more than 2-horse power by the engine, and of 3-horse power by the rope, or a loss of at least 5-horse power before the strain or pull reaches the windlasses. These details require to be tested by the direct and careful experiment, as also does the power consumed by working the windlasses, before any just estimate of the *effective* force or actual working efficiency of the tackle can be arrived at. Another important element for consideration, which has a direct money equivalent in the calculations, is the time required to set and adjust the tackle, to take it down again, and shift it to another locality. Mr. McLaren informed us that they could begin to work in two and a-half hours after the engine and tackle reached the spot, and that they could take all up again in one and a-quarter hours, or about four hours in all. Mr. McLaren also informed us that he had ploughed a field of 33 acres without having to shift the tackle at all, and another of 55 acres without having to move the engine, which was placed advantageously close to a supply of water. We were also informed that the engine and the whole of the tackle had remained out in the fields during the whole of the winter, and certainly without any apparent deterioration to rope or machinery. The main advantages claimed for the 'system,' simplicity and economy of working arrangements and of first outlay, and general adaptability to fields of varying size and shape, appear to be substantially borne out by the practical success it has achieved on Mr. McLaren's farm. Until, however, it has been ascertained by direct and careful testing what amount of power is consumed by friction, &c., and what amount of time is consumed by the arrangement of the tackle, it is not possible to give any judgment as to the practical efficiency of the 'system,' or its comparative economical application. If the verdict on these points be satisfactory, we shall no doubt soon see another and a powerful competitor for public favour in the field of steam-tillage, and Mr. Fiske will be entitled to the thanks of the agricultural community for having successfully worked out a new mode of applying steam-power to the mechanical forces of the farm.

"P. B. SWINTON, Holyn Bank.

"JOHN WILSON, Edinburgh.

Edinburgh, April 28, 1871.

Note.—Although we have said that the rate of working of the apparatus when under our observation was about two acres per hour, it is right to mention, that having left the field for about an hour, on our return we found that the amount of work done in our absence was only equal to one and a quarter acres per hour. From whatever cause this arose, there did not appear to be any want of steam-power, as when the engine was stopped steam immediately blew off from the safety-valve.

P. B. SWINTON.

Mr. MITCHELL (Alloa) reported that a proposal by the Marquis of Tweeddale to form a committee on the general improvement of land in Scotland was approved of at a meeting of the board of directors on the 1st of February, when the following

gentlemen were appointed:—The Marquis of Tweeddale, Mr. Dickson, of Corstophine; Mr. Smith, Whittingham Mains; Mr. Swinton, Holyn Bank; Mr. Young, Keir Mains; Mr. Elliot, Lighthood; Mr. Stephens, Redbrae; Mr. Mitchell, Alloa; Mr. Hunter of Thurston—the Marquis of Tweeddale convener. The committee held a meeting on the 15th of February, when a memorandum on the subject prepared by the Marquis was read. After some conversation as to how the committee should take action, it was resolved that a copy of the memorandum should be sent to each member of committee for consideration, and that the meeting should be adjourned till a future day convenient for his Lordship, by which time it was hoped that each member would be prepared with his own views of the best mode of improving land, and of the course to be recommended to the directors.

THE BIRD-BOY.—His name was Tom Beck. He was the fifth of a family of eleven—four boys and seven girls—of whom eight survived. His father was a farm-labourer, earning fourteen shillings a-week. His mother had been a servant-of-all-work in a small family, and added something, though not much, to the family income by taking-in washing. They had a little garden and a pig; got presents of tea and flannel occasionally from a charitable-society; had the privilege of getting sticks for fuel in the neighbouring woods and plantations; got coal at half-price from the coal-store established by the squire and the parish-gentry; and managed to jog along somehow. His elder brother was a labourer, and married, and the younger children all began to earn a little as soon as they were ten years old, by weeding in the season, if it were only sixpence or a shilling a-week. Tom himself earned four shillings a-week as a crow-boy, but had to be at his post seven days in the week in the spring season, as the crows "didn't take no account of Sundays." All the family slept in one room. He had never been to any school but a Sunday-school; could read a little, but could not write, or read writing. Had never heard of the multiplication-table, but knew that twice two were four, and twice ten twenty. Did not know how many eight times eight were, but could count-up, he thought, on his fingers, or with stones, or bits of stick. Had heard the Bible read, and could repeat the Creed and the Lord's Prayer. Had heard of the Mount of Olives, but did not know where it was. He had never heard of the Alps, the Pyrenees, or the Andes. Had heard of the river Jordan. Had never heard of the Thames, the Rhine, or the Mississippi. Had heard of the Dead Sea. Did not know whether it was in England or not. Had never heard of the Atlantic Ocean. Had heard of Jesus Christ; everybody had. He was the son of Abraham and the Virgin Mary. He (Tom Beck) was a Christian. All of us were Christians, except the dogs and horses, and birds and animals. Some dogs were as good as Christians—"they knowed such a deal"—and he sometimes thought as how the old crows were Christians; they were so uncommon sharp. Had often seen an old crow fasten itself upon a sheep's back, and pull the wool out of its back to help build its nest with. Thought that was more like a Christian than a crow—it was so jolly knowing. Crows were not frightened by scarecrows, as he had often seen them sit on the old hats atop of them, and caw, caw, as much as to say, "We don't care, we don't, for such stupid old rubbish as this!" He thought all birds were too cunning to be afraid after the first "go." Just at first they might be scared, but after a day or so they got used to scarecrows, and he had known starlings build their nests in them. He once took three starlings out of a nest, in the stupidest old way of a scarecrow he had ever seen. If scarecrows were of any good there would be no need of crow-boys. His master would not let him have a gun to shoot at the birds. He wished he would. Said he was not old enough; but he knowed better, and would like nothing so much as to blaze away at them. Crows were afraid of stones and guns, but as for dudmen (scarecrows) the crows precious soon found out as they could do 'em no harm. Had heard of heaven—a place where all the people as were poor in this world were to be rich, and wear golden crowns, and where the squires and such like were to be poor, and not able to get so much as a drop of water when they were thirsty, let alone beer. He did not think this arrangement was unfair. He would like, however, to be rich in this world, and run the chance of the next.—*All the Year Round.*

THE FACTORY SYSTEM OF CHEESE-MAKING.

At the last meeting of the Cheshire Chamber of Agriculture, the following letter, dating from Park Nook, Derby, May 20th, from Mr. JOHN COLEMAN, was read :

"My Dear Sir,—Our balance-sheet is now in course of being made out. We have (at Longford) sold all our cheese; average price of 62 tons, 77s. 6d. Cost of labour, annatto-riennet, warehouse-labour, dairymaid, butter-making, and all working expenses, will come out somewhere at 4s. 10d. per cwt. This includes £100 for one of the American managers. The cheese receipts (net) just pay for the milk at 6½d. per gallon, and leave us the whey, butter, and sundries to pay working expenses with. As 6½d. is equal to 75s. for cheese, we think we have done pretty well for an *experimental* year. We at Longford are altering our mode of cheese-making, and getting back to real Cheddar as fast as we can. You shall have a copy of our Report as soon as issued. It will take years to perfect the factory system in this country, as we must make cheese for the epicure, and leave the Americans to supply the million."

Mr. LATHAM, the Chairman, was afraid, if they all took to making cheese for the epicure, the million would get badly off.

Mr. ASTON: Does he say the whole of the cheese made averaged that?

The CHAIRMAN: He says for 62 tons they got 77s. 6d. per cwt.

Mr. J. SLATER said it appeared to him that the working expenses were to be deducted from the 77s. 6d.; so that, taking 4s. 10d. from that, the real price obtained was 72s. 8d.

The CHAIRMAN: They say positively that the butter and whey have paid working expenses.

Mr. FINCHETT said that, if 75s. per cwt. for the cheese represented the total produce of the cow, it was not desirable to introduce the factory system into Cheshire. There were three things in connection with the system which had not been made sufficiently prominent—the first was the cost of new machinery and plant for the factory; the whey, which he put down at 19s. or 20s. per cow; and the butter and milk, which was worth from 25s. to 30s. So that, by sending milk, to the factory, they would be *minus* about 50s. per cow, unless they would get 9d. per gallon for their milk.

Mr. BROUGHTON said they were giving 9d. at Crewe now.

Mr. FINCHETT said that he felt sure they would lose what he had stated, which would of course include pig-feed and manure.

Mr. DUTTON: Are you going to put a motion?

Mr. FINCHETT: No; I don't wish to throw cold water on the system, but I think we ought not to be led away by such glowing accounts as we have had.

Mr. DUTTON observed that there was a large quantity of milk going out of the county at 6½d.

Mr. G. SLATER: It is more; it is 7d.

Mr. LEES said it averaged 8½d. throughout the year.

Mr. DUTTON said that if the factory system were introduced, they would be in this position—that they would have the option of sending their milk to the factory or to the milk-seller. He thought it would be scarcely wise for the Chamber to adopt a resolution upon this question, because it must be remembered that every farmer would act in the matter according to his own discretion; and if he found it more remunerative to send milk to a cheese factory, he would do so, but not otherwise. A great many were not so well situated as Mr. Finchett and a number of gentlemen in his neighbourhood, and they would adopt the plan most conducive to their own interest.

Mr. HORNBY said that in reminding them of the expenses of the factory, Mr. Finchett had lost sight of the decreased expenditure on the farm in the matter of dairymaids' wages and other expenses.

Mr. FINCHETT said he had not; for he did not think if he were to send his milk to the factory, he would be able to dispense with the wages of one woman-servant. If they were diminished one way, they would be increased another; for if

he had no dairymaid, he must pay a lad to take the milk, night and morning, and keep a cart for that purpose.

Mr. BATEMAN said that so far as he recollected, the arguments in the previous discussion were advanced to show that Cheshire cheese had so far deteriorated in value that there was need for some change. In his opinion the subject was one of great importance, and deserved the attention of every Cheshire farmer. When he listened to the details that were given at the last meeting of the Chamber respecting the falling off of trade in the west end of London and other places, he was led to inquire if there were any market for Cheshire cheese, and it appeared to him that markets were to be found elsewhere. He was led, in fact, from what was stated then, to conclude that the farmers were going to the wall, and that farming interests were on the brink of ruin. But, he would ask, was that the case? Were not the farmers as well off now as they were sixty years ago? Were not the farmers and their wives better dressed now than then? And if the farmers were doing well, how fared the landlord? Did he get as much rent for his land now as sixty years ago? Had he any difficulty in letting a farm—if he was not one of those screws who raised land to the highest value, so that the farmer had to work the skin from the end of his fingers and the nails from the end of his toes to make things meet? Instead of wanting tenants, there would be fifty or sixty after the farm, and ready to break their necks to get it. If they looked to the land itself they would also see that it produced as much now and more than fifty years ago, and they should therefore be careful, when they considered those matters, of adopting any great changes. If they had so far done pretty well they should not be in a hurry to jump to conclusions as to other systems concerning which they had not, as yet, seen any satisfactory results.

Mr. ASTON said he concluded from Mr. Coleman's letter that they were dissatisfied with the factory mode of cheesemaking at Longford, and were now falling back upon the Cheddar plan. He had never heard of the Cheddar plan being adopted there before. He had also been credibly informed that they were highly dissatisfied with the result of the American mode of cheesemaking in the two factories, and that they were going to adopt the Derbyshire Cheddar mode of cheesemaking. Perhaps, however, he might have been misinformed on that point. He heard a short time since, from a gentleman who was a large dealer, that 30 tons of the Longford factory cheese made 66s. per cwt. after all expenses had been deducted; while another gentleman stated at, he believed, the last meeting, but on the platform of the station, that he had bought a quantity there for 65s. per cwt. He, therefore, must receive the statements given in the letter from Longford at present with great caution until they could be fully corroborated. He thought they should not come to any resolution about the factory system at the present meeting. He was himself endeavouring to see what he should be able to realize in pig feed, and also what could be secured from butter, and perhaps in six or eight months longer he should be better able to judge whether it would be desirable to adopt the factory system or not. He also wished to state that Cheshire cheese had risen in estimation, and at the present time there was a margin of 2½s. per cwt. between the very best American and the best Cheshire.

Mr. BROUGHTON moved that, from the information at present in the possession of the Chamber, they were not in a position to say whether the adoption of the factory system of cheesemaking would be advisable in this county. The man who made thorough good cheese, and had a wife and grown-up family about him, would never send his milk to the factory; while those who depended on servants would very likely send it there.

Mr. J. SLATER seconded the proposition.

In reply to Mr. TATTON, whether all the cheese made in America was made in the factory,

Mr. ASTON said, about three-fourths; there were a number of private dairies.

The CHAIRMAN: But all is made from large stocks.

The motion was then put and carried.

AGRICULTURAL REPORTS.

GENERAL AGRICULTURAL REVIEW FOR JUNE.

The weather has been much unsettled during the past month, and vegetation has been much checked by the frosty nights and low temperature, generally, which have prevailed. Nearly all the crops are backward, though there is little positive damage beyond the delay. As we write, the wheat plant is just passing into bloom, and is, therefore, entering upon the most critical period of its existence; Should the weather prove boisterous and rainy much damage must result to the plant, and it is to be hoped that we shall now enjoy a fair continuance of genial sunshine to bring the crop forward. The latest accounts of the crop—though not such as to afford room for serious apprehensions—are not altogether favourable. Too much moisture has fallen, and the plant has been for too long deprived of warmth; consequently, though the crop is looking well on well farmed and strong lands, there is much loss of colour apparent on light soils. The return of genial, forcing weather would probably remedy any defects that at present exist, though there can be little doubt that the harvest will fall a week or ten days late, and that the return can now scarcely reach the average even under the most favourable circumstances. Trade at Mark Lane has ruled very dull throughout the month. The hopes entertained of a large export demand on French account have been altogether disappointed, and since the collapse of the Commune but little produce has been shipped from this side. The market is therefore overstocked with the flour manufactured in view of the anticipated movement, and at the leading outports both in England and France the stocks are exceedingly heavy. This fact has tended to depress the market, and to check operations on the part of millers. As we have now entered upon that dull, lagging period in the trade which invariably precedes harvest, we cannot look for any present return of activity unless the accounts received of the crops are such as to induce animation. For the moment neither factors nor millers seem disposed to extend operations, and we do not look for any material variation from the rates now current, though the tendency—looking at the large quantity of foreign produce on hand and afloat—is towards increased rates.

The barley and oat crops are progressing favourably, and the reports of the spring corn crops generally are satisfactory. Beans and peas have passed blooming, and the pods are setting well. Roots are not prospering altogether so well as could be wished, turnips, especially, having been attacked by fly. On the other hand—a consideration of much importance—the potato crop promises to be an excellent one.

The most unfortunate feature in the agricultural world is the threatened destruction of the hay crop, which a short time back was so promising; the yield has seriously diminished, as much had been cut, and was lying during the recent heavy rains. There is still a large quantity of grass uncut, however, and hopes are entertained that a good aftergrowth may be secured. Fine weather is much needed to secure the grass now on the field.

The accounts from the hop districts are not unfavourable, though a continuance of hot weather is essential for the better development of the bine. The plant is backward, and as we are now getting on in the year it is desirable that a change should take place at an early date.

The wool trade has continued steady, and prices have been well supplied. The demand for goods has ruled active, and manufacturers are well supplied with orders; firm prices may, therefore, be expected to prevail.

REVIEW OF THE CATTLE TRADE FOR THE PAST MONTH.

The cattle trade during the past month has been rather unsettled, and prices have materially improved. The supplies of stock have been about an average, and the quality of the receipts from our own grazing districts has been on the whole satisfactory. A few beasts have come to hand from Lincolnshire in fair condition. The season is now about to commence, and as grass has been abundant, and roots promise to turn out well, we may expect to receive some choice animals. The foreign receipts during the month have embraced some choice Oporto stock. The trade has been much more active, and an advance of 4l. per 8lbs. has taken place in the quotations. The best Scots and crosses are now making 5s. 10d. to 6s. per 8lbs.

With sheep the market has been well supplied. English breeds have come to hand in good condition, and some fair foreign stock has been on sale. In sympathy with beasts the demand has been steady, and 4d. per 8lbs. more money has been paid. The best Downs and half-breeds have been disposed of at 6s. 4d. to 6s. 6d. per 8lbs.

Lambs have been steadier, and the top price of the choicest breeds has been 7s. 4d. per 8lbs.

Calves, as well as pigs, have been steadier in value.

The hay crop will, without doubt, turn out well, provided the weather become dry and warm. Some fields already cut have greatly deteriorated in quality, though having been exposed to the late heavy rains; but, as a set off against this, the aftergrowth promises to be satisfactory.

The total imports of foreign stock into London during the past month have been as follows:

Beasts	...	...	...	7,453
Sheep and Lambs	...	...	...	78,727
Calves	...	...	...	2,739
Pigs	...	...	...	3,445
Total	...	...	...	92,304

Import at corresponding periods:

Total in 1870	...	...	...	35,744
" 1869	...	...	...	57,212
" 1868	...	...	...	24,655
" 1867	...	...	...	48,508
" 1866	...	...	...	47,425
" 1865	...	...	...	61,935
" 1864	...	...	...	38,029
" 1863	...	...	...	30,059
" 1862	...	...	...	22,841
" 1861	...	...	...	32,751

The arrivals of beasts from our own grazing districts, as well as from Scotland and Ireland, thus compare with the three previous years:

	June, 1871.	June, 1870.	June, 1869.	June, 1868.
From Norfolk, Suffolk, &c.	8,930	6,800	4,500	9,000
Lincolnshire	150	—	—	370
Other parts of England	1,818	2,300	2,420	1,920
Scotland	594	850	479	97
Ireland	135	90	161	220

The total supplies of stock exhibited and disposed of at the Metropolitan Market during the month have been as under:

	Head.
Beasts	15,118
Sheep and Lambs	170,715
Calves	3,626
Pigs	965

COMPARISON OF SUPPLIES.

	Beasts.	Sheep & Lambs.	Calves.	Pigs.
June, 1870	18,558	199,139	3,757	625
1869	20,209	167,770	2,780	680
1868	19,650	177,690	2,875	1,489
1867	16,270	146,650	2,600	3,048
1866	18,820	139,880	1,864	1,782
1865	24,050	165,720	4,278	3,210
1864	25,890	138,450	2,786	3,250

Beasts are selling at 3s. 10d. to 6s., sheep 4s. to 6s. 2d., lamb 6s. to 7s. 4d., calves 3s. 8d. to 5s. 5d., and pigs 3s. 6d. to 4s. 10d. per 5lbs., to sink the offal.

COMPARISON OF PRICES.

	June, 1870.			June, 1869.		
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Beef from	3 2	5 0	3 0	5 10	3 0	5 10
Mutton	3 0	5 4	3 0	5 10	3 0	5 10
Lamb	6 0	6 8	5 6	6 0	5 6	6 0
Veal	3 10	5 8	4 6	5 6	4 6	5 6
Pork	4 6	5 8	3 8	5 2	3 8	5 2

	June, 1868.			June, 1867.		
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Beef from	3 0	5 0	3 2	5 6	3 2	5 6
Mutton	3 0	5 0	3 8	5 4	3 8	5 4
Lamb	5 6	6 6	6 0	7 0	6 0	7 0
Veal	3 8	4 2	4 0	5 6	4 0	5 6
Pork	3 4	4 2	3 4	4 6	3 4	4 6

The dead meat market has been well supplied. A good business has been doing at extreme currencies. Beef from 3s. 8d. to 5s. 8d., mutton 4s. to 6s. 4d., lamb 6s. to 7s., veal 5s. to 5s. 8d., and pork 3s. 8d. to 5s. per 5lbs., by the carcase.

S O M E R S E T S H I R E.

The spring of 1871 has gone, the temperature having been very changeable, cold east and north east winds, with a few days between of high temperature, from 70 and 80 degrees, while one night this month as low as 27 to 28 degrees. Very little rain last month, except one day at the latter end; but this rain did much good to the bean and grass crops. On the 17th we had the heaviest rain we have had for two months, accompanied by thunder: the weather is now unsettled, tending to winds from the south. Wheat has improved by the rain but is rather short, and as a rule thin, the good heavy pieces that may come up to 40 bushels per acre being the exceptions. It is not now likely the wheat harvest will be less than two weeks later than last year, even with more forcing heat. Barley and oats in ground promise well. Of spring beans, now in fine bloom, there is a fair prospect; of winter beans almost nil. As yet our crop of winter fodder is double that of last year—that which is secured, and that now cutting; however, the mowing is later than for many years. Mangel is promising in plant, and the weather is now favourable for the swedes in ground, waiting for this fine rain. Although we have a good prospect of winter fodder, and the feed for stock far more luxuriant than this time twelvemonths, we have very few apples, and fruit is far from a large crop. Potatoes are looking well, with a large extent growing. There have been short supplies of wheat, but equal to the wants of the millers, whose stock, considering the dull state of the flour trade, is not so large at this time as at some seasons; yet, with the present greatly falling-off supplies, it must be lessening fast: should they come into the market more freely from this cause, of English wheat they will find it difficult to meet their wants. Wheats have varied from 7s. 3d. to 7s. 9d.; best whites will scarcely command 7s. 6d. to 7s. 7d., reds 7s. to 7s. 2d.; flour 39s. to 41s. per 280 lbs. Millers are not working over hours. Water supply increased this week. Very little doing in barley, beans, or oats. There will be a better

make of cheese and butter—the latter 1s. per lb. Cheese is rather dull, with a tendency to lowered prices. Wool is a better sale, from 14½d. to 16d. per lb. Mutton and lamb are still high—9d. to 10d. per lb., and go off pretty freely at these prices. Beef is brought out as soon as a little ripe, and before much fat has been laid inside, consequently the weights are light—12s. to 14s. per 20 lbs. to sink offal. Fat pigs make 10s., with store pigs rather lower. There are large supplies of poor sheep; these meet customers at high prices. Poor stock are also high, but not such ready sale as sheep. Down hogs have fetched from 40s. to 51s. in their coats, lambs weaned 24s. to 26s., extra 28s. to 30s. in their coats.—June 24.

LONDON CHEESE MARKET, (Thursday last.)—There is not much change to notice in our cheese market since our last week's circular was issued. Really prime old English and American are inquired for to a moderate extent. The quantity of this description now here is small. New Cheshire are beginning to make their appearance; but, so far, only show middling in quality. The same remark will apply to Scotch and Swedish cheese. When prime, firm, meaty cheese, medium-sized and lumps, can be had, we expect a fair demand for them. American cheese are coming in pretty large quantities. Primest new may be quoted at about 60s.; old have been selling this week at various prices—from 20s. to 60s. The arrivals reported since last Thursday are 16,016 boxes.—CORDBROY AND CO.

GLASGOW CHEESE MARKET, (Wednesday last.)—A large supply of cheese brought forward this week, principally new. The best qualities met with a fair demand, while medium and inferior of both old and new were pressed at low prices. Cheddars: Fancy quality, new 56s. to 58s.; first-class, old 63s. to 67s., new 50s. to 56s.; fine, old 57s. to 60s., new 48s. to 50s.; secondary, old 50s. to 56s., new 44s. to 48s. per cwt. Dunlops: First-class, old 62s. to 68s., new 50s. to 52s.; fine, old 58s. to 62s., new 47s. to 50s.; secondary, old 44s. to 54s., new 42s. to 46s. per cwt. Skim-milk, new, 21s. to 23s. per cwt.

SALE OF MR. BOOTH'S HORSES.—Mr. J. B. Booth sent up his weight-carrying hunters, well known with the Bedale, to Tattersall's on Monday, June 12; but owing to the reserves not being reached only three changed hands, viz., Balbriggan, by Killochey, 51 guineas; Brian Boru, by Chieftain (winner of upwards of £300 in prizes) 95 guineas; and Bradsby, by Ash Plant (winner of the Yorkshire Society's second prize for three-year-old hunters at Wakefield) 145 guineas. Brian Boru was purchased by the master of the Durham County Foxhounds, and Bradsby by Mr. T. D. Harvey Bayley, master of the Rufford, who also bought privately Banner Bearer, by Ephebian, winner of prizes at Sleaford, Wakefield, Guisbro', Stokesley, Leybourne, Northallerton, and Otley in 1870.

THE RECENT PIG SHOWS.—In the class of large boars at Romford, the second prize was awarded to the Cirencester College, and not to Mr. Everett. Any one who was at Romford will not be surprised at occasional errors of this kind, excepting perhaps the farm-bailiff at Cirencester. At Rugby Mr. Matthew Walker's boar took the extra prize.

THE FOUR-COURSE SYSTEM.—In the Court of Queen's Bench, before Justices Blackburn, Mellor, and on Lush, the case of Colonel St. Quintin v. Left came for hearing. This was a penal action on a farm lease, tried at York before Mr. Baron Cleasby, when a verdict was given for the defendant. The plaintiff is the owner of Driffild Farm, near Malton, which he let to the defendant in 1863 on a lease, to cultivate the land on the four-course system, and according to the most approved husbandry in the district. There were penal clauses for taking white crops in succession; and the breach here sought for damages was the defendant taking a third white crop, his seeds having failed in the droughty year of 1868. There was much conflicting evidence at the trial as to whether the defendant was pursuing the best approved system of husbandry in that part of the country. Mr. Price, Q.C., and Mr. Kemplay having obtained a rule for a new trial, on the ground of misdirection, Mr. Field, Q.C., and Mr. Wills (instructed by Mr. Hodgson, of Driffild) now showed cause. The Court refused the rule, with costs against the plaintiff.

REVIEW OF THE CORN TRADE DURING THE PAST MONTH.

June has added to the number of very changeable months experienced this season. For the first fortnight there was a great want of rain. There was indeed an occasional outburst of solar heat, but for the most part the days were cold, and several nights frosty. On the 14th, however, a splendid rain fell, and it continued wet for a week; then again after the longest day came cold weather, and a sharp frost on the morning of the 26th, the effects of which we have yet to learn. Some who had cut their grass early were caught, and their bulks much discoloured; but the meadows have greatly benefited, and we may now gather an average yield. All spring-corn was helped forward and the wheat as well; but for this latter grain fears soon began to be entertained lest it should run to straw, or get laid heavily, though the thinness of plant in many fields is certainly against this danger; but the blooming time has yet to come, and should this fickleness of the season last, we may have a return of the poor harvest of 1867 and advanced prices. At the first of the change the wheat trade languished, and fully 1s. per qr. value was lost, and in some places more; but the return of cold brought firmness again, and we seem to be nearing the possibility of an advance, which would be certain with a rough and an ungenial future. As it is, stocks are getting very short in farmers' hauds; for, notwithstanding the much better prices than last year's, our weekly deliveries have, for the last fortnight, been 47,000 qrs. less, and very little now comes up to London, as farmers obtain better prices, relatively, at home. It was, indeed, thought that the recovery of Paris by the Government troops would bring on orders freely, as quotations there are relatively high, but confidence as yet does not seem sufficiently established for the resumption of business on a large scale, the pressure of the war debt being severe and discouraging. Furthermore, what with Prussian occupation and an ungenial season, only a poor wheat crop is generally expected in that country, though in some parts of the south there have already been gatherings of very fine quality—the complaints coming chiefly from the north. To Europe generally the late rains have been acceptable, and prices have somewhat given way; but neither Belgium nor Holland expect much, the severities of the winter, without a snow covering, having cut up the young plants sadly. Indeed, much land has had to be resown with spring wheat, which will make the harvest late, as it will also be in Germany this year. Large receipts, mostly of low quality, are expected from Russia, which may fill up the room in our imports, and some from America; but with the latter country prices will determine quantity, and they have lately been rising. Our census reminds us of about 3 millions increase since 1861, so it is not a little that will satisfy so many mouths with the competition of our neighbours. The following prices were recently current at the places named: Red wheat at Paris 67s., white 69s., red wheat at Antwerp 62s., white wheat at Rotterdam (weak new Zealand sorts) 58s., wheat at Maestricht 60s., at Stettin 54s. to 57s. free on board, at Cologne 59s., at Romanshorn 60s., best mixed at Danzig and Konigsberg 61s. cost, freight, and insurance; at San Francisco 61s. 6d., cost, freight, and insurance; at Valladolid 54s., at Palencia 54s.; red at

Philadelphia 55s. 3d. per 480lbs., cost, freight, and insurance; at New York, No. 1 spring 52s. per 480lbs., cost, freight, and insurance.

The first Monday in Mark-lane commenced on a very short supply of English wheat, but there was plenty of foreign. The show of Essex and Kentish during the morning was very small. But though trade was tolerably free and full prices were made there was no quotable advance on the previous rates. With a good attendance from the country not much was passing in foreign, and to have sold low qualities freely it would have been necessary to take less money. With but few floating cargoes on offer prices were without change. The weather this week being very cold and ungenial the country markets generally were firm, and several noted a rise of 1s. per qr.; among these were Louth, Melton Mowbray, Sleaford, Stockton, Wakefield, &c.; and Liverpool noted a gain of 1d. per cental for the week. Edinburgh reported an improvement of 6d. to 1s. per qr., but wheat at Glasgow though firm was no dearer. At Dublin the trade was quiet and unchanged, both for Irish and foreign wheat.

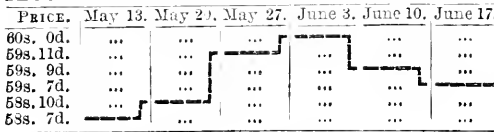
With rather better supplies on the second Monday of home growth, the foreign arrivals were less than one-half of the previous week, not being more 10,000 qrs. This morning the Kentish stands were completely bare, and very little appeared on those of Essex. With ungenial weather and higher rates in several country markets factors expected to realise 1s. advance, but this was firmly resisted by millers, who eventually had their way on previous terms. Very little was done in foreign, and there was no change of values, and this was also the case with floating cargoes. The weather this week opened warmer, and on Wednesday came a fine and continuous rain, with a much raised temperature, and this had its usual effects on the wheat trade, as all vegetation was improved, with the prospect of a heavier gathering than at one time expected. Yet so shortly supplied were many places that it only produced a dull trade, though later on in the week there was more disposition to yield, and 1s. less was taken at several markets, as at Bristol, Birmingham, St. Ives, Wakefield, &c., and on Saturday a few noted a decline of 1s. to 2s. Liverpool was down 2d. per cental on Tuesday, and 2d. more on Friday. Wheat at Edinburgh remained firm, but at Glasgow the late advance was lost. Dublin was again calm, but no reduction was quoted.

On the third Monday there was a small English supply, but the foreign arrivals were good, including some from Australia and India. The number of samples on the Kentish and Essex stands was about the smallest since last harvest, and though the condition was excellent and factors were willing to accept 1s. per qr. decline, there were not many buyers. Beyond this reduction sellers would not, however, go, as it was feared we were getting more wet than sufficed for the wheat crop. The foreign trade also was very slow at the same decline. Floating cargoes, though not abundant, also gave way to the same extent. The early part of the week continuing warm, though wet, there was a general dullness in the wheat trade, and many country markets yielded 1s. per qr., as Hull, Leeds, Newcastle, Spalding, Sleaford, Uppingham, Melton Mowbray, Market Harborough, Rotherham, St. Ives, Lynn, Gains-

AVERAGES

Table with columns: FOR THE PAST SIX WEEKS, Wheat, Barley, Oats, and prices in s. d.

FLUCTUATIONS in the AVERAGE PRICE of WHEAT.



BRITISH SEEDS.

Table listing various seeds like Mustard, Canary, Cloverseed, etc., with their prices in s. d.

FOREIGN SEEDS.

Table listing foreign seeds like Coriander, Caraway, Cloverseed, etc., with their prices in s. d.

HOP MARKET.

BOROUGH, MONDAY, June 26.—During the past week there has been no material alteration in our market...

Table showing hop prices for Mid and East Kents, Weald of Kent, etc.

POTATO MARKETS.

BOROUGH AND SPITALFIELDS.

LONDON, MONDAY, June 26.—The market has well supplied with potatoes. The trade has been slow at our quotations...

Table listing potato prices for Flukes old, Regents, Rocks, etc.

BARK AND TANNING MATERIALS.

LONDON, SATURDAY, June 24.

Table listing prices for English, Coppice, Dutch, etc. bark and tanning materials.

TIMBER.

Large table listing various timber types (Baltic Fir, American Pitch Pine, etc.), prices, and agents like Samuel Downes and Co.

FLAX, &c.

Table listing flax prices for Hemp, Onshot, Half-clean, etc.

ENGLISH WOOL MARKET.

Table listing current prices of English wool for fleeces, sorts, etc.

MANURES.

Table listing prices for various manures like Bone Dissolved, Nitro-phosphate, etc.

SAMUEL DOWNES and CO., General Brokers, No. 7, The Albany, Liverpool.

Table listing prices for various manures like Pretence's Cereal Manure, etc.

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"The book under review is one calculated to warn and instruct the erring, without imparting one idea that can vitiate the mind not already tutored by the vices of which it treats."—*Naval and Military Gazette*, 1st February, 1856.

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Manhood.—"Dr. Curtis has conferred a great boon by publishing this little work, in which is described the source of those diseases which produce decline in youth, or more frequently premature old age."—*Daily Telegraph*, March 27, 1856.

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4 lb. for 20 sheep, price, jar included.....	£0	2	0
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8 lb. 40 " " " " " "	0	4	0
10 lb. 50 " " " " " "	0	5	0
20 lb. 100 " " " (cask and measure	0	10	0
30 lb. 150 " " " included)	0	15	0
40 lb. 200 " " "	1	0	0
50 lb. 250 " " "	1	3	6
60 lb. 300 " " "	1	7	6
80 lb. 400 " " "	1	17	6
100 lb. 500 " " "	2	5	0

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He would also especially call attention to his **SPECIFIC**, or **LOTION**, for the **SCAB** or **SHAB**, which will be found a certain remedy for eradicating that loathsome and ruinous disorder in Sheep, and which may be safely used in all climates, and at all seasons of the year, and to all descriptions of sheep, even ewes in lamb. Price **FIVE SHILLINGS** per gallon—sufficient on an average for thirty Sheep (according to the virulence of the disease); also in wine quart bottles, 1s. 3d. each.

IMPORTANT TESTIMONIAL.

"Scoulton, near Hingham, Norfolk, April 16th, 1855.

"Dear Sir,—In answer to yours of the 4th inst., which would have been replied to before this had I been at home, I have much pleasure in bearing testimony to the efficacy of your invaluable 'Specific for the cure of Scab in Sheep.' The 600 Sheep were all dressed in August last with 84 gallons of the 'Non-poisonous Specific,' that was so highly recommended at the Lincoln Show, and by their own dresser, the best attention being paid to the flock by my shepherd after dressing according to instructions left; but notwithstanding the Scab continued getting worse. Being determined to have the Scab cured if possible, I wrote to you for a supply of your Specific, which I received the following day; and although the weather was most severe in February during the dressing, your **SPECIFIC** proved itself an invaluable remedy, for in three weeks the Sheep were quite cured; and I am happy to say the young lambs are doing remarkably well at present. In conclusion, I believe it to be the safest and best remedy now in use. I remain, dear Sir,

"For **JOHN TINGEY**, Esq.,

"**R. RENNEY**."

"To Mr. Thomas Bigg."

"Be" Flockmasters would be well to beware of such preparations as "Non-poisonous Compositions;" it is only necessary to appeal to their good common sense and judgment to be thoroughly convinced that no "Non-poisonous" article can poison or destroy insect vermin, particularly such as the Tick, Lice, and Scab Parasites—creatures so tenacious of life. Such advertised preparations must be wholly useless, or they are not what they are represented to be.

DIPPING APPARATUS.....£14, £5, £4, & £3.

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CHLORODYNE is admitted by the Profession to be the most wonderful and valuable remedy ever discovered. It is the best remedy known for Coughs, Consumption, Bronchitis, Asthma, effectually checks and arrests those too often fatal diseases—Diphtheria, Fever, Croup, Ague, acts like a charm in Diarrhoea, and is the only specific in Cholera and Dysentery. effectually cuts short all attacks of Epilepsy, Hysteria, Palpitation and Spasms. **CHLORODYNE** is the only palliative in Neuralgia, Rheumatism, Gout, Cancer, Toothache, Meningitis, &c.

From **LORD FRANCIS CONYNHAM**, Mount Charles, Donegal, 11th December, 1865.
"Lord Francis Conynham, who this time last year bought some of Dr. J. Collis Browne's Chlorodyne from Mr. Davenport, and has found it a most wonderful medicine, would be glad to have half-a-dozen bottles sent at once to the above address."

Earl Russell communicated to the College of Physicians that he received a dispatch from Her Majesty's Consul at Manilla to the effect that Cholera has been raging fearfully, and that the **ONLY** remedy of any service was **CHLORODYNE**.—See *Lancet*, 1st December, 1864.

CAUTION.—BEWARE OF PIRACY and IMITATIONS.

CAUTION.—Vice-Chancellor Sir W. PAGE WOOD stated that Dr. J. COLLIS BROWNE was, undoubtedly, the Inventor of **CHLORODYNE**; that the story of the Defendant, **FREEMAN**, was deliberately untrue, which, he regretted to say, had been sworn to.—See *Times*, 13th July, 1864.

Sold in Bottles at 1s. 1d., 2s. 9d., 4s. 6d., and 11s. each. None is genuine without the words, "Dr. J. COLLIS BROWNE'S CHLORODYNE" on the Government Stamp. Overwhelming Medical Testimony accompanies each bottle.

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No. 2 Vol. XL.]

AUGUST, 1871.

THIRD SERIES.

THE
FARMER'S MAGAZINE,
AND
MONTHLY JOURNAL
OF
THE AGRICULTURAL INTEREST.

Dedicated
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THE FARMER'S MAGAZINE.

AUGUST, 1871.

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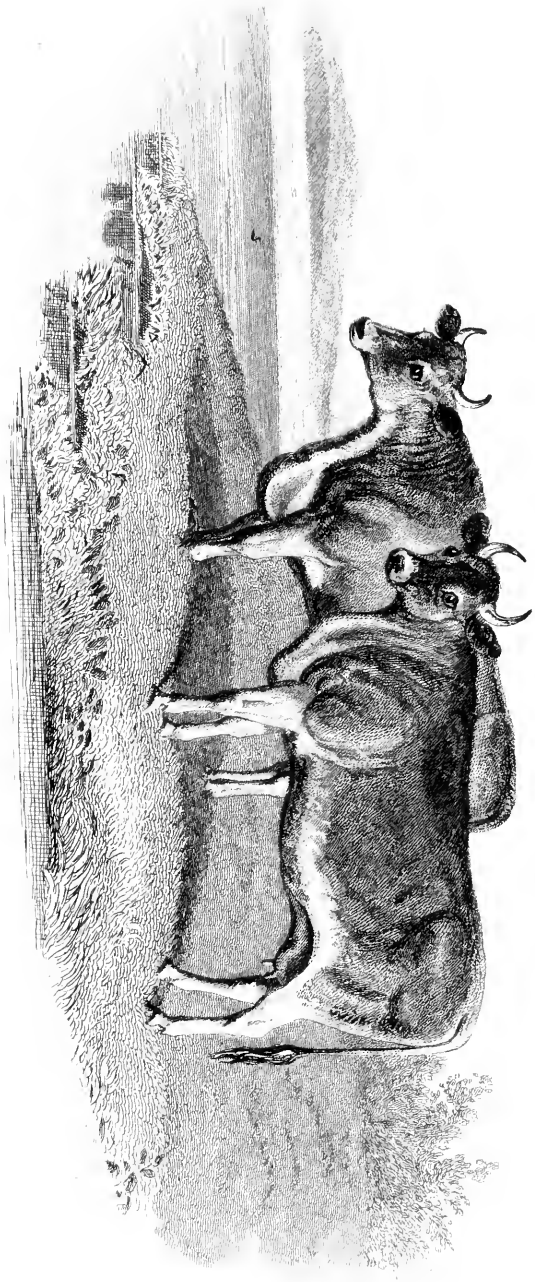
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A Good Harvest

Two Hogs





THE FARMER'S MAGAZINE.

AUGUST, 1871.

PLATE I.

JERSEY HEIFERS.

THE PROPERTY OF MR. HENRY MIDDLETON, OF CUTTESLOWE, OXFORD.

These heifers were exhibited at the Guildford meeting of the Bath and West of England Society, where, as we reported of them, they were to be distinguished by their style and purity. We prefer to let the following letter from Mr. Middleton speak for itself:—

In giving a short account of my experience of cattle, I may perhaps observe that I was born and bred a farmer, and I take the pride of saying that our family has been on the same holding (which I rent of Christchurch College) for about 220 years, and that I take precedence at the audit dinners as representing the oldest tenancy belonging to the College. The house I occupy was once an ancient priory called 'Saint Frideswide at Cutteslowe.' As regards cattle, I began with pure Shorthorns about the year 1844, and at the time of my sale in April 1867 I was the oldest breeder in Oxfordshire; but having escaped the cattle plague, I determined not again to risk so much money, and to sell the whole herd, which Mr. Strafford did down to the last lot. In the latter part of the same year, under the advice of Mr. Dauncey, I began to form a herd of Alderneys. Through the kindness of Mr. Dauncey, I had for some years previously to my sale the opportunity of occasionally visiting Horwood, and looking over the herd with him, and of profiting by his experience, so that long before I commenced I knew what an Alderney really was, and was able to set to work accordingly. At the great sale, however, I was not prepared to give the prices that the animals made; but, directly after, finding that Mr. Dauncey's favourite old bull, Dolphin, was not sold, I again journeyed to Horwood, and purchased him. Mr. Dauncey told me that this was the best bull he ever bred;* and that if I

* At the Dauncey sale the following heifers and calves got by Dolphin sold at the following prices: Heifers—Day Star, 61 guineas; The Ban, 81 guineas; Croquet, 38 guineas; heifers-in-calf, 55 guineas, 35 guineas, and 60 guineas. Calves—20 guineas, two at 20½ guineas each, and 21½ guineas; bull-calf, 20 guineas. The eleven realised the sum of 432½ guineas.

meant to breed first-class animals I should select some of the choicest heifers from the Island to put to Dolphin, as he (Mr. Dauncey) generally succeeded best with fresh blood put to his bulls, and instanced three of his cows at his sale which were the result of crossing—viz., Elk, Elfin, and Landscape. Profiting by this advice, I met several of Fowler's importations at Southampton, and I selected from time to time about twenty females. I also purchased some home-bred Jerseys from some of the best strains I was able to meet with, so that for the past two or three years I have possessed of all ages a herd numbering about 60 head, and I consider that I have done well with them, having sold two fourteen-months-old heifers at Oxford for 70 guineas each, and a bull twelve months old for 33 guineas. Immediately after the sale of the two heifers, I was bid 80 guineas each for them, and offered 10 guineas to be off the bargain, but in vain. At this time one of the two Guildford heifers, Fairy, was a calf, and the same buyer bid me 70 guineas for her also, as I have since had an offer of 100; but I could not warrant her in calf, as having been brought up for show purposes she has proved to be a shy breeder, though I think she is now safe, having gone nearly six weeks without turning. I believe you know my opinion with respect to which animals will eventually be at the top of the tree, and I justify it by the care that is now taken in the selecting of bulls and heifers by the English breeders regardless of expense. In fact, it will soon be seen that Alderneys will be as straight and as well-bred as the cleverest Shorthorn, only one is now all beef, and the other will retain the milking properties. I have at present in use, with others, a pure-bred Dauncey's bull, Captain Claydon, and I have also four females, which I intend keeping to breed bulls from, so as to get a succession of bulls of the pure Dauncey blood. Mr. A. Gilbey's famous bull, Banboy, is a cross once removed, being by the Dauncey Rioter, out of a heifer from the Island.

PLATE II.

A BAD BUSINESS.

"So ho! friend Joshua, thou art early to the road this morning. Has the spirit moved thee and thy righteous brethren to act with true honesty, and pull down yonder tide nets that keep the fish from coming up the river?"

"Surely, friend, not so," answered Joshua firmly, but good-humouredly at the same time; "thou canst not expect that our own hands should pull down what our purses established. Thou killest the fish with spear, line, and coble net; and we with snares and with nets which work by the ebb and the flow of the tide. Each doth what seems to do best in his eyes to secure a share of the blessings which Providence hath bestowed on the river, and that within his own bounds. I prithee seek no quarrel against us, for thou shalt have no wrong at our hand."

"Be assured I will take none at the hand of any man, whether his hat be cocked or broad-brimmed," answered the fisherman. "I tell you in fair terms, Joshua Geddes, that you and your partners are using unlawful craft to destroy the fish in the Solway by stake nets and weirs; and that we, who fish fairly, and like men as our fathers did, have daily and yearly less sport and less profit."

Ominous words these; but they have come to have a very different bearing since the time when Red Gauntlet thus pointed the argument. The spear is now held to be amongst the very worst of weapons by those who "fish fairly," and were another Sir Walter to paint us another fisherman's riot he would arrange for an attack on the poaching crew who work silently a-nights with torch and spear,

THE WORKING OF THE DAIRY.

BY THE NORTHERN FARMER.

Every succeeding year finds farmers increasing their dairy stock, laying out their land so as best to suit its successful management, each year developing greater interest on the subject of the best breeds of cattle, and the most profitable modes of managing them, than its predecessor. With dairy stock it would almost appear as if there was no such thing as standing still. Unless improvement is aimed at constantly, by weeding out those members of the herd which are getting old, or which after sufficient trial are found to be inferior milkers, and by occasionally introducing fresh and, if possible, superior blood through the agency of the sire, there is great danger of retrogression. It is neither profitable nor creditable to a farmer to have his stock decreasing in stamina, in lower condition, and the receipts from their produce less than during previous years, and yet unless the interest in their welfare and improvement is continually kept up, this is a contingency that is almost sure to become a certainty. No bad milker should have a permanent place in a herd which is kept not for show, nor for breeding purposes solely, but principally for the disposal of dairy produce. To keep such a cow is simply to lose money wilfully, her keep costing quite as much as the best milker in the stall, and the trouble she occasions just as much as that given by the animal which gives double her amount of produce. It may be difficult to have every one first-rate, yet the herd may be so improved by judicious selection as to have all good cows. In a stock of forty we shall suppose that there are at present ten bad, or at all events indifferent, milkers. By testing the milk of these cows carefully, and ascertaining the amount of produce in butter to be under the average of what might be fairly expected from the care and keep expended on each, there is nothing more easy than to keep the bull from them, dry off at the end of the season, stall feed, and get rid of them without further loss. To fill their places, from twelve to twenty heifers can be sent to dairy, ample margin being thus left to afford a choice at the period of calving. By persisting for a few years in this course the stock will not only become first-class milkers and increase the profits of their owners, but will gain a character and reputation in the district for their good qualities. Much can be done in a given time by holding over the offspring of those cows which have proved them-

selves to be first-class milkers, breeding, if possible, for all permanent stock from those only, and thus getting into a strain of milkers. It is just as likely as not that a heifer, whose mother was an excellent milker, may herself turn out to be scarcely worthy of house-room; but when she is the descendant of a celebrated line of pail-fillers, the probabilities are altogether in her favour that she will possess in a high degree the good qualities of her race. In a large herd there will, in spite of the most careful scrutiny, be an occasional bad milker. This no forethought can prevent, and whatever loss may result, it must only be accepted for the time-being, and the removal of the animal causing it effected on the first favourable opportunity. With regard to the best breeds of cattle for dairy purposes, it may be taken as a very safe rule, that every district of country possesses a breed of cattle in every way suitable to its climate and soil; and that, with care, skill, and capital combined, good specimens fit for general purposes may be obtained without going far from home. It is quite possible that cattle of a particular breed, expensively purchased and brought from great distances, may do very badly and lead to much disappointment and loss before becoming acclimated, and even afterwards never doing so well as the ordinary breeds to be found in the locality. With the bulls it is quite different, they must be got of pure blood, without a stain if possible, whatever the trouble or whatever the expense. The breed that suits every variety of cattle is unquestionably the Shorthorn; and wherever the situation, whether it be in the north of Scotland, the most southern point of England, or in the wilds of Kerry, a yearling Shorthorn bull should be introduced to the stock. £35 will in any part of the three kingdoms procure a yearling of pure blood, and when it is taken into consideration that half that sum will be required to purchase a decent looking cross-bred animal of any pretensions, the prudence and economy displayed in getting the highly-bred bull become at once apparent. With ordinary success the first cost will always be secured when the animal is finally disposed of, his owner thus having the use of him at no expense other than providing him with food while in his possession. If twenty calves are reared the whole price of the sire is regained on the first lot by the time they are twelve months old, in their extra value over those

animals which are the offspring of a cross-bred bull. This argument in favour of good blood is so easily proved, and in fact forces itself so constantly on the notice of everyone who will take the trouble of looking into it, that it is really astonishing the principle of pure breeding by the sire is not universally adopted. At a fair held on the 29th of May I saw yearlings from a good bull sell at £8 each, although in but moderate condition, and a lot of two-year-olds from a cross-bred in much the same condition close beside them for £7 each. The former lot were sold the moment business began, and almost at a word, the latter only at the close of the day, and bought by a bargain-hunter, such as frequent most markets, coming in at the finish to pick up at nearly their own offer what the better class of purchasers will scarcely look at. Comparing the two lots as they stood side by side the difference was striking. The straight and level backs and square full hips of the well-bred cattle contrasted strongly with the slender girth, drooping rumps, and thin thighs of the others, affording ample testimony as to the correctness of the theory which attributes so much importance to purity of blood. I am strongly of opinion that the best paying dairy (unless specially circumstanced) is that which combines the rearing of good cattle with the manufacture and disposal of its other products. Unless the demand for new milk is locally good, and the price so high as to outweigh all other considerations, sending away the milk the moment it is drawn from the cow leaves the farm very bare. If calves are attempted to be reared, they are extremely apt to be starved, the milk being valuable; there is nothing for pigs; and even the family and servants have often not unjust cause of complaint in reference to the scarcity of this very essential article of daily consumption. When kept at home and manufactured into butter, the skim and butter-milk affords abundant food for calves and pigs, and young stock can be raised in sufficient numbers to make the farm self-sustaining. Very few can manage to rear a calf to each cow in a butter dairy, skim-milk being their only food after being fairly started, sows and their young requiring to get some portion of the milk. To rear three-fourths of the number may be counted as good management, and if they are fairly attended to and of a good sort will add a goodly sum to the income of the dairy on the day when they finally leave it to shift for themselves on the pastures. £4 is a moderate value to put on a well-reared calf of good blood; and a herd of calves, whose treatment has been liberal enough to make each animal worth this sum at weaning time, will not only be exceedingly creditable to the establishment which turned them out, but a valuable source of future profit to their owner. Providing their wants are always attended to on the same scale, such animals can at any time be turned into cash, if necessary. The heifers will supply the place of older cows as they go out, and all the spare stock may be cleared off at paying prices at the age of two years. Few farms are extensive enough to enable the cattle to be bred and held over profitably until three years old. What with the permanent and successional stock the pastures get crowded, nothing is first-class, mediocrity as a whole becomes difficult of attainment, and in the end loss from over-stocking is unavoidable. With improved breeds it is quite unnecessary as well as unprofitable to hold longer than two years, as they can be beautifully finished at that age. A year's keep is thus saved, in itself an immense thing, and the heavy cattle being cleared off the riddance becomes doubly profitable, in enabling the farmer to be more liberal to the young stock which he retains. £20 is a very remunerative price for young animals that have just completed their second year, and very high feeding is not required to accomplish it, never allowing them to

lose condition from exposure or shortness of keep being nearly all that is wanted to force a well-bred beast into premature maturity and ripeness, a few months' full feeding in the stall putting on the necessary finish. Although undoubtedly the last fortnight of April and 1st of May is a highly suitable period for cows calving, yet, when much importance is attached to the calves, a month earlier adds greatly to the value of the young animals. From whatever reason, the early-born has always the advantage, taking the lead most decisively, and preserving it all through the period of growth. Let anyone just take the trouble of comparing the calves born within the past month with those dropped in March and beginning of April, and he cannot but be struck with the marked superiority of the latter over the former, the great substance and hardiness of the one, and the somewhat puny and delicate appearance of the other—a remarkable difference, in fact, which no liberality of feeding can overcome. Early calving is of no advantage, however, unless abundance of succulent food has been provided for the cows. If not fed well the flow of milk will be speedily diminished, and no after treatment, however generous, will restore it when lost. Let the food be kept to the cows, and although the quantity of milk given may be less, and the quality somewhat poorer than would be the case farther on in the season, yet, when grass begins to grow, and the weather becomes warm and fine, they will take a second springing; and although it may be that a couple of months has elapsed since they calved, there will be but little difference between their produce and that of cows coming in about the beginning of May. In any case I much prefer to have the entire stock calved before the first of May, so as to have the full advantage of that month which is the best in the year for milk, the grasses being young, tender, and fresh, a condition which is soon lost under the broiling sun of June. It is not too much to expect that between produce sold and the value of the calves half the season's income should be realized by the 15th of June; if a fortnight earlier so much the better. The past dry summers that have been experienced taught the propriety of this course, as in many dairy stocks the cows were scarcely at their full milk when they began to dry up from want of succulence in the herbage. On all light lands that are unavoidably more or less affected by drought every year, arrangements should be made to have a morning and evening feed every day during the season, so as to relieve the pasture and keep the cows from prematurely drawing in. Once get such a system fairly inaugurated and there is no difficulty whatever in carrying it out, obstacles that appeared insurmountable in theory giving no trouble when reduced to practice. The quantity of manure constantly making renders it every season easier to provide an increased supply of food, not necessarily by increasing the acreage, which I by no means advocate, as increasing the expenses, but by manuring highly, adding immensely to the bulk grown on a circumscribed area. All the forage crops stand heavy manuring, and when successfully grown leave the land improved greatly in condition, and thoroughly free from weeds, everything possessing vegetable life being fairly rotted out. For autumn sowing to come in early in spring there is no more valuable crops on light land than tares and trifolium incarnatum. Sown not later than last week of September if possible, so as to be sufficiently forward to stand the frosts of winter, the quantity of food afforded per acre is simply enormous, taking the cattle completely off the pastures, giving the latter an excellent opportunity of strengthening in the bottom and withstanding the drought, however severe. May and June will be amply provided for by the autumn sowing, the land being cleared quite in time for turnips. A spring sowing of tares will carry

them through July and a portion of August, and if well manured the breadth need not be very great to feed even a large stock. In August and September clover will come in handy, and about the end of the latter month and continued during the remainder of the milking season cabbage will prove eminently suitable. None of these crops interfere with the quality of the produce, on the contrary, while increasing the quantity the quality is at the same time greatly enriched. The cabbage is a plant whose merits as a source of cattle food have been hitherto greatly overlooked by most farmers, an oversight which, taking into consideration its valuable feeding properties and the immense bulk of food it grows to the acre, it is hard to account for. Of late years, however, cabbage is yearly increasing as a field crop, and its value is more generally understood and acknowledged. One acre of this crop if successfully grown will, in favourable situations for its sale, realise over £60, besides leaving a considerable residue of lower leaves to be used with cattle. This becomes a great temptation to dispose of a considerable portion of the good heads to market-gardeners, vegetable dealers and others. Such a course is certainly excusable, as with a portion of the money so made foods can be purchased, and manure brought to the farm in quantities far greater than what is required to balance what is sold of such a small portion of land as is required to grow £100 worth of cabbage. Last October I went down to Staleybridge, near Manchester, to visit a farmer there, who has for some years been carrying out the principles of high feeding and high manuring, advocated so strongly in these columns. To me the visit was both pleasing and profitable, as I had the satisfaction of seeing beautiful root-crops, the best manured land, and the best cared-for dairy stock I have ever yet seen. The teeming population of that great manufacturing district causing an immense demand for the products of the dairy, and the price for every article being in consequence over the average, the crops on this farm were laid out so as to supply as large a quantity both of winter and summer food for the cows as could possibly be obtained by skilful working and abundant manuring. This part of Cheshire is by no means favourably adapted for high farming, with the land, sloping and craggy, running into pasturage immediately above the town, scarcely capable of supporting the small horned sheep of the mountainous districts of Derbyshire. These slopes run on in gradually increasing height and sterility of soil until they reach the range of mountains familiarly known as the backbone of England, the Peak standing out with great prominence, forming a magnificent and fitting boundary to scenery so superbly grand in its very wildness and desolation. Cabbages are reckoned of the greatest importance by this gentleman as a paying crop, giving an immense amount of the finest food for cows that can be grown, and if a portion can be spared for sale, a large sum can be made from a very limited extent of surface. One acre had been sold to a market gardener for disposal in the Manchester market—I happened to see the last load drawn—and the money paid by this man to the grower for 4,840 square yards of produce amounted to the very large sum of £57. In addition to this about two tons of refuse leaves remained for feeding. A portion of the plants had not hearted well; but for this, the money value would have been considerably greater. The mangolds were a splendid crop, just in process of being lifted and pitted, and were so plentiful that large quantities were being sold on the spot to small farmers, who came many of them from considerable distances to procure them. Although in this district nearly every farmer keeps a number of milk cows, yet few grow their own roots, declaring that the soil and climate is not suited to their growth. One would think it scarcely possible that such

ideas could be held within seven miles of Manchester; yet I myself saw men, whose places I afterwards visited, coming here, and asking to be complimented by getting a few tons of mangolds, paying the handsome sum of 25s. a ton for them, and looking upon it as a special favour besides. The grass on this farm was as rich green and succulent on the 27th of October as other lands are in the middle of May. The land is naturally poor and cold; but these results have been attained by liberal manuring for the green crops, and abundant top-dressings of short dung after being laid down. The sanitary regulations of the town compelling the instant removal of all matter dangerous to public health, manure in almost unlimited quantity can be had for little more expense or trouble further than permitting a place of deposit at sufficient distance from the town to comply with the regulations. This of course is a local advantage that few can avail themselves of, and my reason for noticing it is simply to show the basis on which a prosperous farmer has built up and continued a system of successful cropping, with excellent pecuniary results to himself, and the yearly improvement of the land which he holds. The dairy stock were in noble condition, as well they might be from the care and assiduity displayed in their management. Rain was scarcely permitted to fall on them, and if the day changed to cold, however early, they were at once taken in-doors. Grass, rich, fresh, and succulent, was abundant in the fields, and a mixture of foods of the best and richest quality was supplied to them in equal abundance while within. Most of the members of the herd were fat enough to kill, while at the same time their udders were as much distended on coming in to be milked as if they had but recently calved. The house-feeding consisted of nearly everything grown on the farm all shred up together in a large cutter. The mixture at that time consisted of mangolds, khol-rabi, cabbage, chopped hay and straw, oil-cake, rape-cake, bean-meal, and a small portion of brewers' grains. Every beast got just as much as it would eat without waste, and a better or more appetizing mixture could not be put before any animal. Liberality and good taste displayed itself at every turn, the shippens as the cow-stalls are here termed, being models of cleanliness, the stall divisions on the best principles, and the ventilation perfect. The receipts from each cow average on this mode of feeding about £30 per annum, many cows giving considerably more than that sum. They are at all times fit for the butcher, and when a good price offers are frequently sold while still giving as much milk as clears their keep, £32 being a not unusual price for cattle sold not quite dry.

After a round of inspection in the neighbouring districts, and a few visits to the monster cotton mills of Staleybridge (to me, a dweller in the country, a truly wonderful sight), the time at last came for departure. Much pleased with my visit, I shook hands at the station with my kind and worthy host, who, albeit that I was totally unknown to him except through the columns of the *Mark Lane Express*, kindly invited me down to spend a few days with him, to see his farm and stock, and be a partaker of his hospitality.

Extensive corn growing and a large dairy do not suit well on the same farm, the pastures being unavoidably too new to permit the produce in butter to be profitable. The bottom is also thin for a few years, and the cows have a difficulty in filling themselves, requiring to be almost continually on foot. A well-doing dairy stock should be resting the greater part of their time, the food being supplied in such abundance, both in-doors and out, as to keep them always full, and so enable them to be as much as possible in a state of repose. Again, the young grasses, however succulent and milk-producing, are far behind

rich old pastures in yield of butter, this fact requiring no elaborate test to ascertain its truth, a few days' change from the one to the other proving it incontestably. The difference between the quantity of cream on each pan (to descend to particulars), its firmness and body, is so decided and striking as to afford the most powerful argument that can be given in favour of preserving as great a breadth of permanent pasture as can possibly be managed consistently with growing the necessary forage and root crops required for winter and spring. On a dairy farm every field that has been turned up should be manured unsparingly when under green crop, so that it may be again laid down to pasture in the best possible condition. The small quantity of extra manure required to make an ordinary dressing first-rate would be amply repaid in the succeeding root and corn crops, while the rich full bite enjoyed by the cattle from the time they are first permitted to graze on it will not fail to add greatly to the profit and satisfaction of the farmer who has the spirit and liberality to lay out his money in such a judicious manner. It is quite possible to have good turnips, good corn, and possibly, if the season is moist and otherwise favourable, good hay on land that has been lightly dressed with dung, and liberally with artificials at the time of preparing for the green crop; but the real test of good treatment is in the pasture: it will not be cheated of its rights without showing it. The previous crops having in a great measure exhausted the sparsely distributed manurial constituents, the soil ceases to respond to the calls made upon it, growth languishes, and the herbage being scarce and devoid of succulence can no longer sustain the stock in profitable condition. It is vain to expect that stock will sensibly enrich land that has been poorly laid out to pasture: they have no means of doing so, on account of the food which they obtain being so small in quantity and poor in quality. Mere rest will, of course, renovate the soil to some extent; but for this time is required, and while the farmer is waiting expenses are accumulating and nothing coming in to meet them. On a large scale this cannot go on long, ruin being the invariable result of such management. No field or portion of a field however small in extent should ever be neglected or badly treated, as by doing so a corresponding amount of hard cash is excluded from the year's receipts, the amount from crop and stock being just so much the less. Sheep and milch cows agree badly on the same farm, unless of unusual extent, or the number kept of each exceedingly limited. Few men are contented with being under-stocked, mostly every one who has capital inclining to keep a large number of beasts. With ordinary store stock some kind of shift can be made, but for dairy cows sheep eat much too close, and in spite of the most careful management the cows can never get a full bite. Thus both stock are seriously impaired in their usefulness, the sheep if shortened in their range and kept on bare pasture drying off prematurely, and rearing a crop of stunted lambs. The cows at the most important and critical part of the season coming on pastures that have been stocked during the entire winter and spring with a flock of sheep never find food in sufficient abundance, fall off at once in the amount of produce and never afterwards regain it. When the income is made up at the end of the season the probability is that each cow has not returned much more than half of what under more favourable conditions she would have done. To know what each kind of stock can really do, and to give each a fair chance, they ought to be completely separated, if not on different farms, at least as thoroughly isolated from each other as if this were the case. But for the fact of a portion of everything being at times desirable, I would strongly advocate the working of the dairy by itself, if it were only on the principle that what a man confines himself

to, he is almost sure to get good at, if possessed of ordinary intelligence and business habits. If at all attentive he must find out the best modes of making that particular branch pay in a more effectual manner than if he had a number of other things on hand. Appliances for saving labour are almost sure to be hit on, and the attendants, from being constantly at the same business, soon learn to get through it both quickly and well. In the disposal of his produce the advantage still holds good: he finds out the best markets, gets stated customers, and, if the article he turns out is of the best quality, can from his intimate knowledge of the trade demand and obtain the highest price going. Particular attention should be given to the condition and feeding of the cows towards the conclusion of the season, a small quantity of produce making at that time of year a good deal of money. If permitted to lose condition, or allowed to remain out at night too late in the year, they dry at once, and lose flesh very quickly, remaining lean for the winter unless extra fed. This is a serious mistake, and one too often perpetrated, as if the cows are in strong condition when winter comes on, they are easily kept over during the time they are dry; a little sweet straw and a very small quantity of roots daily, bringing them to the period of calving in fine health, and no perceptible loss of flesh. Thin dairy cattle in spring are a most expensive and losing stock, the improved food supplied to them after calving naturally going to renew and build up the wasted tissues, the produce being neither in quantity nor quality anything near what it ought to be. Indeed in a herd which has been thus neglected, many of the cows will not give as much milk as would be required to rear their own calves. Under the most favourable circumstances a lean cow can never pay, the very best part of the season being past before her constitution has become so much renewed as to give her the slightest chance of milking well.

So as to enable the milk and cream to be kept sweet and sound until manufactured and the produce finally disposed of, every farm should have a good house to which the milk can be removed on its being drawn from the cow. Most people would imagine that this of all things on a farm was sure not to be neglected, its utility being so unmistakable, and yet it is astonishing how many farms possess only a hole and corner place which is by courtesy called the dairy, utterly innocent of ventilation, and seldom free from a heavy, sour, and damp smell. It does not follow that such erections are to be found only on small farms tenanted by struggling men; on the very contrary, a clean, tidy dairy may often be found where the surroundings are in many other respects miserable. This is, of course, due to the good management of the mistress or other person in charge of this particular department, good taste and a love of order and cleanliness overcoming difficulties, which to a person devoid of these qualities would appear insurmountable. On the other hand, the dairy on a farm owning from eighty to a hundred cows may not unfrequently be continually found in a state of the utmost disorder, with damp, earthen floor, and the whole internal arrangements destitute of the slightest attempt at neatness. A building intended specially for a dairy, and finished regardless of expense, may be not at all suitable for the purpose in view, on account of some oversight or fault in the construction and mode of ventilation. Should the entrance to the milk-house be from the churning-room, a mistake often made, it will be almost impossible to preserve a pure atmosphere, and, worse still, should there be a drain leading from the latter, however well it may be protected by the modern appliances for the prevention of gaseous exhalations, the air will never be perfectly pure. On the inner-door being opened, the taint is at once perceived, the smell being heavy and sickly, the floor and shelves

damp and clammy, and moisture running down the walls. When told by any dairy farmer that there is something in the grass of his farm prejudicial to the making of good butter, I always feel assured that there is an error somewhere else, and for which it is much easier to find a remedy than it is to change the nature of the grass. In a dairy of such faulty construction and insufficient ventilation as that which has now been pictured, it is easy to see that the butter made in it must be simply abominable, particularly if the cream is permitted to stand any time on the pans. The milk-room should have no communication whatever with the scalding or churning-rooms; but should it be such a matter of convenience on account of connection with other buildings as to have the entrance through the latter, no drain is admissible, however well protected, or mode of getting rid of waste water other than by carrying it out at the door. Although inexpensively built, a milk-house may yet possess as perfect ventilation, as much facility for the most rigid cleanliness, and want for none of the usual conveniences for setting the milk and preserving it pure and untainted, any more than if it were built for a model, and a large sum of money spent in erecting it. Whether intended to be both ornamental and useful, or the latter only, and that in its simplest form, the dairy should be a light, cheerful, and airy apartment, the air at all times sweet and pure, as well as cool, the floor and walls perfectly dry, the milk-vessels and everything within its walls scrupulously clean. Whether in connection with a large farm or a small one, it ought to be arranged so neatly, tidily, and with such absolute cleanliness in every particular, every morning on the work being completed, as to provoke the remark from any visitor who may inspect it, "This is a delightfully cool and sweet dairy!" Simple as such a remark may appear, and however natural to utter it, the compliment will not readily be passed unless the dairy and its contents are in complete harmony with each other, and in the most perfect order. The ceiling should be high, and if there is an opening in connection with a ventilator on the ridge so much the better. Ordinary pavement for the floor, however suitable otherwise and easily kept clean, is objectionable on account of sweating on the approach of rain, and thereby tainting the air at a time when of all others a dry atmosphere is imperative if a good article is desired. Tiles or bricks, or any other material in whatever shape, if prepared by the action of fire, just meets this difficulty, neither possessing nor absorbing moisture. A thorough draught is vitally essential, purity and sweetness of air being impossible without it. This can be easily obtained by having windows on opposite sides, and directly fronting each other. These should not be mere holes, but of sufficient length and breadth to harmonize with the general style and outline of the building. Care should be taken that they are not placed too high, as in such a case their drying effect on the floor and shelves might be partially lost. No sash or glass is required for a dairy window; if introduced, they are more injurious than beneficial, obstructing the free admission of air. A square of perforated zinc answers every purpose, admitting a subdued light and air in abundance, and excluding the fierce heat of the sun. Flies or dust cannot gain an entrance, and the only thing in addition that could be added with any show of necessity might be shutters, closing them during the prevalence of high winds, if thought necessary. The frame painted with a rich brown, and the zinc itself with blue somewhat lighter and sprightlier than its own colour, will impart a pleasing appearance to these openings, and amply compensate for any break in the uniformity of design, if connected with a range of farm-buildings, which the dairy too frequently is. If shaded by a few trees it will prove an acquisition; still, as the possibility of procuring such

a shade is the exception, and not the rule, it can very well be done without. If the house is a low one, slates form the worst possible covering for the roof, on account of absorbing so much heat. When a ceiling intervenes, the temperature, however, of the milk-room is not perceptibly raised, and much annoyance is in consequence obviated. There is now a great variety of material to choose from in milk vessels—wood, iron, glass, china, and earthenware all having their advocates, who are not slow to advance convincing arguments in favour of the particular article which they themselves use. For general use in a large establishment tinned iron forms a very economical and useful milk-pan. They are lasting, and therefore cheap in the end, although dear to buy; the milk keeps well in them, and the cream is thrown up quite as well as in pans of any other material. They are economical, in being easily cleaned—a point of some importance to most people, a smart rub with a cloth and a little fine salt making them shine like silver, a dip in boiling water completing the cleansing process. When not in use they should be smeared with a mixture composed of whiting and oil to prevent injury, as rust taints milk very quickly, and consequently if the pans are permitted to become rusty, they are rendered useless. Much difference of opinion exists as to the length of time the milk should stand before the cream is taken off, and the inevitable result is, that there is an immense difference in the quality of the manufactured article, although the disputants who leave it the longest cannot be brought to acknowledge the fact. If a first-class article is required, it is dangerous during the summer months to leave it longer down than four meals, and in certain states of the weather three will be found enough, unless the dairy is an exceptionally cool and airy one. It is an act of the most egregious folly to allow the milk to stand for four or five days before being skimmed, as good butter cannot possibly be made, and moreover the cream loses substance and is not so productive when old. Like a field of corn, cream the moment it has come to maturity begins to decay, and if carefully watched will be seen to wither on the top of the pans, all the richness which a few hours previously were so eminently its characteristics being completely lost. Good cream being placed in the churn, there is no difficulty in making butter of excellent quality, providing the succeeding operations are performed with care; but if the cream has begun to decay before being churned, it is in vain to expect the butter to turn out anything but inferior. There ought to be no trouble with soft butter, however warm the weather may be, if a few precautions are taken to lower the temperature of the cream, and keep it as low as possible during the process of churning. Half-filling the churn overnight with spring-water, and plunging the cream-crocks in tubs of the same, has an excellent effect; and when this is aided by slow churning, butter in the middle of summer, and in the hottest seasons, may be turned out as firm in texture as in the month of October. Whatever the form of churn, butter cannot be made in large quantities satisfactorily, if brought too quickly, one hour being the minimum time occupied in the churning process, and if allowed to run to nearly an hour-and-a-half during very hot weather so much the better. A good spring in the neighbourhood of the dairy is invaluable, as with the assistance of plenty of cold water in the manufacture of butter all difficulties vanish, or are easily overcome. Badly-managed butter can be wonderfully improved in quality by careful and patient manipulation in cool spring water: with a few applications it can be cleansed from impurities, hardened and improved in texture, and much of the harshness of taste consequent on indifferent management neutralised. On its removal from the churn the first care should be to get the milk completely out of

the butter, washing it in successive waters, until at last it runs off without the slightest colouring of milk. To get rid of every drop of water is the next care, this being effectually accomplished by dividing the butter into lumps of three or four pounds each, and pressing firmly on the bottom of the tub or cooler. To make sure of getting rid of the last drop of water it should finally be taken up in the hand and dashed down with considerable force, the expressed moisture being wiped off with a cloth at every stroke. This operation carefully performed, the butter is now ready to be salted. One pint of salt and two ounces of crushed lump sugar will be quite sufficient for twelve pounds of butter however long it may be intended to keep it, half the quantity being enough if intended for immediate use. So as to thoroughly mix the salt with the butter, it should be spread in successive layers, then turned and returned, the instrument most suitable for this purpose being a strong wooden skimmer about nine inches in circumference. This being held with both hands every particle of butter and salt can be intimately blended, not the slightest streak being observable when packed. To perform this operation in a proper manner, however, a good deal of trouble must be taken, it being scarcely possible to have it as it ought to be, without going over it five or six times. When ready for the keg or firkin, pack carefully, filling every corner and pressing firmly down with the skimmer as each layer is put in. Salt butter looks all the better for a little colouring, this being easily imparted by

the addition of liquid annatto. One teaspoonful of annatto put in the churn along with the cream will be enough for forty pounds of butter, giving the peculiar richness of colour so much sought for by the consumer, whilst at the same time it does not interfere in the slightest perceptible degree with the flavour of the article itself.

The very important question how much butter does a cow really give is one often discussed, but seldom agreed upon, few people caring to admit the exact quantity, unless undeniably good. We hear of, and very probably know, men who make £25, £30, and even as high as £40 per cow per annum, but we seldom have an opportunity of knowing exactly how it fares with the plodding farmer, who, unfavoured by fortune, must forward his produce to a distant town, there to be disposed of at the wholesale price of the day. With such a man, the year's receipts per cow must be placed, if the truth is told, at a sum so modest in comparison with the first quotation as to reach to scarcely half, not even coming to half, unless a regular system of house-feeding during the summer is carried out. The larger the number of cows, the lower in general will be the average, as selection then becomes more difficult. If the herd numbers fifty members, five pounds of butter per week per cow may be considered low during the height of the season; six, a very fair return; and seven, so good as to be attainable only by liberal treatment and general excellence of management.

ODDS AND ENDS OF FARMING FACTS.

I.—The mechanical condition of the soil exercises an important influence upon its fertility: the more completely the particles are comminuted or pulverised, or, in the technical language of the farm, the finer the tilth, as between two given soils, the greater the difference between their fertility. It is, indeed, this mechanical difference that in some cases constitutes the difference in their agricultural value. These two soils have been carefully analysed, and both were of the same value analytically, yet the difference in actual fertility was very great indeed, the more valuable soil being found to be the most finely pulverised. The fineness of the tilth of arable soil does not only aid fertility by allowing the air to permeate through its particles, but it exercises an important influence upon the relative capabilities—so far as moisture is concerned. Thus, although a heavy clay will hold a far larger amount of moisture than a light friable soil, still the heavy clay will, in a dry season, be the first to suffer from drought, whereas the greater the depth to which the light soil is pulverised the moister will be the bulk. The difference between the two soils—a close retentive clay and a light friable soil—will be easily noticed in sultry dry weather by merely turning them with the hand. The light soil will be found warm, but moist, whilst the clay will be hard and burnt up. It is easy to see how widely different must be the condition of growth of plants growing in these two varieties of soil. There are, however, one or two points modifying the effects of finely pulverised soil, which will be noticed hereafter.

II.—A good deal has been written and said about the exhaustion of soils: that is the abstraction of their fertilising mineral constituents by the repeated taking of crops from them. But that there is a much more extensive supply of these mineral constituents in our soil than some writers and scientific authorities would seem to believe and to maintain, some researches would seem to

show. Thus in the case of the celebrated Lois-Weeden system of culture, there was during a given period of fifteen years an annual extraction from each acre of land of about three-and-a-half times as much phosphoric acid, about seven times as much potass, and about thirty-seven times as much silica as would have been taken out of the soil in the course of an ordinary system of annual cropping; and yet at the end of the period above named, there was no apparent diminution in the fertility of the soil. Messrs. Lawes and Gilbert gave us an illustration on this point, in which it was estimated that in the case of a soil one foot deep, with ordinary rotation with home manuring and selling only corn and meat, it would take one thousand years to exhaust as much phosphoric acid, about two thousand years to exhaust as much potass, and about six thousand years to exhaust as much silica as, according to the average of 42 analyses relating to 14 soils of different descriptions, had been found to be soluble in dilute hydrochloric acid.

III.—A bushel of good Peruvian guano should not weigh more than 60lbs., say between 56lbs. and 60lbs. It should be light in colour, it should be dry, so that when a handful is squeezed together the lump will cohere but slightly. The ammoniacal odour should not be too highly developed; when rubbed between the fingers it should be smooth, not gritty, and no lumps should be in it, which when broken will yield a substance of a lighter colour than the other part of the sample. If these points are present in a sample of guano, it may be considered, according to a high authority, *good*.

IV.—Artificial manures for loamy soils, according to a good authority, are the following—(1) for the cereal crops: Winter wheat 4 cwt. of rapecakes; if after beans or bare fallow for application in spring, 3 cwt. guano in March or 2 cwt. each of nitrate of soda and salt; in April 1½ cwt. of sulphate of ammonia and 2 cwt. salt. For spring

wheat, 3 cwt. guano at seed-time, or applied later 1½ cwt. each of guano and nitrate of soda. For barley after turnips artificial manures will seldom be required, but if after wheat 1½ cwt. of sulphate of ammonia and 2 cwt. salt, or 2 cwt. each of nitrate of soda and guano. For oats 2 or 3 cwt. of guano at seed-time; if a later dressing be necessary, 1½ cwt. of sulphate of ammonia and 2 cwt. of salt. (2)—Root-crops: Turnips, where farm-yard manure is used, 3 cwt. of superphosphate alone, or with ½ cwt. of sulphate of ammonia; where dung is not used, 2 cwt. guano and 3 cwt. superphosphate, or 3 to 4 cwt. of guano, or 4 cwt. superphosphate, and ½ cwt. sulphate of ammonia. Mangolds: 2 cwt. each of guano, superphosphate, and salt, or 4 cwt. of Peruvian guano. For potatoes: 2 cwt. guano and 3 cwt. sulphate of potash, or 4 cwt. of guano. (3)—For beans or peas: 2 cwt. guano or 2 cwt. of phospho-guano, or 2 cwt. of superphosphate. (4)—Grasses: Permanent pasture 2 cwt. superphosphate, 1 cwt. of guano, and 1 cwt. of nitrate of soda. Artificial grasses: 2 to 3 cwt. of guano, or 2 cwt. nitrate of soda.

V.—From an experiment made in the best depth at which wheat should be grown, it appears that the seed sown at half an inch of depth came up above ground in eleven days, and seven-eighths of the plants came up; at one inch in depth, the time of coming up was twelve days, and all the plants came up; at two inches of depth the time taken was eighteen days, and seven-eighths of the plants came up; at three inches the time was twenty days, and the number was six-eighths; at four inches the time was twenty-one days, and the number four-eighths; at five inches the time was twenty-two days, and the number three-eighths; but at the depth of six inches the number of days which elapsed before the plants came up above ground was twenty-three, and one-eighth only of the plants came up.

VI.—A mucilaginous tea of linseed and bean-meal is, in conjunction with milk, an excellent food for calves. The mucilage is made, according to an authority, by mixing three quarts of the linseed and four quarts of the bean-meal with thirty quarts of water, covering the whole up close for twenty-four hours, and then adding thirty-one quarts of boiling water and thereupon boiling the whole for half-an-hour, stirring it the while, so as to make the mixture uniformly smooth. During the first fortnight a little should be mixed with the milk at the beginning of period, and then, by gradually increasing it, at the end there will be quart for quart of the mucilage-tea and the milk. At the end of the third week the quantities will be one-and-a-half of the tea to one of the milk. The end of the fourth week should see the mucilage double the quantity of the milk; the milk up to this point having been sweet, but beyond it skin. At the end of the sixth week the mucilage will be two and a-half to one of milk; from this to the end of the tenth week the milk should be gradually reduced till it disappears; and the calves should then be fed upon the mucilage alone till they are weaned at the end of the fifteenth or sixteenth week. The quantities of the food made up of mucilage and milk in the above-named proportions should be, the first week three to four quarts daily; the second week four to five quarts; third and fourth weeks five to seven quarts; fifth and sixth eight to ten; sixth to eighth week ten to twelve—increasing the quantity one quart weekly up to the weaning time.

VII.—From a carefully-conducted series of experiments on sheep-feeding made by the Farmers' Club, the following is given here as of some practical value. Taking the money-cost the following figures may be said to represent the value of the various breeds tried: (1) Cotswolds,

14s. 9½d.; (2) Leicesters, 22s. 6d.; (3) Shropshire Downs, 25s. 10½d.; (4) South Downs, 17s. 3d.; (5) Lincoln, 30s. 5d.; (6) North Sheep, 12s. 5½d.; (7) Teeswater, 11s. 7½d. The live weights gained in three months were as follows: (1) 12 st. 6 lbs.; (2) 14 st. 10 lbs.; (3) 15 st. 11 lbs.; (4) 11 st. 13 lbs.; (5) 16 st. 1 lb.; (6) 12 st. 11 lbs.; (7) 13 st. 7 lbs. The bruised cake consumed during the above period was: (1) 300 lbs., (2) do., (3) do., (4) do., (5) 363 lbs., (6) 300 lbs., (7) do.; of turnips (1) 926 lbs., (2) 877 lbs., (3) 924 lbs., (4) 984 lbs., (5) 936 lbs., (6) 914 lbs., (7) 978 lbs.

VIII.—The value of rape-cake as a material for the feeding of dairy cows is admitted pretty generally, and its analytical value is very high, nevertheless it is a fact that comparatively few adopt it in practice; and of those who have tried it, not a few have failed in endeavouring to get their cows to take it. This chiefly arises from the pungent flavour which the cake possesses, as compared with oil-cake (linseed). The best way to treat the cake is to give it in the form of a mash with other food, the cake being subjected to the action of boiling water, or it may be steamed. The daily allowance per cow may vary from 4 to 7 lbs., two stone of turnips being allowed. The following shows the relative analytical value of (1) lin seed or oil-cake, and (2) rape-cake: Water (1) 12.44, (2) 10.08; oil (1) 12.79, (2) 11.10; flesh-forming substances (1) 27.69, (2) 29.23; heat-giving ditto (1) 40.95, (2) 40.90; ash (1) 6.13, (2) 7.79.

IX.—An eminent authority states that feeding substances, rich in albuminous compounds, are specially valuable for the production of milk in dairy cows; it will be useful to glance at the proportion of these compounds in various foods. Wheat 13.5, oats 19.65, barley 6.0, maize or Indian corn 12.3, beans 31.4, peas 22.6, rice 7.5, rye 10.5, oil-cake 29.75, rape-cake 29.53, cotton-seed cake 25.16, locust beans 9.00, malt combs or cummins 23.57, bran 13.80, potatoes 5.77, clover hay 13.52, meadow hay 8.44, turnips 1.44, mangold 1.54, carrots 0.607, parsnips 1.280, khol-rabi 2.75, Jerusalem artichoke 2.38, cabbage 1.75, wheat straw 1.79, barley ditto 1.68, oat ditto 1.63, bean ditto 6.79, pea ditto 12.55.

EXPORT OF PEDIGREE STOCK.—The following Shorthorns, horses, sheep, and pigs have just been exported by M. H. Cochrane, of Hillhurst, Compton, Province of Quebec, and Montreal, Canada. The cargo left Liverpool on Thursday, July 20th. The animals were purchased by Mr. Cochrane, Mr. Simon Beattie, and Mr. John Thornton from several of the best herds and stocks in the United Kingdom of England, Ireland, and Scotland: Cows AND HEIFERS.—Acacia, bred by Mr. G. Bland; Lady Lucy Thorndale, bred by Mr. J. Clayden; Rosevale, bred by Mr. W. Derham; Waterloo Rose, bred by Mr. R. Chaloner; Waterloo Rose 2nd, bred by Mr. D. McIntosh; Weeping Willow, bred by Mr. W. Torr; Pet Gwynne, bred by Mr. P. Riall; Phillis Gwynne, bred by Mr. P. Riall; Glossy Woodbine, bred by Mr. W. Bolton; Glossy 5th, bred by Mr. W. Bolton; French Aster, bred by Mr. J. Christy; Anemone, bred by Mr. J. Christy; Oxford Duchess, bred by the Rev. R. B. Kennard; Portaiacca, bred by Mr. J. Christy; Belinda Oxford, bred by Mr. C. Barnett; Fanny 29th, bred by Mr. J. Meadows; Primrose 9th, bred by Mr. J. Meadows; Royal Duchess 2nd, bred by Mr. C. A. Barnes; Nellie Booth, bred by Messrs. Garne and Son; Lady Amelia, bred by Mr. C. A. Barnes. BULLS.—The Doctor, bred by Mr. W. Derham; Cherub, bred by Lord Sudley; War Banner, bred by Mr. W. Torr; Breadalbane, bred by Mr. W. Torr. The other stock included stallion horses of the Suffolk and Clydesdale breeds, prize Berkshire pigs, and Cotswold sheep.

THE INJURY TO GRAIN IN THRASHING.

At the June meeting of the East-Lothian Agricultural Club, Mr. DOUGLAS, Athelstaneford, the Chairman, in announcing the subject for discussion as "The Breaking or Bruising of Grain by Machinery," said Mr. Cunningham, brewer, Athelstaneford, had kindly sent a detailed communication with reference to the deteriorating effect for malting purposes of bruising or breaking grain in the process of thrashing. On the same point, Mr. Panton, Aberlady Mains, wrote: "As regards the overdressing of barley, a serious loss is the consequence in malting, particularly in the spring months. When the pickles are broken or bruised they do not germinate, and when only a few days in operation they become quite mouldy and sour. The damaged grains also contaminate the sound ones, and the whole 'floor' has to be thrown on the kiln before the malting process is half-finished, and the quality of the malt is consequently very much deteriorated. I observe that barley thrashed with the English high-speed mills is very often a good deal broken and bruised, but I cannot say whether it is caused by the action of the drum, or by having the hummeller too close set, possibly both of these may have something to do with it. I may mention the machinery we have here (the old style of rollers and hummeller) thrashes the barley without breaking or injuring a single pickle, and the weights during the past season ran from 57 to 59lbs. per bushel. I have no experience of wheat. No doubt over-dressing will act against it too, but to such an extent, I should think, as with barley." With regard to the mechanical aspect of the question, Mr. Bridges, engineer, North Berwick, wrote: "This evil has been brought on by the introduction of drums running at high speeds. First, there were the peg mills, a few of which I erected in this county about 1850, and were discontinued principally on this account. Then immediately followed the present high-speed drums, which are not free of the same fault. From 1852 to 1860, I made a considerable number of them in this county, and tried various plans to overcome this defect, but had not at this period availed myself of any of the English patents, but rather avoided them. The greatest advantage I found was in making the concave as open as possible, particularly at the entrance, where the bulk of the grain was knocked out, so as to allow it to escape more readily the instant it was out of the bar. For the last ten years, the concave I have been using has carried out this principle more effectually than before, having substituted malleable for cast-iron. I have used drum beaters of various kinds, and for several years past have used only the patent serrated beaters, which are now made of steel as well as of iron, and during this period—viz., the last ten years—I have had no complaints made. As an evidence of the effects of the improved concave, there were lately complaints made of two mills I had erected in 1858 bruising the grain. The old beaters on the drum were replaced by the patent serrated beater without making any material improvement. The concaves were next replaced by new ones, which entirely remedied the defect. But besides this construction, a careful millman is indispensable for the proper working, and keeping these mills in the best order. Several cases of bad management have come under my notice considerably affecting the bruising of grain. In putting barley through the mill a second time in cases of smut, when the hummeller cannot be used, it is highly needful to screw back the concave a little; also, when rough elevators discharge into the drum no more grain should be allowed to come up than is necessary. I do not recollect of any case where the hummeller was at fault in bruising grain, where it was not found to be running too close to some part of the casing." On the same branch, Mr. Munro, agricultural engineer, Dunbar, wrote: "The subject you name has had a great amount of my attention for several years back, namely—the evils arising from the breaking of corn by machinery. The causes of the same are not

few, from which I may mention two or three. 1st, the kind of drum used; 2nd, the way the drum and concave are adjusted and kept in order; 3rd, the state the corn is in when thrashing. In dry seasons, the drum must be kept in first-rate order to prevent breaking. The thing suggests itself to me, that if the farmers would get their millwrights at shorter intervals to examine and adjust their drums, instead of their own men shifting them, we would see less broken corn than at present. In this district, where the drums are not meddled with, there are no complaints of broken corn. In making this suggestion I do not mean to blame the men in charge of them. On the contrary, I think they deserve credit for the way that they manage them. The only kind of drum I use is Goucher's patent drum, with grooved beater plates.

Mr. CUNNINGHAM said: First, then, as you are aware, the object sought in malting is to change the starchy substance of the grain into grape sugar. This is accomplished by steeping the barley in water, for a longer or shorter period, to produce fermentation. When the grain begins to vegetate, it is extended on the floors, and kept there from ten to twenty days, the time varying with the condition of the grain and the temperature of the atmosphere. During this period the plumule or acrospire, which springs from the root end of the seed—the future stem of the plant, in fact—gradually ascends until it emerges from the seed at the end opposite the root. Now, it is found that the chemical change effected by the gradual extension of the acrospire—namely, that of changing the starch into sugar—is limited to that portion of the corn up which the acrospire has crept, and no further—the upper part of the corn not covered with the acrospire still retaining its starchy consistence. It is evident, then, that the secret of malting consists in promoting, by a natural and regular process, the growth of the acrospire until it reaches the end, or very nearly the end, of the corn, because when it extends further it extracts the substance of the seed. Now, it will be evident, I think, from what I have stated, that when grain is damaged to any extent, it is more than useless for malting purposes. In the first place, the broken and crushed corns not only do not grow, but they change colour, and become mouldy. The crushed corns, by absorbing moisture internally, rapidly decompose and putrefy when exposed long to the temperature of the working floor; while those grains that are rubbed, although they do spring, rapidly discolour and decay before being ready for the kiln. The loss thus sustained in malting damaged barley consists first in paying duty for a portion of grain incapable of undergoing the necessary chemical change for producing malt, in the loss of quality and flavour, by the damaged corns becoming mouldy with decay, and, lastly—and this is the greatest loss connected with the handling of the article—in being obliged to hurry the floors to the kiln before the sound grains have had time to mature, thereby leaving the acrospire only half developed, and a considerable part of the corns still retaining their starchy consistence, leaving the malt hard and flinty, in place of coming out crisp and flowing in texture, as good malt should be. I may remark here that these observations are applicable to all barley which has sustained damage in the way indicated, when used for malting; but, of course, the evil is modified by the degree to which the evil has extended. Some of the barley may be only slightly rubbed, while some may be both broken, crushed, and rubbed, and the results I have explained will follow in the proportion to which the damage has extended. Let me say that a good deal of damage may be sustained by grains, which can only be discovered by looking somewhat closely into it. And buyers, on some market days, have little opportunity to inspect the grain as it should be. A number of farmers, with the view of improving the colour of their barley, when there had been much smut, were in the habit, in the early part of the season, of putting their barley twice through the mills—a most pernicious practice, as the barley was so damaged as to be very unsafe for malting purposes. I have on more than one occasion bought parcels of barley

coloured to some extent with the dust of the smut, and I have found that by putting the water into the steep first, and giving the barley an extra water, a considerable quantity of the smut came off. So long as the body of the corns have sustained no damage, something may be made of them. The evil malsters above all things deprecate is the damage of corn by breaking or bruising it. I mentioned in the first part of my letter that the evils resulting from damaged barley date from the introduction of high-speed mills into East Lothian. Such is my experience. The particular phase of the complaint was contemporaneous with their introduction into the county. I am quite aware that the high-speed mill, with all the necessary apparatus for finishing the grain for the market as it comes from the machine, is a most desirable implement. It thrashes quicker, it thrashes cleaner, it turns out the straw in a whole state, it has many recommendations, and I believe cannot be dispensed with now. I consider, however, that much of the evil resulting from their use is the result of faulty construction or mismanagement. I often get barley thrashed with high-speed mills perfectly free from any damage whatever. If one farmer can use it to good purpose, it is surely possible for all to do it; the effort is worth trying. I know that parties whose grain is known to be sound and good not only command a more ready sale in the market, but invariably get, I believe, a higher price. My object in writing this is more to point out the evils resulting from defective thrashing, leaving to others the task of devising the remedy; but I may remark that I think the damage is often sustained by the grain in passing through the mill, the concave of the drum being screwed too close to the convex of the frame. I cannot otherwise account for the rubbing and crushing of the corn. It is the opinion of some that the hummeller is the cause, but the grain runs through the hummeller in a thin stream. The knives, indeed, are sharp, and may possibly cut the grains. They sometimes appear as if they had been cut, so clean across does the division appear without a dimple or break on either side of the grain. If such should be the case, is it not possible to alter the hummellers as they come in connection with the old beating drum, viz., to have the machine placed vertically instead of horizontally, the knives blunted, and the speed very much reduced? There would then be a solid body of grain to act upon, and although the inlet and outlet would require some nicety of regulating, that might be accomplished. Another defect with some high-speed drums consists in their being serewed without any gauge to regulate the distance of the drum from the frame. Consequently the space for the grain and straw to pass between is regulated with no certainty—sometimes it may be closer and sometimes wider, as inclination or accident may determine. The great bulk of the barley grown in East Lothian bought for malting purposes, and the climate, soil, and means of the farmer combining to produce a first-class article, so far as the raw material is concerned, I think there can be no doubt that it is greatly the interest of farmers to study the requirements of the trade (the malting trade), and prepare the grain in such a way that its value may be in no way deteriorated by the process of preparing it for the market—I repeat, the interest of farmers. I might suggest an appeal to your professional reputation, and say that while East-Lothian can boast of a class of farmers who have led the van in the march of improvement, and been foremost in utilising any discovery in science applicable to their particular domain, it seems like a stigma on their character—their professional character—that grain of such superior quality should be spoiled in the dressing. But I feel persuaded that, were buyers assured of greater security against damaged grain, coming as they now do from all quarters, a spirit of confidence would be implanted, and they would be the more prepared to give the utmost value for the article. I know, from conversation with parties in the trade, that the feeling has been that rubbing is one of the drawbacks to the East-Lothian barley. As I remarked in many cases it is very slight, in some there is no defect; still, there must have been a considerable amount of mischief when the feeling extends to the whole district. Had there been no such feeling, it is probable prices might have been better. I must say that when I have pointed out the evil to any of my friends engaged in farming, they have invariably admitted it, and expressed a most anxious desire to remedy the evil did they know how. The difficulty lay in

applying a sufficient amount of friction to separate the awn without damaging the grain. I hope that some wiser heads will be able to devise a remedy, and that no such subject will need to be discussed next year. In these remarks I have confined myself to barley as applied for malting purposes. Other kinds of grain are broken and bruised, but I would suppose that unless used for seed, or stored for a length of time, the damage sustained is nothing like so great in the way of destroying the value of the grain as in the case of barley making into malt, the rest being all manufactured in a dry state.

The CHAIRMAN said that after the statement of Mr. Cunningham it could not be doubted that an evil connected with the dressing of both wheat and barley did exist, which in the one case deteriorated its value as seed, and in the other for malting purposes. Farmers would be glad if practical men could fall upon some expedient to remedy the evil. It was their desire not only to get the best price for their grain, but that the purchaser should have the full value from it, and not be subjected to the waste which it had been shown had sometimes to be borne by the malster. A thrashing-mill should, above all things, thrash clean, for they could not afford to throw away any of the grain, seeing that they had little enough of it on the straw. A good deal of the evil complained of, he thought, arose from the hummeller, to which much attention should be paid. Some of the hummellers were too horizontal. He considered the upright action the best because it was more under control. There ought also to be some scale for regulating the speed of the drum. As showing the importance of a properly working mill, he mentioned a case in which a farmer thrashed a portion of a stack, and its weight in the market was 16st. 11lb. His mill then underwent some alteration, and the rest of the stack was thrashed. This portion only weighed 16st. 6lb., but in consequence of the improved mill not having broken so much, it sold 3s. per qr. higher than the heavier sample.

Mr. HOPE (Fenton Barns), as bearing out the statements of Mr. Cunningham, said he had been told by an extensive brewer in Edinburgh that he frequently got over the fingers by buying barley from parties he did not know. There were some farmers, this gentleman said, from whom they could buy with perfect security; and when the barley was unbroken, he had no hesitation in giving 2s. or 3s. more a quarter for it. Sometimes, too, he had been told that when severely bit, brewers had recourse to laying in a quantity of foreign barley. These things showed the necessity for farmers paying attention to this subject. For his own part, he believed the evil had arisen in a great measure from the high-speed drums.

Mr. HARVEY said he had no wish to speak disparagingly of high-speed drums; but about thirty years ago it was an uncommon thing to see broken grain coming into the market, and there was no doubt that broken grain had increased since their introduction. He admired the fine action of the high-speed drums; but when the grain came out broken where was the benefit? Mismanagement had been blamed for this; but what did that mean? It meant that these mills needed to be superintended by men accustomed continually to the same mill.

Mr. SHEPHERD (Gleghornie) said that during the last eight or ten years he had depended greatly upon travelling mills, and the quantity of broken grain was serious—sometimes more and sometimes less, but always a most serious fact to look at.

Mr. HALLIDAY (engineer) said he commenced to make high-speed thrashing machines sixteen years ago, and before doing so he had gone to England to see the machines in use there. After inspecting several at work, he came to the conclusion that they had all the fault of breaking the grain. The result of what he saw made him think that the system of regulating the concave by six or eight screws was a very awkward thing to put into the hands of farm servants. He had therefore constructed a system of regulating the concave, whereby any gentleman could regulate it with his dress-coat on, and without stopping the mill. If the mill was not thrashing clean, the attendant had nothing to do but to turn a small handle, and the whole concave was regulated from one point. He found this expedient of great benefit. He had put up a mill for Mr. Tod, Bearford, about twelve years ago; and after it was in operation they had to search the whole "bing" over to try to get a broken pickle. He thought there was a good deal in the width of the concave. He made the concave of Mr. Tod's mill pretty wide, to allow the grain to get down after being thrashed,

to allow it to escape from the drum whenever the grain was taken from the ear. He found that, with the concave being so wide, there were portions of the heads which went down without the pickle being taken out. He therefore commenced to straighten the concave to prevent these half-heads getting through the concave; but this, he thought, had a greater tendency to break the grain, and he therefore agreed in the concave being wider to let the corn get out. He believed, also, that the speed of the drum had something to do with the breaking of the grain. When the grain was very dry, the velocity of the drum would cause this breakage: the mere contact of the drum would break very dry corn. The drum acted as a disintegrator when the speed was very high. To obviate this he had put two speeds on the drum, so that in thrashing beans and wheat the speed of the drum could be reduced while the rest of the machine was going at the full rate. He had done this to several mills, by putting on another pulley for thrashing wheat, and he believed that since then there had been a great improvement. As to the hummeller, his were all horizontal, and delivered at the top instead of the bottom.

Mr. HOPE: You must work it full, then?

Mr. HALLIDAY: No. The velocity of the drum keeps the grain always on the outside. I admit that it does not look very natural, but nevertheless it is the fact. When it stops

there is no more grain in the hummeller than there would be if it was delivered at the bottom.

Mr. PATON believed the complaints made by Mr. Cunningham to be well founded. For his own part, he thought the whole fault lay in the setting of the drum. If farmers would look well after that, and see that the drum was equally set, there would be less breakage. He had seen mills working with one side quite open and the other quite close; and in such a case it was quite impossible that the barley could be thrashed properly. He held that, with a well-set drum, nothing could beat the high-speed mills.

Mr. DURIE was still working with the old Scotch mill, and he was never bothered with either broken wheat or barley.

Mr. HALLIDAY: I neglected to say, with regard to the Goucher's beater, that I believe it is far too closely grooved, and that if it were wider it would have more tendency to let the grain get through undamaged.

The CHAIRMAN said the discussion had brought out some very valuable information, that upon the whole had shown it was not desirable to dispense with high-speed drums. Speed and safety, he believed, were both quite attainable in the use of these mills; and by the application of skill and the results of experience on the part of engineers, and careful attention on the part of farmers, they might hope in the course of time to get a stop put to the evil which had given rise to the discussion.

THE LINCOLNSHIRE AGRICULTURAL SOCIETY.

MEETING AT BRIGG.

The Lincolnshire management is improving, for a more riotous show-ground than that at Lincoln three years ago it is impossible to imagine, or a more orderly one than that at Brigg. The Society pitched their tents within a mile of the railway station, on a nice bit of level turf, and nothing could be natter than the laying out of the yard, while the comfort of the animals was studied to the utmost, and the public served with a well got up catalogue for sixpence. Then, the management of the horse-rings, the hoisting of the prize numbers on the telegram-boards, together with the numbering of the horses, and the regularity with which class after class followed each other, was almost faultless; but still the judging of the horses is spun out until the morrow, which we are confidentially told is *the day*, while prize cards are not posted over the animals, but only the colours in some instances, though the hour is fast approaching six, and the yard getting empty. Now had prize cards been placed over the winning animals entered in 1, 2, or 3 classes immediately after the decisions, so that the public could read, mark and learn which were the prize beasts, a gentleman on his way home who took a delight in nothing but the Shorthorns, would not have replied to the query of another as to which was the prize in such a class? "Well I really don't know, as some said one and some the other," but there always will be confusion while animals contend for prizes in several classes. The show of horses was grand as Islington, Bath and West of England, and Royal winners had to haul down their colours; while the Shorthorns were about on a par in numbers with Sleaford last year, and the sheep not quite so numerous, as many an entry was represented by an empty pen. Then the pigs were excellent, and Mr. Duckering in great force on his own ground, for Northorpe is but a few miles off; while Mr. Peter Eden had fled; for on our coming up to his man, who was contemplating, with one eye, Young Prince, a Royal winner, and some of the fattest of bacon and brownest of home-made with the other, we exclaimed, "What, beaten by that one?" "Ah! sir," he replied, "you should see his nose! It was too much for Peter, and he is gone clean away home."

Leaving Peter Eden for the present at his smuggery in the Cross-lane, Salford, pondering over snouts, chaps, and collars, we will go in for a little blood, symmetry, and action. The £30 for the best thorough-bred stallion for getting hunters being again taken by the Derby winner of '67—the Hermit—as it was at Sleaford, when we gave a sketch of him; beating for the second time the dancing Broomielaw, who has put on flesh with better behaviour; as also Suffolk, whom we have twice noticed this year at Islington and Wolverhampton, and whose hind-quarters, second thighs, and hind-leg-action, did not improve by comparison with those of the Hermit. Then, the rather slight Wamba seemed light below the knee, and stiff and stilty in his hind legs; and the long, light-girthed Playmate, not blest with the best of forelegs, or remarkable for symmetry; while Denmark, by no means a pleasing subject to look upon, with bad shoulders, made up the lot. Next, Suffolk, Wamba, Tom Bowline, Thor, and Carlton contended for the two prizes for thorough-bred hunting stallions that had served half-bred mares at not more than £5 5s., or whose owners would undertake that they would in the county during 1872. Thor's forehead put him out of the contest; and Carlton, by Stockwell, out of Midsummer by Melbourne, is a very useful upstanding country horse, with power without coarseness, but his strong thick pointed shoulders do not make quite a hunting forehead; while he is much bigger below the knee than he looks, and has a scar on the oil-hock that at first seems like a reminiscence of a curb, but it is not on the tendon. Another bench may prefer Suffolk to Playmate, but we are not in love with him behind the hips to the ground in form or action. The hunting brood mares, nineteen in number, were a grand class, with Heliotrope, a lengthy coaching mare, which played second at Sleaford last year and third at Oxford, and that to Orpheus has thrown a four-year-old, Taucredi, a neat, showy young horse, who in a poor lot of four-year-olds and upwards beat Loiterer, the Beverley prize hunter or gig-horse of 1870, which the judges here would not have at any price. Surely it must be palpable to any one with the least idea of action, who stood near the ring,

that Loiterer cannot go a bit as a hunter should, as it was to us when he came out at Islington and at Beverley in 1870. Why judges have the saddles off these wooden idols, that have been worshipped and gilded too long, to stand side by side with those that can move is beyond our comprehension. Stand-still horses we do not want, but a good spacious ring we do, so that we may get rid of the impostors. Getting back to the hunting mares, the first prize chesnut by West Australian out of Camera Obscura by Elis, is a fine made, short-jointed mare, with some of the Elis white markings. The second, Kathleen, is a very good-looking mare, with blood, length, shoulders, and limbs; while the third is a mare that we said last year was a game-looking one, full of hunting character, as she should have been third, though not placed. These mares' foals were first and second in the youngsters. Then, Mr. Chaplin's powerful, blood-like, Irish chesnut we preferred to Heliotrope, though she drops a little in her hind leg action. Colonel Astley's Mittie is a nice one, and her foal by Broomielaw third. Mr. Priestly's and Mr. Wilson's greys, the old wreck of a mare of Mr. Robson's by Brownie, and Mr. Kirkham's Peggy were not wanting in hunting character. The best 5, 6, or 7-year-old hunting gelding turned up in Magnun Bonum, a horse we have seen before, a fine upstanding, hardy, galloping-looking brown, without any beef about him, and which we were told was bought at one time by Captain Machell for £500. The next to him was Marmalade, also a second this year at Islington, and that we did not think much of there, nor do we in the open, as he has a great deal too much flourish in his action; while the reserve was Banner Bearer, who did not show well in the slow-paces, and it would have been all the better for his chance and some others had the hurdles which divided the ring been taken away; so that he could get in his stride, as he can gallop, and went well through the muck of Wolverhampton. Mr. Robson had a nicely-made six-year-old by Artillery, but he was not handled well; Mr. Stephenson's Lothair is a big chesnut that can go; and Mr. Brady Nicholson has a thick-set useful chesnut mare, a real maid of all work. In a capital class of four-year-olds, in which Major Barlow's weight-carrier Tregothnan, the Islington cnp horse, and Beckford, the Bath and West of England Hero, were defeated by Wassand, a chesnut, by Vollurno, out of Romula by King Caradoc, a stag-necked horse, but in other respects fairly made, with good short limbs, and a sweet goer, and Nobility by Artillery, a capital goer, with good limbs nicely placed, form, and hardy looks. When in hand his neck appears rather throaty at the jawl, but when the rein is dropped, and he stands in his natural position, it is not. Then, like the Artillerys, he may work a trifle light in his back ribs, but for all this he is a very nice horse, and it was a near thing between the two; in fact, we had ticked the Artillery horse down as the best goer long before the decision was arrived at. Tregothnan was one of the reserve, but did not show any the better for a change of jockeys. The owners of the first and second knew they could go, and after the judges had left the ring for luncheon, the two were galloping in and out of the ring. How different this to the wooden ones, whose owners take particular care to walk them off directly they get a prize. The four-year-old and upwards, *up to 12 but not up to 14 stoves*, a nice condition for an objection and a wrangle, were not up to much. There was a capital class of three-year-old hunting geldings or fillies by a through-bred horse—a *sine qua non* as we always thought for a hunter—with fourteen in the ring. The pick, Moslem, is a rich chesnut, full of blood and good form, with nice action, and although he has a Blacklock head it is a very taking one. The second is one of Lord

Yarborough's breed by Nottingham; and the third, Wicked-eye, a short deep black gelding by Wild Huntsman. Mr. Booth's Duckling, by The Duke, third at Wolverhampton, is a well-made muscular mare, but a slight blemish inside the foreleg caught the eye of the judges, and we fancy put her out of it. Colonel Astley's Forerunner, by Trumpeter out of Shunting by the Ugly Buck, would be very handsome as a light charger. Lord Yarborough showed a lathy-looking brown by Nottingham, and Mr. Overton a showy bay with capped hocks by the same horse. Mr. Robson had a bay by Achilles; Mr. Johnson Cotham by Rivet; and Mr. Frudd, a brown gelding by Odd Trick, which, with some others, lacked not form and action. The roadster stallions only mustered six or seven, Clear-the-way and Young Quicksilver being among them, but the prize turned up in Young Merry-legs, a three-year-old, of thick-set proportions, and a good goer, without any flourish; but we doubt whether he or any of his companions would make much of a gallop, but it is not their calling, for which reason we think judges ought not to rely too much on the slow paces in hunters when they have space to see them gallop, as there are many horses that could cross a country like birds, and others that could win on a race-course, that make but a poor show in a trot.

There was a good muster of roadsters and hackneys, but as we did not see them out we can tell little or nothing about them. The agricultural stallions, with some useful horses among them and nine in number, had Honest Tom for their champion, and Le Bon as his second, the first and third at Wolverhampton. In the half-dozen two-year-old stallions there were two good and a couple of useful colts. The mares for breeding draught horses were a very good class, with Royal Duchess a prize youngster at Manchester and Oxford, only commended, an honour she did not get last year in the same class. Two or three two-year-olds, a couple of yearlings, a few nice foals, and three pairs of good draught horses, made up the agricultural classes, of which we should have seen more had the ring been within sight and somewhat nearer that of the nags, as at the Royal, the Yorkshire, and other shows.

In numbers, the Shorthorns were about on a par with last year, with nothing very grand among the bulls, headed as they were by Royal Windsor in the Champion Class and Challenge Cup. He was a second in the bulls under three-years-old at Wolverhampton, and now defeated Telemachus; but the Romford Champion had it all his own way in the three-year-olds, with Charlie, a commended at Manchester for second, and Windsor Fitz-Windsor third. Royal Windsor having won the two cups, was out of the two-year-old class, and let Lady Pigot in with Bythis and Victoria Rex in a strong class as to numbers, there being eleven to three last year. There were only five yearling bulls to eleven last year, a fourth prize at Wolverhampton gaining third honours, and a highly commended one there, Grandee, the first. Though entered, Mr. Dudding's British Flag was an absentee, as was Mr. Linton's Leeman, the first and second at the Royal; but Mr. Dudding had the Adjutant in reserve, and carried the day. It is not saying much for the cows when we report them, as a lot, better than at the Royal, while the three-year-old heifers were really good, and the two-year-olds extraordinarily so. Concert, third at the Royal, is first here, and the first at the Royal—Dame Swift—not even commended. Then, in the yearling heifers, Fleur de Lis, a nice heifer, and second at Wolverhampton, is third here; and in the cow-calves under one year Lady Grace, the reserved number at the Royal beats a second Royal, Victoria Viatrix, not even commended; and such is the uncertainty of pitch-and-toss.

With two or three pairs of fair bullocks, some very

creditable cottagers' cows, and a couple of Alderneys, we come to the Leicester sheep, where in the shearlings the Royal decision is confirmed, Mr. Turner and Mr. Borton being left in, and Mr. Marris the odd man out; but in the two-shear, or older rams, judgment is reversed, and Mr. Borton's third at Wolverhampton is placed before Mr. Turner's first Royal. There were nearly twice as many Lincoln shearling rams at Sleaford as there were at Brigg, but perhaps as a lot Brigg had the pull, and there were some very useful sheep among them. Mr. Dudding was first in the two-shear, beating a nice one of Mr. Hesselstine, with good head, loins, and wool, his sire being a fine four-shear sheep in the next class, in which Mr. Wright was first with a three-shear, beating Mr. Dudding's first Royal. But there is many a slip between the cup and the lip, for Mr. Dudding objected, and Mr. Wright was disqualified, as the sheep was not his property at the time of entry, and so Mr. Wright was wrong, and Mr. Dudding got the cup. The gimmers were first-rate, and won by Mr. Clarke, of Sleaford—who can ride, and now and then shows a good horse. He also had the prizes for the pens of five ewes without any opposition, and Mr. Roc as an occupier of less than 200 acres. There was but one pen of shearling wethers and but three of lambs; the rest was made up with a beggarly account of empty boxes.

Byron says that woman is uncertain, coy, and hard to please, and we think Mr. Peter Eden, had he been the poet, would have added, "and man equally so," for in the pigs Duckering's second Royal boar in the large breed is first, and Peter Eden's first Royal unnoticed; while an unnoticed one at the Royal is second at Brigg. In this decision the judges have gone for size against quality, which is more palpable than ever in the small breed, where a big useful boar beats Peter's Royal pig that never was beaten previously, and is the very pink of fashion and quality. Of Berkshire there were not more than half-a-dozen. In the small whites Mr. Duckering's celebrated Topsy had twelve little grunners by her side, as she was put to bed on the Royal ground, but as a pig may even have too much of a good thing, her owner gave away four of the sixteen. In leaving the prize-list to tell the story out, we may say that this does not include all the numerous commendations for horses, sheep, and pigs.

PRIZE LIST.

JUDGES.

CATTLE.—Hugh Aylmer, West Dereham Abbey, Stone Ferry, Norfolk; J. Wilson, Woodhorn Manor, Morpeth; C. Raudell, Chadbury, Evesham.

LEICESTER SHEEP AND PIGS.—R. Fisher, Leconfield, Beverley; J. Painter, Belgrave House, Nottingham; L. Borman, Barnoldby-le-Beck, Grimsby.

LONG-WOOL SHEEP.—H. Mackinder, Langton Grange, Spilsby; J. Topham, The Hemploe, Welford, Rugby; R. G. F. Howard, Temple Bruer, Lincoln.

HUNTERS AND ROADSTERS.—Colonel Luttrell, Badgeworth Court, Weston-super-Mare; T. Pain, Tattersall's, London; W. Young, Norwood House, Beverley. **AGRICULTURAL HORSES:** J. H. Wood, Humberstone, Great Grimsby; E. T. Booth, Wainfleet St. Mary's, Boston; T. Vincut, Harlaxton, Grantham.

CATTLE.

SHORTHORNS.

Bull.—The champion prize, £30, J. Outhwaite, Bainesse, Catterick (Royal Windsor).

Bull three years old or upwards, and for which the prize in class I shall not have been awarded.—First prize, £15, the Marquis of Exeter, Burghley (Telemachus); second, £7, T. Statter, jun., Manchester (Charlie); third, £3, T. Willis, Carperby, Bedale (Windsor, Fitz-Windsor).

Two years old bull.—First prize, £15, Lady Pigot, Branches (Bythis); second, £7, Lady Pigot (Victor Rex); third, £3, Earl Feversham, Duncombe (Colonist). Commended: P.

Brown, Glentworth; Messrs. Dudding (Standard Bearer) and Wm. Bradburn, Wednesfield, Wolverhampton (White Satin).

Yearling bull.—First prize, £15, Colonel Reeve, Leadenham, Grantham; second, £7, H. F. Smith, Sutton, Hull; third, £3, J. Meadows, Thornville, Wexford.

Bull-calf under a year old.—First prize, £10, Messrs. Dudding; second, £7, A. Garfit, Sotherton, Lincoln; third, £3, T. Clayton, Bodles, Doncaster. Commended: T. Statter, jun.

Bull above one and not exceeding four years old, which has served cows during the present year, or the owner of which will undertake that he shall serve cows in Lincolnshire during the next year at a charge of not exceeding £1 ls., each.—First prize, £20, W. Bradburn (White Satin); second, £10, P. Brown; third, £5, W. Dunn, Worlaby, Brigg.

Best bull exhibited in classes 2, 3, 4, or 6.—Prize, a cup, value £25, Marquis of Exeter (Telemachus).

Bull of any age.—Prize, challenge cup value 20 guineas, J. Outhwaite (Royal Windsor).

Cow or heifer.—The champion prize of £25, J. Outhwaite (Vivandiere). Highly commended: R. Gibson, London, Ontario, Canada (Double Butterfly 2nd); F. J. S. Foljambe, M.P., Osberton Hall (Fleur-de-lis); Lady Pigot (Dame Swift); F. J. S. Foljambe (Concert); R. Gibson (Countess of Oxford); and J. W. Kirkham (Rose of Windsor).

Cow more than four years old.—First prize, £20, J. W. Kirkham, Cadeby Hall, Grimsby; second, £10, W. Bradburn; third, £5, T. Statter, jun.

Cow not exceeding four years old, which shall exhibit the greatest dairy properties with aptitude to fatten.—Prize, a silver cup value £10, W. Bradburn (Red Rose).

Three years old heifer, having produced a calf.—First prize, £10, R. Gibson; second, £5, W. Bradburn.

Two years old heifer.—First prize, £10, F. J. S. Foljambe (Concert); second, £7, R. Gibson; third, £3, J. J. Sharp, Broughton, Kettering. Highly commended: T. Willis.

One-year-old heifer.—First prize, £10, H. F. Smith, Sutton, Hull (Lauwath); second, £7, Lady Pigot (Victoria Windsoria); third, £3, F. J. S. Foljambe (Fleur-de-lis). Highly commended: J. J. Sharp; F. Foljambe. Commended: E. Paddison, Ingleby.

Cow calf under one-year-old.—First prize, £7, Messrs. Dudding (Lady Grace); second, £4, T. Statter, jun.; third, £2, G. Bland, Coleby Hall, Lincoln.

Pair of bullocks.—First prize, £10, W. T. Lamb, Welbourn; second, £5, R. G. F. Howard, Temple Bruer.

Milch cow, having produced a calf, the property of a cottager occupying not more than 10 acres.—First prize, £5, W. Tuplin, Bigby, Brigg; second, £2, G. Smith, Bigby.

Heifer under two years old, bred by and the property of a cottage occupier.—First prize, £5, W. Vickers, Henswell, Kirton Lindsey; second, £2, J. Lyon, Hainton.

EXTRA STOCK.—First prize, £5, Messrs. Dudding (Short-horn cow); second, £2, W. F. Marshall (Alderney heifer).

SHEEP.

LEICESTERS.

Shearling ram.—First prize, £10, G. Turner, jun., Alexton Hall, Uppingham; second, £5, J. Borton, Barton, Malton. Highly commended: J. Borton. Commended: T. H. Hutchinson, Manor House, Catterick.

Two-shear or older ram.—First prize, £10, J. Borton; second, £5, G. Turner, jun. Highly commended: J. Borton. Commended: T. Borton.

Pen of five ewes or gimmers.—First prize, £10, T. H. Hutchinson; second, £5, J. Borton.

Best ram in the classes.—Prize, £10, J. Borton.

LONG-WOOL (NOT LEICESTER).

Shearling ram.—First prize, £15, T. Cartwright, Dunston Pillar, Lincoln; second, £10, W. F. Marshall, Brantson, Lincoln; third, £5, Messrs. Dudding. Highly commended: Messrs. Dudding and W. F. Marshall. Commended: T. Cartwright.

Two-shear ram.—First prize, £10, Messrs. Dudding; second, £5, W. Hesselstine, Beaumontcote, Barton.

Three-shear or older ram.—Prize, £10, R. Wright, Nocton Heath.

Pen of five ewes.—First prize, £10, C. Clarke, Ashby-de-la-Launde, Sleaford; second, £5, C. Clarke.

Pen of five ewes, the property of an occupier whose entire

occupation does not exceed 200 acres.—Prize, £5, W. Roe, North Scarle Field, Newark.

Pen of five shearing gimmers.—First prize, £10, C. Clarke; second, £5, J. Pears, Mere, Braunton.

Pen of five shearing gimmers, the property of an occupier whose entire occupation does not exceed 200 acres.—Prize, £5, W. Roe.

Pen of five shearing wethers.—Prize, £10, J. Byron, Kirkby Green, Sleaford.

Pen of ten ewe lambs.—First prize, £5, J. Byron; second, £2, T. Dalton, Sturton, Scawby, Brigg.

Ram.—The challenge cup, value 15 guineas, R. Wright, Nockton Heath.

EXTRA STOCK.—First prize, £2, T. Marris, Uleiby (three-shear Shropshire ram); second, £2, J. Pears (two-shear Lincoln wether).

HORSES.

Thorough-bred stallion for hunters.—Prize, £30, H. Chaplin M.P., Blankney Hall (Hermit).

Thorough-bred stallion for hunters that has regularly served mares in Lincolnshire during the season of 1871 at a price not exceeding £5 5s. for half-bred mares, or whose owner will undertake that he shall do so during the season of 1872.—First prize, £20, T. H. Davey, Addelethorpe (Carlton); second, £10, C. Marsdin, Hatfield (Playmate).

Mare for breeding hunters, with a foal at her heels, &c.—First prize, £15, W. H. Clark, Hook, Howden; second, £7, E. Heneage, Hainton; third, £3, R. Graves, Linwood Sleaford.

Hunting gelding or mare, five, six, or seven years old.—First prize, £20, J. M. Richardson, Limber Magna, Uleiby; second, £10, J. M. Tattersall-Musgrave, Hengate, Beverley. Commended: H. D. Bayly (Banner Bearer).

Gelding or mare, four years old, calculated to make a hunter.—First prize, £50, W. Munday, jun., Wrawby, Brigg; second, £10, W. Stephenson, Cottingham, Hull.

Hunters, four years old or upwards, up to carrying 14 stones.—Prize, £10, W. Tindall, Lincoln (Tancerdi).

Hunter, four years or upwards, up to carrying 12 stones, but not up to 14 stones.—Prize, £10, J. U. S. Smith, Uleiby. Commended: J. Dunn, Elsham, Brigg.

Three-year-old hunting gelding or filly, by a thorough-bred horse.—First prize, £20, and a whip value £5, W. Core, Fletton, Peterboro'; second, £10, A. Everett, Barnet-by-le-Wold, Uleiby.

Two-year-old hunting colt.—First prize, £10, J. Iles, Binbrook Hill, Market Rasen; second, £5, J. J. Young, Claxby Market Rasen.

One-year-old hunting colt.—First prize, £10, W. Toder, West Burton, Retford; second, £5, J. H. Skipworth, Housham, Brigg.

Two-year-old hunting filly.—Prize, £10, H. G. Skipworth Rothwell, Caistor.

One-year-old hunting filly.—First prize, £7, J. Dunn, Elsham; second, £3, G. Walker, Bigby, Brigg.

Yearling, by Broomielaw.—Prize, £10, J. H. Skipworth, Howsham.

Hunting foal, by a thorough-bred horse.—First prize, £10, W. H. Clark; second, £5, E. Heneage.

The cleverest jumper.—First prize, £10, J. M. Richardson. Stallion for roadsters, exceeding 14 hands 2 inches in height.—First prize, £10, J. Smith, Shipton, Market Weighton (Young Merry Legs); second, £5, H. Bultitaf, Ely (Clear the Way).

Stallion pony, not exceeding 14 hands 2 inches in height.—First prize, £7, Colonel Astley, Elsham Hall, Brigg; second, £3, W. Newton, Newark.

Mare for breeding roadsters.—First prize, £7, S. Gibson, Barton-on-Humber; second, £3, Colonel Astley.

Action in harness.—First prize, £10, W. Bromley; second of £5, J. Searby.

Weight-carrying cob, mare, or gelding, not exceeding eight years old, and not being under 14 hands nor above 15 hands 1 inch in height, quality and action being specially considered.—Prize, £10, J. H. Smith, Shipton, Market Weighton.

Hackney (mare or gelding), exceeding 14 hands and not exceeding 15 hands 1 inch in height.—Prize, £10, R. Millward, Thurgarton Priory, Southwell.

Pony (mare or gelding), exceeding 13 hands but not exceeding 14 hands in height.—First prize, J. Dodds, jun., Elsham; second, £3, W. Fowler, Manton, Rutland.

Pony (mare or gelding), not exceeding 13 hands in height.—First prize, £5, J. Hornsby, Grantham; second, £2, S. Gooseman, Bradley.

Stallion for draught horses.—First prize, £20, W. Welcher, West Tofts, Brandon (Honest Tom); second, £10, C. Sharpley, Kelstern Hall, Louth (Le Bon). Highly commended: W. Johnson, Hatfield, Doncaster. Commended: T. Middleton, Lyddington, Uppingham.

Two-year-old stallion for draught purposes.—Prize, £10, N. Melbourn, Fillingham, Lincoln (Hercules). Highly commended: E. Griffin, Temple Bruer, Lincoln. Commended: W. Walker, Great Gonerby.

Mare for breeding draught horses.—First prize, £15, E. Crowe, Downham; second, £7, W. T. Lamb, Welbora, Grantham; second, £3, R. Bingham, Swallow, Caistor. Highly commended: J. Tomlinson, Luton. Commended: C. Lister, Coleby Lodge, Lincoln.

Two-year-old cart filly.—First prize, £8, Mrs. Skipworth, South Kelsey Hall, Caistor; second, £4, F. Cartwright, Kirkstead Abbey, Horncastle.

One-year-old cart filly.—First prize, £5, G. Houlton, South Killingholme, Uleiby; second, £3, W. F. Marshall, Braunton, Lincoln.

Cart foal.—First prize, £8, S. Jaeklin, Horkstow Bridge, Barton; second, £4, W. Toder; third, £2, J. T. Purvis, Knaith Park, Gainsborough. Highly commended: J. Tomlinson. Commended: W. Chatterton, Belchford.

Pair of draught horses (geldings or mares) under eight years old.—First prize, £10, G. C. Woolhouse, Wellingore, Grantham; second, £5, G. Woolhouse, Nocton Grange, Lincoln. Commended: R. Walker, Somerby, Brigg.

EXTRA STOCK.—Extra prize, W. Bramley, Amcotts, Doncaster (cart colt).

PIGS.

Boar, large breed, not less than twelve months old.—First prize, £10, R. E. Duckering, Northorpe, Kirton Lindsey; second, £5, P. Eden, Salford. Commended: P. Eden.

Boar, large breed, not exceeding twelve months old.—First prize, £5, R. E. Duckering; second, £2, R. E. Duckering.

Boar, small breed, not less than twelve months old.—First prize, £10, J. B. Green, Coleby House, Brigg; second, £5, G. W. Smith, Clixby, Caistor.

Boar, small breed, not exceeding twelve months old.—First prize, £5, R. E. Duckering; second, £2, Lady Pigot.

Berkshire boar.—Prize, £5, E. Godfrey, Thealby, Brigg.

Sow, large breed.—First prize, £5, P. Eden; second, £3, R. E. Duckering.

Sow, small breed.—First prize, £5, R. E. Duckering; second, £3, C. Roberts, Wakefield.

Berkshire sow.—Prize, £5, J. Lynn, Stroxtan, Grantham.

Three breeding pigs of the same litter, not exceeding six months old, large breed.—Prize, £5, R. E. Duckering.

Three breeding pigs of small breed.—Prize, £5, J. G. Taylor, Castlethorpe, Brigg.

EXTRA STOCK.—Prize, £4, R. E. Duckering (black sow and a white sow).

IMPLEMENTS.

Stand of implements exhibited by a maker.—First prize, Hornsby and Sons, Grantham; second, Amies, Barford, and Co., Peterborough.

Stand of implements exhibited by an agent.—First prize, E. H. Smith; second, Isaac Spight; silver medals, J. Fletcher, Ramforth and Son, T. Harrison, and T. Ashley; bronze medals, Farmer and Son, R. Silvester, C. F. Whitworth, G. Houlton, J. Thompson, E. Skinner, W. Wholey, Mason and Son, T. Grassby, C. Thompson, and W. Ashton.

Stand of implements exhibited by a farmer.—Prize, W. Torr, Aylesby.

The following were amongst the makers and agents who had implement stands on the show ground, or had made entries in the catalogue: Hornsby and Sons, Grantham; Gibbons, Cadney, Brigg; Neave, Barton-on-Humber; Fletcher, Winterton; Ashby, Jeffrey, and Lake, Stamford; Foster and Co., Lincoln; Marshall and Sons, Gainsborough; Spight, Brigg; Hannam, Gainsborough; Rainforth and Son, Lincoln; Searles, Lincoln; Smith, Brigg; Cooke, Lincoln; Farmer and Son, Gainsborough; Robey and Co., Lincoln; Amies, Barford, and Co., Peterborough; Boyall, Grantham; Marrows and Sons, Brigg;

Harrison, Lincoln; Wright, Boston; Thornton, Lincoln; Torr, Aylesby; Tong, Lincoln; Penny and Co, Lincoln; Knowles, Lincoln; Cooper, Barton-on-Humber; Robinson, Winterton; Edlington, Gainsborough; Pearson, Gainsborough; Ogle, Seawby; Anderson, Grantham; Howard, Winterton; Fenwick, Kirton-in-Lindsey; Newton, Digby; Whitworth, Cuxwold; Houlton, Howsham; Moggs, Newstead; Hunter, Ulceby; Hodgson, Louth; Perkins, Boston; Thompson, South Ferriby; Kirkham and Bamford, Brigg; Watkinson, Louth; Lyne, Brigg; Coultas, Grantham; Ashley, Louth; Brooke, Market Rasen;

Gibson, Horkstow; Abey, Barnethy; Spencer, Glentworth; Metheringham, Scopwick; Booth, Corringham; Smith, Bigby; Kittmer, Fulstow; Wholey, Alford; Ashton, Horncastle; Sowerby, Brigg; Mason and Sons, Alford; Good, Grimsby; Thompson, Keelby; West, Melton Ross; West, Great Limber; Smith, Gainsborough; Barron, Holbeach; Hayes and Son, Stamford and Peterborough; Coleman and Morton, Chelmsford; Garrett, Leinston; Picketsley, Sims & Co., Sleaford; Richmond and Chandler, Manchester; Woods, Cocksedge, and Warner, Stowmarket; and Dodge, London.

THE BEDFORDSHIRE AGRICULTURAL SOCIETY.

MEETING AT BEDFORD.

Taking for its fixture a happy medium between the early summer and remote autumn, this old Society—established in 1800—has just held a very successful meeting in Bedford. The manufacture of prize ploughs in these parts would certainly seem to conduce to the breeding of prize plough horses; for, however little Bedfordshire might have been famous in this way some few years since, the show of working pairs and young stock is now becoming a very prominent and equally creditable feature in the exhibition. The judges commended two of the classes of cart horses; and the sixteen entries of pairs for “agricultural purposes” served to very aptly illustrate this “purpose.” They were not unwieldy, over-grown, nor over-weighted dray-horse, but smart quick-stepping pair teams, pretty generally showing some quality with good looks. The judges certainly went for the biggest they could find, and the Messrs. Howard’s four-year-old is a really grandly-grown animal, of just the stamp of a Norfolk cart horse, at least so said Mr. Sewell Read; while his companion was one of the prize pair which won here in quite as good company some three or four years since. Both are tolerably well known about the country as the public match horses of the Messrs. Howard; but Mr. Charles Howard took the second premium with two perhaps more properly farm horses, as it was, in fact, holding to the agricultural purposes, a difficult class to judge, and several taking pairs appeared to command no attention whatever. There were, for instance, a couple of white-legged bays, which seemed to show a deal of breeding, and which, as we followed them back to their standing, turned out to be prize horses of two years since; but no question the most valuable pair were put first. The seven two-year-olds, with Mr. Walker first, and Mr. Davies second, were all commended; and in another lot of seven yearling colts Mrs. Brimley took the first prize, and Mr. George Hine the second. There was not much competition amongst the yearling fillies, where Mr. George Street, of Maulden, was first and second, and Mr. Harris, of Wootton, had only Mr. Hine to beat for two-year-old geldings. The cart mares and foals ran to a large but indifferent entry, with a grey from Mr. Whitworth, of Kempston, as the best, and Mr. Hurrell, of Stevington, next. Messrs. Howard’s prize four-year-old hunting horse, by Wingrave, is a beautiful goer, with every promise of making a first-flight nag; but he was shown quite in the rough with a great grass carcass, and other evidence of having been badly done by; the more consequently is it to his credit to beat Mr. Boulton’s very neat filly, by The Little Stag; as Mr. Boulton was beaten again in the next class of hunters, the property of Bedfordshire farmers. The winner here, Mr. Lilley’s son of Idler, is a very true horse to look over, although naturally enough he got disgusted with the leaping business, as he is

said at the best of times to be a rather difficult horse to ride. Still the judges mounted him, as they did almost everything, and then the owners and servants rode them for half-an-hour or so at some gorse hurdles, with a sort of Islington Hall pond trap in the centre. It certainly seemed to us, very early in the proceedings, that the Knotting bay must win, and we heard that, after a most pains-taking investigation the judges eventually arrived at this conclusion. Mr. Boulton’s brown went very weak and slovenly, and as he was the only other one fairly in it he took the second prize. The first and second best hackneys, both by The Little Stag, have blood in their favour, and Mr. Higgins’ filly promises to fashion into quite a charming mare under a saddle or a side-saddle. Mr. Gibbins’ best cob is a coarse cart-quartered, underbred animal, and Mr. Lavender’s second or Mr. Boulton’s entry with “a leg”, of a far better stamp. Mr. Slinn won the Mayor’s cup with a pretty grey pony, and we believe the best donkey was one which nobody could sit, although, as Mr. Stephenson said at the dinner, it was to be regretted that “riding judges” shirked such a duty.

The show of Shorthorns was not strong, and Mr. How’s Vesper Queen, an improving heifer, and unmistakably the best of them, took the President’s cup on these conditions. The best bull in the all-aged class was Mr. Marsh’s Prince Pearl, by Baron Warlaby, a long, straight red, who had not much to meet, as about the plainest and most faulty bull of the four, Mr. James’ Lord Howard, was put second. Lord John Thynne’s prize yearling, bred by Mr. Robarts, has a really good touch, but like the sort Douglas is growing all ways at once. Mr. Pawlett’s was the best bull-calf of the two, and his yearling heifer, first in her class, ran close up with Vesper Queen, the best two-year-old, for the Champion Cup. There was a poor class of cows, of which Mr. Lavender’s roan Hawthorn was declared to be the best, as Lord John Thynne had the best dairy cow, and Mr. Pike the best Jersey in one of Mr. Dauncey’s sort. The veteran Mr. Barnett won with his heifer; and Mr. Pulver brought out another steer, curiously, like his cup ox, but rather bad in his touch. He was first in his class, as was Mr. Mumford’s Climax in a companion class of fat cows; and Mr. Fowler, of Henlow, took the prize for pairs of steers in the absence of any competition whatever.

The show of sheep was short, with the exception of the Oxford Down ram class, which was numerously and creditably filled, and where Mr. Charles Howard won, beating some of his own blood in Mr. Longland’s two-shear (second), a son of the Wolverhampton old sheep; while Mr. Treadwell was commended for three shearings shown quite in the rough. The Royal Biddenham ewes, helped out by five others, not only beat Mr. Underwood’s cross-breds in their class, but took the cup as the

best pen of sheep in the show; while Mr. Treadwell beat Mr. Howard for breeding ewes of all ages. Mr. T. W. D. Harris took all the chief prizes for long-wools with his well-known cross; and Mr. Frederick Street, of Harrowden, had the best pen of ewe lambs, Oxford Downs of course. There were but few entries of pigs; and in the sow class, the only one where there was any competition, Mr. Wythes had the best of the famous Britannia whites; their Silver Hair being the second prize sow, their Hero 3rd and Victor 3rd, the two prize boars, and Duchess, the best sow in pig. Amongst the extra stock Mr. Manning showed his "thoroughbred" cart horse, Mr. Bassett, of Leicester, some nice Jersey heifers, and Mr. Frederick Street a great well-grown mare from the Fen country, with slovenly "dishing" action, but we believe she was highly commended. The judges were:—For horses: Messrs. J. E. Bennett, Husbands-Bosworth, Rugby, and J. M. K. Elliott, Heathcote, Towcester. For cattle, sheep, and pigs: Messrs. G. Baker, Orwell, Ipswich; J. Robinson, Clifton Pastures, Newport Pagnell; and W. Sanday, sen., Radcliffe-on-Trent.

The full attendance at the dinner might be regarded as something of a compliment, and the proceedings thereat as something of a trial to the President, Mr. James Howard. There were *eighteen* toasts on the list, whilst reverend men of different denominations spoke for the church, and honourable members indulged occasionally in impromptu orations, in consequence of having taken to gibe one another on the work of the session. Mr. Magniac, indeed, would give a premium to the man who makes the shortest speeches, but he would limit the competition to the House of Commons, whereas such an offer might appear quite as becomingly on the prize list of an Agricultural Society.

At the dinner Colonel GILPIN, M.P., said that foreign animals recently introduced from Holland, after having been passed by inspectors, turned out to be affected by foreign disease—pleuro-pneumonia. My own opinion has been that we cannot keep that disease out without sufficient quarantine for store stock and immediate slaughter for fat stock. Our present quarantine of twelve hours is not sufficient to test whether an animal is diseased or not, and I shall consider it my duty, as soon as I get back to London, to call the attention of the Vice-president of the Privy Council to it.

Mr. JOHN HARVEY said all agriculturists ought to band together to get redress for the wrong done to them in having the whole of the support of the poor thrown upon the real property of the country.

The PRESIDENT said that in the course of his short life he had been called upon to occupy many public positions, but never had felt more complimented by election to office than when chosen president of this, one of the oldest agricultural societies in the kingdom. For many years he had taken a very lively interest in its prosperity, having heartily sympathised with its objects. It was founded for the purpose of raising the standard of farming throughout the county, for the encouragement of the agricultural labourer, and rewarding the meritorious. It was inaugurated at a time when there was very little public spirit or enterprise in agricultural affairs. Much ignorance prevailed, and throughout the greater part of the county agriculture was carried on after a most minutive fashion, and the live stock was of the most wretched quality. How much of the great advance which had since taken place was owing to the operation of this society he would not take upon himself to say, but that it had improved it considerably no reflecting mind could doubt. He was glad to know that the Society had better support now than at any former period, and when the benefits it was calculated to confer on the agriculture of the county were more fully known it would be supported in a corresponding ratio. Bedfordshire, from being one of the most backward counties in agriculture, had now become one of the most forward (Mr. Read, M.P.: Hear, hear). The Member for South Norfolk said "hear,

hear;" when he (Mr. Howard) was in the county of Norfolk, which had a world-wide reputation for agriculture, he came to the conclusion that we in Bedfordshire were, if not superior to Norfolk, at least quite abreast of it. Still, we must not suppose that we have reached perfection. Far from it. Much of the soil of this county, by being deeper and better tilled, was susceptible of being made to raise a larger produce, and by the introduction of a larger amount of capital more meat could be produced. While there was such a scarcity of meat, and while we depended upon foreigners for one-third of our grain supplies, we could not look altogether with complacency on our agriculture. He believed there was not a practical farmer in that tent who would not agree with him that if all England were farmed like much of this county we should be a long way towards being independent of foreign supplies. There was one important obstacle, in his opinion, to the further progress of agriculture. He believed that until the tenantry of this country enjoyed a greater security of tenure the resources of the soil would never be fully developed. Fortunately, on the great estates of this county the relations between landlord and tenant were of a most amicable nature, but throughout the great extent of England a different state of things existed. He maintained that six months' notice to quit was altogether incompatible with high farming, and capital would never be attracted to the soil in the way it would be if the tenantry had a vested interest in the improvements they made. Dr. Lehlig had long asserted, and Mr. Lawes had proved by experiment, that to exhaust the natural fertility of the soil was absolutely impossible. No amount of bad farming could permanently reduce it, but all that could be taken out of it was "condition," a word the meaning of which was known to every man who knew anything of an animal, and this was a fact which every landlord in the kingdom would do well to ponder, and they ought not to hesitate for a moment in consenting to liberal agreements with the tenantry. Mr. Harvey had alluded to the revolution, and doctrines which had recently been propagated on the land question. He (Mr. Howard) had no fear that the rights of property would be rudely interfered with if landlords did not stand in the way of progress. They knew that the tenants could not run away with their broad acres; and now it was demonstrated that the worst of tenants could not permanently reduce the fertility of the soil, landowners would do well to consent to liberal covenants with their tenants.

Mr. MAGNIAC, M.P., said there were two sides to many questions, and young as he was in the House of Commons he thought he had heard it was stated in pretty strong language that the interests of landlords and of tenants were not always identical. He did not mean to say they were always in antagonism, but wherever there were two interests there were always two views. There was, for instance, the question of leases, the reference to which had been so well received, and there was also the question of the Game-laws. Mr. Harvey had referred to local taxation, but he had heard men who were competent to reason that question out say that it depended on the rent, and that it was as broad as it was long.

Mr. C. S. READ, M.P., said, in answer to Mr. Magniac, that the question of local taxation was not a question between landlord and tenant. Both these were perfectly united, knowing that local taxation as at present levied was wrong, but the question was whether land and houses should pay the whole of the local taxation, and why all the other property of the country should go scot free. In foreign countries almost all industries, but especially agriculture, looked to the State for protection and encouragement; in England there was a good saying that if we wanted to do a thing well we must do it ourselves, and his advice to the farmers was, never to go to the Government for anything they could have otherwise. As it was impossible for them as individuals to protect themselves, they therefore united in great agricultural societies, and foremost amongst these was the Royal Agricultural Society of England. Some time since, in the House of Commons, it was proposed that a department of the Board of Trade should take in hand the prevention of the adulteration of manures and feeding stuffs, but he ventured on that occasion to say that if the matter were left to the agricultural societies they could do better than any Government department, and he was glad that the Royal Society had come forward and exposed the frauds to which farmers had been subjected.

THE ROYAL COUNTIES' (HANTS AND BERKS) AGRICULTURAL SOCIETY.

MEETING AT PORTSMOUTH.

With Guildford within easy hail of Portsmouth, the shows of the Southern Counties and the Royal Counties were this year, as might have been expected, something of an echo the one of the other. But although the Royal Counties' Meeting is also an open one, it is but of limited scope, with the material mainly supplied from Hampshire, Berkshire, and Sussex. The handsome subscriptions, however, contributed by the town, backed by the temptation of a visit to Southsea, or a trip to Ryde, gave something of gala air to the occasion, that with better weather would have been amply realised. What with soldiers and sailors, there is always some seeing and doing here, while the great agricultural exhibition itself made no particular call on one's time or energies.

The opening section—of sheep—was decidedly the strong feature of the show; the A. I. appropriately enough introducing some capital specimens of Hampshire and west country Downs. Nearly all the best flocks were represented but the Russells from Kent, and their absence let in Mr. Morrison for first with the shearing as well as the all-aged rams. The great merit, however, was in the old class, where the judges had half-a-dozen really good sheep before them, but with the now famous Fonthill champion still the best. Five rams were here noticed, out of nine entries, a return which speaks emphatically to the excellence of the competition. The shearlings were not so generally admirable, the nice quality of Mr. Morrison's and Mr. Bennett's sheep standing out in strong contrast to some coarse, plain, or still more indifferent, animals. None of those beautiful ewes were sent in from Bulbridge; and in one class of shearlings there was but one entry, where the first prize was withheld, the pen being very moderate, and bad about their necks. Of the ewes in the rough, Mr. Fitt's first is just a useful pen, while Mr. Barton's next best are plain sheep, and there was not much to beat. There was a very creditable class of ram-lambs, which offered further proof of how scientifically the lines of the Fonthill flock had been laid; and the ewe-lambs were all really good. Of Southdowns, again, there was an equally strong show, some of the best Sussex flock-masters, like the Heasmans, Mr. Penfold, Mr. Humphrey, and Mr. Pinnix's executors, being amongst the exhibitors. The Messrs. Heasman are keeping back their best Guildford shearing for Wolverhampton, where, as he has gone on well since, and is a smart, stylish ram, he will take a good deal of beating, as, indeed, with the Merton flock out of the way, he would look very like repeating his West of England performance. In his absence, they relied on their heavier sheep, also shown at Guildford, and, at his age and weight, perhaps the biggest Southdown ever shown. He has also plenty of good looks, barring being down in his dock, and he won easily enough here, with another of the same sheep second. In the old class, the Angmering ram had got all wrong in his wool, and so put himself out of it, although he took a commendation at Oxford; while a shearling was overweighted in such company. Mr. Penfold, it will be seen, just got a turn the best of it in the two classes, his first ram being a very nice taking sheep forward, of good quality, and the right sort of wool. The Westdean sheep rather disappointed us after all we had heard of them, but they had evidently not been prepared for exhibition,

and should so sell all the better on the dispersion of the flock in the autumn. Mr. Wallis' second prize Oxford Down shearing at Guildford was nowhere at Portsmouth, and Mr. Milton Druce's unnoticed Oxford Down shearing at Guildford was second at Portsmouth—so much for difference of opinion. They were both beaten here, in the absence of Mr. Treadwell, by another of Mr. Wallis' sheep, but we prefer the previous award. The first here has the better frame, but he is weak and bad about his head, and altogether wants the masculine character of the other. There was nothing to oppose Mr. Druce's pen of Oxford ewes, and there were no entries of Leicesters; while Mr. Mayo made up with two rams the show of Dorset horns; and the Gilletts had only the Wheelers to beat for Cotswolds. Lord Chesham and Mr. Wood competed in the two classes of Shropshires; and a Latimer shearing, unnoticed at Guildford, now beat Mr. Wood, who was first in the class at Guildford! But it was pretty clear at the time that the long-wool West of England judges had no business amongst the Shropshires, where Lord Chesham looks like working up again to his previous position. The prize Hampshire Down and Southdown fat wethers were particularly good pens; while in the cross-bred class and fat lambs there were no entries beyond those to which the several premiums were duly awarded.

The best Shorthorn bull at Guildford, Mr. Soffe's Lord Morpeth, was the best again here, as there can be no mistake about his being a very good showy animal, but there was not much to beat amongst the few things opposed to him. The two-year-olds were as indifferent, Mr. Walter's first having some quality, but standing out at his shoulder points, and Lord Aylesford's second being bad in his touch, and poor and mean in his appearance. Of cows there were only three entries, Mr. Mumford's first having the remains of good looks and nice character, but showing age in sundry humps and dips; while Mr. Nicholson breeds his Shorthorns of the largest, entering a bull, cow, and heifer, all of great scale, and all winners. His heifer, indeed, deep, square, and straight, won outright in the best filled class of the breed, where a number of commendations, beyond Mr. Young's very close second, were deservedly bestowed. Messrs. Heasman and Turvill were the only exhibitors of Sussex cattle, the two bulls, Young Martin and Southampton having been first and second at Guildford, but with their positions reversed at Portsmouth, where they reversed everything they could. Mr. Taylor's Devons are very admirable, and his steer should bring him further honours from the Smithfield Club. There was quite a numerous entry of Channel Island bulls, with sundry commendations attached to the actual award, but Lord Chesham's best of all is hardly a prize bull, although with plenty of good about him in places. His Lordship also won with a very nice heifer, and another noble lord—Bolton—showed a sweet, high-bred cow, as deservedly the best of her class, and from which they have been breeding. It is becoming more and more evident that for quality of butter you must have a taste of the Alderney, although as they argue in Warwickshire such kind of cattle are not "suitable for the district."

Mr. Humphrey with Berks, and the Duckerings in the other classes had all the best of a good show of pigs, where it was Berks and Hauts against All-England. The

best large boar and the best large sow, the best small boar and the best small sow, have all been out already this season at Glasgow, Guildford, and Romford and have never been beaten. Then Mr. Humfrey's best Berkshire was best at Guildford, and it was only occasionally that other exhibitors like the Wheelers and Mr. Druce with his blacks ever got a turn. In the pairs of sows the Berkshire winners were rather gaily marked, while Mr. Humfrey was actually the exhibitor of a white pig, one of Mr. Eden's breed, which, however, was bought for a friend and is not to leave his mark behind him at Kingstone. But the physiology of breeding tells of all kinds of freaks as the results following from mere impression.

The catalogue of the Royal Counties Society is illustrated. Thus, there is an engraving of a Hampshire Down on the title-page, of a prick-eared pig as the head-piece to his section, of a cart-horse rampant in a fitting place, and a sketch of two or three steeple-chase nags, charging a fence, by way of introduction to the hunter and hack classes. Unfortunately, as we fear, the judges were not allowed to have a look at this pretty picture until too late, for they commenced their duties over the hunters by actually ordering clean out of the ring the only animal that looked like going a pace over a country. This was Mr. Pallin's Merlin, a well-bred, light, corky sort of horse, with a clean knowing head, beautifully laid shoulders, and a wiry wearing look about him, as bound up to a certain weight to lose anything shown against him. In fact, there was not otherwise a hunter in the class, for the bay mare, useful and slow, has her heavy neck put on all wrong, while for a second they hung as long as they could to a whistling, cramped-action animal, which at best was but a machiner. However, Mr. Perkins' wonderfully clever grey galloway, as smart and true as a model, fairly placed himself, and Mr. King's second was another neat one, as was a very varmint bay pony, the property of Mr. Warrell. Mr. Canning's prize hack, and his prize hunter, had both the looks of nice riding-horses; while there was a wretched pig of a thing exhibited amongst the galloways, apparently a cross between a Suffolk cart-horse and a pony, which the judges did *not* order out, but looked at so hard, and sent round so often, that we had really some hopes they were going to give her a prize, their line clearly being for beef at any price. This had been just previously demonstrated by the decision over the class of cart-mares or geldings in work, when their choice fell on a great sour-headed animal, with something of the action, as well as the shape, of an elephant, and the worse he went the more they seemed to like him. But then, no doubt he would scale more than anything else, and tested by avoirdupois weight the award was possibly correct enough. Barring the winner there were some very creditable teamsters in this class, to one of which—a very nice mare of good quality—the judges awarded a second prize, without, as it would seem, the power to do so, as the lists only spoke to one premium. Mr. Woodman did not send his Clydesdale, and the prizes for all-aged stallions were withheld, while a couple of growing colts were the best two-year-olds. A fine showy mare of Mr. Terry's, despite a very poor foal, was still in her place at the head of the class, but it was hard to understand how the plain-headed, greasy-heeled thing, put second, was preferable to Mr. Woodman's level good mare, backed by a smart foal. Amongst the extra stock Colonel Raines, of the 95th, showed "a very high caste pure Arab, 15 hands high," who was deservedly commended as a smart, flashy, light dragoon sort of charger; the Colonel also sending for inspection a Cashmere ram, whose body and bones seem devoted to "silky wool," while he carries all his mutton in his tail; and further, an Indian ram with a black head and twisted horn, and growing "very strong fine wool,"

Colonel Raines completed his entry of certainly very "extra" stock with "a blue cow, or Neilgny of India, the link between the cow and deer, having a deer's head and cow's tail." This animal takes a deal more after the deer than the cow, but her peculiarities should supply a very welcome link in Mr. Darwin's history of how everything is descended from something else.

It would be difficult to imagine anything more provokingly primitive than the conduct of a Royal Counties Show. The judges, we believe, begin at nine o'clock, and the high-price paying public is admitted at ten, by which time, of course, the awards over some of the most interesting of the classes have been settled. As, however, many of the prizes are never announced until very late in the day, if even then, it is clear that the high-price paying public has a deal the worst of the bargain, as that a man gets more information by paying a shilling on Thursday, than he can for half-a-crown on the Wednesday. Continual were the complaints of exhibitors who were kept for hours in ignorance of their fate, and had it not been for the kindness of the judges, who placed their books at our disposal, it would have been simply impossible to have "done" the show. Blue and red rosettes were certainly given out in the horse ring, but then the numbers were either attached to the inner-side of the horses' heads, where you could not see them, or occasionally stuck on to the top of the tail, or anywhere that a playful fancy might suggest. The stall numbers again were carefully hidden from the view, instead of being at the head of each beast, or pen; and, in fact, as a means of withholding all possible information, the system looked to be about as perfect as it well could be. As almost every other man, moreover, had some badge of office about him, these regulations of course were very efficiently carried out.

There were poultry and flower shows and military bands, as matters of course, whilst those famous seedsmen, the Suttons of Reading and the Carters from Holborn, gave effect to the scene with their palatial stands of tastily arranged roots, seeds, grasses, and so forth—kind of half-way houses as they are between the rearing of stock and the cultivation of the soil. Intent on the latter service there was a small but useful exhibition of machinery, backed by trials of mowers and ploughs, and with steam engines put to work on the ground by the following firms: Taskers, Humphries, Clayton and Shuttleworth, Wallis and Stevens, Marshall of Gainsborough, and Vosper of Portsmouth, who entered for trial steam pumps and boilers. Amongst the collections Mr. Sutton, so long and so well known all over the country as Messrs. Howards' representative, but who has now settled down at Shirley by Southampton, had many of the best houses entered in his list, such as Clayton and Shuttleworth, Richmond and Chandler, the Howards of Bedford, Coleman and Morton, Bentall, and Crosskill, with reapers and mowers from Samuelson, Wood, and Hornsby. The other firms with stands of their own were Cannings, of Finchdean; Kendell, of Blandford; Tasker and Sons; Budd, Cosham; Burgess and Key; Hetherington and Moor, Alton; Chase, Chichester; Picketsley, Sims, and Co. (Limited); The Reading Iron Works Company (Limited); Duffield, London; Smith, Basingstoke; Bradford and Co., Fleet-street; Eames, Midhurst; Wallis and Stevens; Hobbs, Basingstoke; Fowler and Co., Leeds; Cheale and Son, Lewes; Dodge, Thames-street; Mitchell and Co., Manchester; Hathaway, Chippenham; Spong and Co., London; Brown and May, Devizes; Baker, Compton; Bell, Oxford-street; Walter Wood, Thames-street; Kearsley, Ripon; and Sawney, of Beverley; with sundry companion exhibitions of sewing machines, T. carts, soda-water taps, mouse traps, types, and such like "fancy

goods," which have no very direct connection with an agricultural meeting.

The ploughing was on sainfoin ley, and the soil was of a kind and in a condition to show off the skill of the men and the qualities of the ploughs to the best advantage. The double-furrow competition excited the greatest interest, though this would have been much increased had it been a competition in reality as well as name. A very short trial enabled the judges to decide in this class. In the single-furrow plough class Howards' were in competition with Hobbs' and Rausomes'; but it was to be regretted that Rausomes' professional ploughman was not engaged, as the local man, though a good ploughman, could not compete with the professional. In the farmers' class some good ploughing was also shown.

After the match was concluded, Mr. Sutton showed a Howards' double-plough with one body taken off and a subsoiler tine substituted at work. The judges were so satisfied with the merit of the plough used with subsoil, that they desired a special prize should be awarded, to which the officers cordially agreed, and Mr. Sutton, of Shirley, who superintended these trials was awarded two guineas. There were also some trials of mowers, where Samuelson and Wood ran a dead heat.

PRIZE LIST.

JUDGES.

SHEEP.—H. Fooks, Whitechurch, Blandford; E. Olding, Woodford, Salisbury; H. Bone, Avon, Ringwood.

HORSES.—J. B. Spearing, Ilurst, Wokingham; W. Wheatley, Reading; W. C. Spooner, Eling, Southampton.

CATTLE and PIGS.—A. Craddock, Lamborune; W. Champion, Reading; G. Garne, Church Hill, Chipping Norton.

POULTRY.—J. Bailey, Mount-street, London.

MOWING MACHINE COMPETITION.—W. Chalcraft, Liphook; C. Clark, Clanfield, Horndean.

PLOUGHING.—J. Turvill, Hartley Mandit, Alton; G. Pittis, Wymering.

SHEEP.

HAMPSHIRE AND WEST COUNTRY DOWNS.

Shearling rams.—First prize, £10, A. Morrison, Fonthill-house, Tisbury; second, £5, W. F. Bennett, Chilmark, Salisbury; third, £3, J. Moore, Littlecot, Pewsey. Highly commended: W. F. Bennett.

Rams of any age.—First prize, £5, A. Morrison; second, £3, J. Rawlance, Bulbridge, Wilts. Highly commended: J. Moore. Commended: J. and M. Arnold, Westmeon, Petersfield, and J. Barton.

Shearling ewes.—Second prize, £5, A. Budd, Overton, Hants (one entry).

Shearling ewes of the same flock, which have never been housed and clean shorn.—First prize, £10, W. E. Fitt; second, £5, J. Barton. Highly commended: Rev. T. J. Torr, Danmer House, Basingstoke. Commended: F. S. Schwann, North Houghton, Stockbridge.

Ram lambs.—First prize, £8, A. Morrison; second, £5, J. Moore; third, £3, W. F. Bennett, Chilmark, Salisbury. Highly commended: W. Lunn, Woolding Farm, Whitehurst.

Ewe lambs.—First prize, £5, F. S. Schwann; second, £3, A. Budd. Highly commended: F. S. Schwann. The class commended.

SOUTH DOWNS.

Shearling rams.—First prize, £10, J. E. and A. Heasman, Augmering, Arundel; second, £5, J. E. and A. Heasman; third, £3, H. Penfold, Selsey, Chichester. Highly commended: H. Humphrey.

Ram of any age.—First prize, £8, H. Penfold; second, £5, H. Penfold; third, £3, A. T. Newman, executor of the late Mr. J. A. Pinaie, Westdean, Chichester. Highly commended: A. T. Newman.

Shearling ewes.—First prize, £10, S. W. Seward, Weston, Petersfield; second, £5, G. Pittis, Wymering, Cosham.

OXFORDSHIRE DOWNS.

Shearling rams.—First prize, £10, G. Wallis, Old Shifford,

Bampton, Farringdon; second, £5, A. F. M. Druce, Burghfield, Reading. Commended: A. F. M. Druce.

Shearling ewes.—Prize, £5, A. F. M. Druce (one entry).

SHROPSHIRE DOWNS.

Shearling rams.—First prize, £10, Lord Chesham, Latimer, Chesham; second, £3, H. Wood, Woolley House, Romsey. Highly commended: Lord Chesham.

Shearling ewes.—Prize, £5, Lord Chesham. Highly commended: H. Wood.

COTSWOLDS.

Shearling rams.—First prize, £10, Executors of the late Mr. Thomas Gillett, Kilkenny, Farringdon, Berks; second, £5, Executors of Mr. T. Gillett.

Shearling ewes.—No entry.

LEICESTERS.—No entries.

SOMERSET AND DORSET HORNS.

Shearling rams.—First and second prizes, H. Mayo, Coker's Farm, Dorchester.

Shearling ewes.—No entry.

FAT SHEEP.

HAMPSHIRE OR WEST COUNTRY DOWNS.

Five fat wethers.—First prize, £5, A. Morrison; second, £3, J. and M. Arnold.

SOUTH DOWNS.

Five fat wethers.—First prize, £5, H. H. Penfold; second, £3, J. E. and A. Heasman. Highly commended: W. Taylor, Glynley, Westham, Sussex.

CROSS-BREDS.

Five fat wethers.—First prize, £5, and second, £3, C. B. Smith, Wickham, Hants (two entries).

Fat lambs of any breed, bred by exhibitor.—First prize, £3 3s., W. E. Fitt; second, £2 2s., J. Wigg, New-street, Basingstoke (two entries).

HORSES.

CARTERS.

Stallion, foaled before 1869.—No merit.

Stallion, foaled in 1869.—First prize, £10, J. Butler, Sherfield Court, Basingstoke; second, £5, J. E. and A. Heasman. Commended: W. E. Fitt and O. C. Richards, West Stratton, Micheldever.

Mare and foal.—First prize, £10, S. H. Terry, Weston Patrick, Odiham; second, £5, E. W. Snook, Bognor. Highly commended: R. J. Woodman, Southeast, Lewes.

Three-year-old filly.—Prize, £3, A. P. Martin (only entry). Filly foaled in 1869.—No entry.

Mare or gelding.—First prize, £5, J. C. Leather, Portsea; extra prize, J. Stubbs, West Tisted, Alresford. Highly commended: T. Watson, Kingston Farm, Portsmouth. Commended: J. Stubbs; W. H. Dunn, Stauden Manor, Hungerford.

HUNTERS.

Mare or gelding of any age.—First prize, T. R. Hulbert, Old Alresford, Hants; second, £5, J. Canning, Sutton Scotney, Micheldever. Highly commended: W. W. Curtis, jun., Highland House, Portsmouth.

HACKS.

Mare or gelding not exceeding 15 hands high, and calculated to carry 12 stone.—First prize, £10, E. W. Snook, Middleton House, Bognor; second, £5, J. Turvill, Hartley Park Farm, Alton. Commended: H. C. Earle, West Leigh, Havant.

PONIES.

Mare or gelding not exceeding 14 hands high.—First prize, £6, W. Perkins, Southampton; second, £3, W. D. King, Chittley Farm, Liphook. Highly commended: W. E. Fitt.

Mare or gelding not exceeding 12 hands high.—First prize, £6, S. Warrell, Portsmouth; second, £3, A. Ede, Swarthling, Southampton. Highly commended: G. Curtis.

CATTLE.

Shorthorn bull.—First prize, £10, R. Soffe, Hams, Eastleigh, Southampton; second, £5, W. Nicholson, Basing Park, Alton, Hants.

Shorthorn bull, under three years.—First prize, £5, J. Walter, M.P., Bearwood, Wokingham; second, £3, Marquis of Ailesbury, Savennake. Commended: H. E. Raybird, Lower Mill Farm, Old Basing.

Shorthorn cow in calf, or if in milk having had a calf.—First prize, £10, J. A. Mumford, Chilton, Thame; second, £5, W. Nicholson.

Shorthorn heifer, under three years.—First prize, £5, W. Nicholson; second, £3, G. Young, Ashy Farm, Brading, Isle of Wight. Highly commended: H. Armstrong, Peckham. Commended: H. Armstrong and H. Raybird.

Sussex bull of any age.—First prize, £5, Messrs. Heasman; second, £3, J. Turvill, Alton.

Sussex cow in calf, or if in milk having had a calf within six months.—First prize, £5, Messrs. Heasman; second, £3, J. Turvill.

Devon bull of any age.—Prize, £5, W. Taylor (only entry).

Devon cow.—Prize, £5, W. Taylor (only entry).

Channel Islands bull of any age.—First prize, £5, Lord Chesham; second, H. Drewitt, Milvill, Titchfield. Highly commended: J. Walter, M.P., and G. Deller, Odiham. Commended: Miss Malcom, Beechwood, Lyndhurst; J. Willis Fleming, Chelworth Manor, Romsey.

Channel Islands cow.—First prize, £5, Lord Bolton, Hackwood Park, Basingstoke; second, £3, H. Drewitt.

Channel Islands heifers.—First prize, £5, Lord Chesham; second, £3, H. Drewitt.

FAT STOCK.

Fat ox or steer of any breed.—Prize, £5, W. Taylor, Devon. Highly commended: W. Nicholson and C. J. Walter.

Fat cow or heifer of any breed.—Prize, £5, W. H. Dunn. Commended: R. Soffe.

PIGS.

Berkshire boar of any age.—First prize, £5, H. Humphrey, Kingstone Farm, Shrivenham; second, £3, C. Barton, Sherborne, Basingstoke. Highly commended: J. Walter, M.P.

Berkshire sow of any age.—First and second prizes, H. Humphrey. Highly commended: The Marquis of Ailesbury. The class commended.

Pair of boars under six months.—No entry.

Pair of sows under six months.—First prize, £4, H. Humphrey; second, £3, Wheeler and Sons, Long Compton, Shipton-stour. Highly commended: J. Canuing, Sutton Seotney, Micheldever. Commended: The Marquis of Ailesbury.

Boar of any age, large breed, not being Berkshire.—First prize, £5, R. E. Duckering and Sons, Northope, Kirton Lindsay; second, £3, J. Wheeler and Sons.

Breeding sow of any age.—First prize, £5, Messrs. Duckering; second, £3, J. Wheeler.

Boar of any age, small breed, not being Berkshire.—First prize, £5, Messrs. Duckering; second, A. F. M. Druce. Commended: J. Wheeler and Sons.

Breeding sow of any age, small breed.—First prize, £5, R. E. Duckering and Son; second, £3, J. Wheeler and Sons. Highly commended: Colonel Portal, Southington, Overton. Commended: J. Wheeler and Sons.

Pair of boars, under six months.—First prize, £4, R. E. Duckering and Son; second, £3, W. H. Dunn.

Pair of sows, under six months.—First prize, £4, J. Wheeler and Sons; second, £3, W. B. Boxall, Strathfieldsays.

EXTRA STOCK.

Kyloe cow.—A. Cooper Sayers, Croft House, Bishopstoke, highly commended.

Heifer, a cross between the Kyloe and Jersey.—A. Cooper Sayers, highly commended.

Hack stallion.—G. Chase, Hook Grange, Titchfield, Fareham, highly commended (Performer).

Arab.—Col. Raines, C.B., 95th Regiment, Gosport, highly commended.

Ram, Indian breed.—Col. Raines, highly commended as a curiosity.

Cashmere ram.—Col. Raines, highly commended as a curiosity.

Blue cow, of Neilguy, of India.—Col. Raines, highly commended as a curiosity.

IMPLEMENTS.

MOWING MACHINES.

First prizes, 3 gs. each, to Sammlson and Co., Britannia Works, Banbury; and Walter A. Wood, 77, Upper Thames-street, London; second, 2 gs., Picklesy, Sims, and Co., Leigh, Manchester. Highly Commended: Reading Iron Works Company.

PLOUGHS.

First prize, £3, J. C. Sutton, Shirley, Southampton (Howard); second, £2, P. and W. Hobbs, Basingstoke (Ransome and Sims).

Farmers' Class.

First prize, £3, G. E. Kent, North End, Portsea (Howard); second, £2, G. E. Kent, (Howard).

DOUBLE FURROW PLOUGHS.

Prize of 3 gs., J. and F. Howard, Bedford.

At the dinner Sir J. D. H. ELPHINSTONE, Bart., M.P., said the show of stock was not quite so numerous as he had been accustomed to see, living, as he did, where they devoted their energies almost entirely to the production of high-priced stock, but he had seen many animals in the showyard of great merit. There was a class in which he was more particularly interested, and he could not describe his admiration of several pens of Southdowns, such as he had seldom seen. They had tried in Scotland to introduce the Southdown, as nearly allied to their own mountain breed, but they had not had success until the Duke of Richmond settled amongst them and introduced the higher class of Southdowns, which were now almost acclimatised in the north of Scotland. But he had seldom seen any finer points in that breed, or more perfect specimens than he had seen in the showyard that day; and he thought that one or two pens of those animals were about as perfect as it was possible for sheep to be.

LORD NORTHBROOK, the chairman, said it must be to their advantage, as an agricultural association, to come into these great centres of business, and to be put in communication with business men who were in the habit of going a little faster than they, agricultural men, were, and where more of the population were in the habit of collecting than in smaller, although more agricultural, centres. There could not be a greater proof of this than in the large increase of space this year occupied by machinery and implements. At the last exhibitions only one half the space was allotted for machinery that there was this year. He had seen many shows, and never was there an exhibition in which there were better pens of sheep than in this one to-day. With respect to this society he might say that they were very much satisfied with the progress they had made of late years. This was only the tenth show they had held, and up to two years ago they had only a one day's show. Last year it was a two days' show. They used to confine their operations to agricultural towns, but they had extended them to this town and to a three days' show, and they hoped with increased success.

The MAYOR of Portsmouth said: The men of the town heartily rejoiced in the fact that their brethren in the counties were about to manage, in a very large degree, their own business, because, if he had observed things aright, he had discovered that the gentlemen who generally managed county matters were men of high position, who were so absorbed and taken away from the little details of ordinary life, that it would be a great relief to them if those of ordinary capacity and moderate position in life were left to fulfil those duties. There could be no earthly reason why in the county they should not have representative bodies, as they had in the boroughs, and he heartily congratulated their agricultural friends on the certainty of their having representative boards, which would become large and important bodies in the various counties in which they lived.

MR. G. SCLATER-BOOTH, M.P., said: The Mayor congratulated them on the speedy prospect of exercising functions similar to those he discharged. While he appreciated the importance of his compliment he must remind him that the parishes and unions in the county had long since enjoyed and exercised administrative functions which were far more important in their way than those exercised for the country at large. Sir James Elphinstone, had commented upon the specimens of Southdowns, with which he had been familiar in his own county of Aberdeen, through the introduction of them by his neighbour, the Duke of Richmond. He was glad to hear from one whose opinion was worth having on the subject, that the capital breeds of their own Hampshire Down Sheep had always been extremely well represented, and it was a matter of congratulation to his friends who came from the chalk district to have their excellent animals appreciated by so large and intelligent an army of spectators.

NORFOLK AGRICULTURAL SOCIETY.

MEETING AT EAST DEREHAM.

Time was when this Society restricted its meetings to one day only, and vibrated pendulum-like between two towns—Norwich and Swaffham—the former being supposed to represent East Norfolk, and the latter West Norfolk interests. But some ten years since the Society, possibly with a certain amount of fear and trembling, made the great experiment of moving from point to point. The first start was to East Dereham, and now to East Dereham the Association has returned. In the course of time, it has gone to Fakenham, Lynn, Yarmouth, Harleston, Attleborough, and Downham; but it has never yet pitched its tents at Diss, and, from the absence of railway communication, it has given North Walsham a wide berth. The effect of peregrination has been very beneficial, for, while under the old see-saw system of Norwich and Swaffham, and Swaffham and Norwich, the attendance was comparatively small, and the number of Norfolk exhibitors, properly so-called, might almost be counted on one's fingers, the shows of the association have now been popularised to an extent which renders them much more lucrative to the Society's exchequer, while the indirect influence of the meetings—and this is of more importance—upon the progress of Norfolk agriculture, so far as stock breeding is concerned, has been very materially and very beneficially increased. The meetings of the Society have also become more *bona fide* Norfolk shows, properly so-called. There is room for further improvement in this particular; still, when we find, as we did on Wednesday and Thursday, that Norfolk contributed 364 out of 456 entries of beasts, sheep, horses, and pigs, we can but come to the conclusion that Norfolk farmers are, to a much greater extent than hitherto, devoting their attention to the breeding of animals which they consider good enough to stand the test of public exhibition and public criticism.

This season a new breeder of live stock has appeared at the Norfolk and East Anglian Shows in Mr. J. J. Colman, M.P. for Norwich, and an active partner in the great mustard-making, starch-making, flour-making, and paper-making house of J. and J. Colman, of Cannon-street. Whatever the Colmans attempt they seem to carry out with success; and, thanks to a very excellent steward, a very long purse, and a large measure of personal good sense, Mr. Colman has stepped at once into the front rank as a live-stock exhibitor in the eastern district. The Prince of Wales seems to have also gone in for sheep-breeding upon his Sandringham property; but thus far His Royal Highness has not proved particularly successful, having merely secured one or two commendations at the East Dereham Show.

In Shorthorns Norfolk was never noticeably strong; but, with the help of Lady Pigot, Mr. How, of Broughton, and Mr. Upson, of Essex, a few respectable, but not very numerous classes were made up. The first prize for old bulls was taken by Hogarth the Second, so well known at these meetings when the property of Mr. Kersey Cooper. One of the most prominent prizes was thus retained in Norfolk; but the prize-list will show that almost all the other Shorthorn premiums went either to Branches Park or somewhere else out of Norfolk. Thanks to the efforts of Lord Sondes and other gentlemen much greater prominence has been achieved at the Norfolk meetings of late years by the Norfolk and Suffolk red

polled breed, and these showed to much advantage here. The cows all appeared good dairy animals, while the bullocks had capital chins and good backs, although perhaps somewhat deficient in the springing of the ribs and in their hind-quarters. The class appears sufficiently numerous to justify the appointment of separate judges; as the matter was arranged, it seemed to be thought that gentlemen accustomed to Shorthorns were scarcely suited to give decisions over a comparatively local breed. The cross-breds comprised some Shorthorn and Ayrshires and Shorthorn and Norfolk Polled. The fat stock embraced a few Highland Scots, Polled Scots, Shorthorns, Herefords, and Norfolk Red Polled. The competition was, however, only weak under this head; at the same time, Mr. Colman's prize Shorthorn was a capital one. A tenneginea prize given by the Prince of Wales for the best fat heifer was won by a handsome level Shorthorn.

In the horse department Norfolk appeared to more advantage than at any former period. In the agricultural classes the entries fifteen or twenty years since were usually so weak that the Norfolk portion of the company at the dinner was generally periodically chaffed by the judges for their shortcomings under this head, more especially if one of the judges happened to come from Suffolk, which makes a speciality of its cart stock. Now the tables have positively been turned, and this year Mr. Taylor, one of the judges, came out with a remark that although Suffolk horses might be nice ornaments to parks, they were not useful to farmers; that they could not be compared with horses from the shires; that a pony might as well be compared to a hunter, and so on. As regards the nags, Mr. Barker, from Essex, did not put in an appearance; but Major Barlow was, as usual, at his post, and Brennus, the reserve number at Romford, carried off the prize for the best thoroughbred stallion. Through some mistake of the management he was placarded for a time as only second best, and, of course, there was something of a row Royal on the correction being made. The light-weight carrying hunters comprised some capital horses, and although Mr. Bennett, one of the judges, did not express entire satisfaction with the heavy-weights, there can be no question but the Dereham "nag" show will rank as one of the best of the year. To revert for a moment to the agricultural horse stock it may be remarked that Norfolk cart horses have now been constituted by the Society into a separate division, and the Norfolk farmers have come out strongly under this head, and contributed to the Dereham show a good contingent of hearty active animals.

As regards the sheep and pigs, the Merton Southdowns were not much missed, as Lord Walsingham did not exhibit of late about home; but Lord Sondes from Elmham, and the Prince of Wales from Sandringham, came bravely to the rescue; and the omnipresent Mr. Colman also proved that he had dabbled in Southdowns in his usual enterprising fashion, having gone for inspiration to the flocks of Lord Sondes and Sir W. Throckmorton. Mr. Giblin came all the way from Essex with a grand long-woolled ram; but in the long-woolled classes Mr. T. Brown of Marham swept off, as usual, pretty well all the prizes. The miscellaneous sheep comprised some capital Oxford Downs, shown by Mr. H. Overman of Weasenham, the son, it will be remembered, of one of

the most eminent Southdown sheep-breeders of the century. In the pig department the Duckerings, the Stearns, and the Sextons had most of the prizes; the Rev. T. L. Fellowes kept one of the premiums, however, in Norfolk with a white boar, of the "small" breed, weighing only a trifle of 25 stone, and yet not unwieldy from a pig-connoisseur's point of view. Mr. Everett of Bridgham also showed a fine boar of the large breed.

The exhibitors of implements comprised: Messrs. Baker, Wisbeach; Baker, Lynn; Bowles, East Dereham; Bradford and Co., 63, Fleet-street; Burrell, Thetford; Cornish, Walsingham; Dyball, Weaseuham; Dodman, Lynn; Fuller, East Dereham; Garrett and Son, Leiston; T. Gidney, East Dereham; Gill, East Dereham; Hambling and Son, East Dereham; Holmes and Sons, Norwich; T. Le Fevre, Norwich; Marshall, Sons, and Co. (limited), Gainsborough; Maude and Walker, Shrewsbury; Murton and Turner, Kenninghall; Rainforth and Son, Brayford Head, Lincoln; Randall, North Walsham; Rands and Jeckell, Ipswich; Readwin, Fakenham; Riches, Norwich; Riches and Watts, Norwich; Roby and Co. (limited), Lincoln; Savage, Lynn; Thorn, Norwich; Woods, Cocksedge, and Warner, Stowmarket; Howes and Sons, Norwich; Baly, Sutton, and Co., Norwich; Hills, Sudbury; Hnbhard, East Dereham; King, Coggeshall; Packard and Co., Ipswich; Townsend, Fordham, Cambridgeshire.

The judges awarded a silver medal to Burgess and Key for their self-raking reaper; and a silver medal to Riches and Watts for Howard's self-acting lever-rake. They also highly commended Maude and Walker's water-tight galvanized iron cattle-crib; Mr. Redwin's set of team-harness for four horses, with chain trace; and Woods, Cocksedge, and Warner's one-horse gear with separate intermediate motion.

PRIZE LIST.

JUDGES.

CATTLE.—J. K. Fowler, Aylesbury; M. Savage, Sarsden Lodge, Oxon.

NORFOLK CART HORSES.—J. H. Plowright, Manea, Cambridge; B. Taylor, Peterborough.

CART HORSES OF ANY BREED.—W. Godson, Normanby-by-Slow, Lincoln; H. W. Martin, Littleport, Cambridge.

THOROUGHbred AND HENTING HORSES.—J. E. Bennet, Bosworth Grange, Rugby; G. Higgins, Castle Close, Bedford.

HACKNEY AND RIDING HORSES AND PONIES.—T. Percival, Wansford; W. Stunt, Gillingham, Kent.

SOUTHDOWN SHEEP.—F. Budd, Hatch Warren, Basingstoke, Hants; B. H. Masfen, Peaford, Wolverhampton.

LONG-WOOLLED AND CROSSBRED SHEEP.—J. H. Caswell, Laughton, Folkingham, Lincoln; W. Garne, Cirencester. Pigs.—J. Moon, Plymouth.

IMPLEMENTS.—T. Chambers, Colkirk, Norfolk; J. Fergusson, Brettenham, Norfolk.

CATTLE.

SHORTHORNS.

Bull above three years old.—First prize, £10 and silver medal, Thomas Rose, Great Melton (Logarth the 2nd); second, £7, Rev. J. N. Micklethwaite (Theodorus).

Bull above two years old.—First prize, £10 and silver medal, Lady Pigot, Branches Park (Bythis); second, £7, Lady Pigot (Victor Rex).

Yearling bull.—First prize (Prince of Wales's), £10 10s. and silver medal, J. Upson, Rivenhall, Essex (Prince Lincoln); second, £7, Lady Pigot (Gunpowder); third, £4, N. Catchpole, Bramford, Suffolk (Oxford Prize).

DAIRY CATTLE.

Cow above three years old.—First prize, £10 and silver medal, James How, Broughton, Hunts (Windsor's Butterfly); second, £7, N. Catchpole (Daisy); third, £4, Rev. J. L. Brereton, Little Massingham (Stranger).

Heifers above two years old.—First prize, £10 and silver medal, N. Catchpole (Coronet); second, £7, Lady Pigot (Dame Swift).

Yearling heifers.—First prize, £8 and silver medal, N. Catchpole (Lady Lubbock); second, £5, Lady Pigot (Dame Prudence); third, £3, J. How (Verona).

NORFOLK AND SUFFOLK RED POLLED.

Bull above three years old.—First prize, £10 and silver medal, and cup £10, B. Brown, Thursford (Norfolk Duke); second, £7, Sir W. Jones, Crammer Hall (Duke); third, £4, J. J. Colman, M.P., Norwich (Cherry Duke). Highly commended: Lord Sondes.

Bull above two years old.—First prize, £10 and silver medal, Lord Sondes, Elmham; second, £7, B. Brown (Bailiff); third, £4, Lord Sondes. Commended: T. Brown, Marham.

Yearling bull.—First prize, £10 and silver medal, G. M. Nicholson, Elmham (Nobleman); second, £7, J. Hammond, Bale (The Baron); third, £4, J. J. Colman, M.P., Easton Duke).

DAIRY CATTLE.

Cow above three years old.—First prize, £10 and silver medal, J. Hammond (Buttercup); second, £7, H. Smith, Honingham (Rosy); third, £4, B. Brown (Countess). Highly commended: J. J. Colman, M.P.

Heifers above two years.—First prize, £10 and silver medal, Sir W. Jones, Crammer Hall (Cherry); second, £7, B. Brown (Countess); third, £4, J. Hammond (Davy the 4th). Highly commended: Lord Sondes. The class commended.

Heifers above one year.—First prize, £8 and silver medal, J. Hammond (Bessie); second, £5, J. J. Colman, M.P. (Rose Bud). Highly commended: B. Brown. Commended: Lord Sondes.

CROSSBREDS.

Cows above three years old.—First prize, £10 and silver medal, J. Morton, Stow (Spot); second, £7, P. J. Sharman, Scarning (Nugget); third, £4, H. Overman, Weasenham. Highly commended: H. Overman. Commended: H. Overman.

Heifers above two years old.—First prize, £10 and silver medal, H. Overman (Handsome); second, £7, H. Overman (Butterfly).

Heifers above one year old.—First prize, £8 and silver medal, J. Morton (Moss Rose); second, £5, G. M. Nicholson; third, £3, J. Baly, Hardingham (Polly). Highly commended: J. Morton and H. Overman.

CALVES.

Three calves not exceeding six months old, bred in Norfolk.—Prize, £5 and silver medal, Lord Sondes. Highly commended: G. M. Nicholson.

FAT CATTLE.

Steer above three years old.—First prize, £8 and silver medal, J. J. Colman, M.P. (Briton); second, £5, J. J. Colman, M.P. (Easton Glory).

Steer not above three years old.—First prize, £8 and silver medal, J. How, Broughton; second, £5, R. Wortley, Suffolk.

Cow or heifer above three years old.—First prize, £5 5s. and silver medal, J. J. Colman, M.P.

Heifers not above three years old.—Prize, £5 and silver medal, and Prince of Wales' prize of £10 10s., W. How, Tottington.

HORSES.

NORFOLK CART HORSES.

Stallion.—First prize, £15 and silver medal, and £15, W. Welcher, West Tofts (Honest Tom); second, £7, J. Taylor, Walpole St. Peter (Young Matchless); third, £4, J. Howell, Runcton Holme (Young Thumper).

Three years old stallion.—First prize, £10 10s. and silver medal, J. How, Denver (Farmer's Glory); second, £7, W. Matthew, Carbrooke (Young Bardolph); third, £4, F. Spelman, Tivetshall (Ploughboy).

Two years old stallion.—First prize, £8 and silver medal, R. K. Folley, Sutton, Lincolnshire (Long Major); second, £5, F. Spelman (Drayman); third, £3, L. J. Falmer, Snetterton (Judge).

Yearling entire colt.—First prize, £7 and silver medal, L. J. Palmer; second, £4, W. Welcher (Prince of Wales).

Mare and foal.—First prize, £10 and silver medal, W. Betts, Bunwell (Diamond); second, £7, J. Neave, East Tuddenham (Beauty); third, £4, J. Neave (Bunny).

Gast mare.—First prize, £5, £5 and silver medal, and £10,

E. Crowe, Denver (Smart); second, £7, H. Overman (Diamond); third, £4, J. Tingay, Ellingham (Brag). Commended: H. Overman.

Three-year-old geldings.—First prize, £7 and silver medal, R. Smith, Kimberley (Short); second, £4, J. Tingay (Boxer).

Three-year-old filly.—First prize, £5 and silver medal, W. Betts, Bunwell (Brandy); second, £5, T. Lombe Taylor, Starston (Countess); third, £3, F. O. Taylor, Thuxton (Beauty).

Two-year-old filly.—First prize, £3 and silver medal, E. Betts, Moulton; second, £5, E. Betts; third, £3, W. Allen, Little Ellingham (Smart). Commended: W. Allen.

Yearling filly.—First prize, £3 and silver medal, C. Beart, Stowbridge (Lioness); second, £5, J. Tingay.

Pair of cart horses.—First prize, £10 and silver medal, J. Tingay (Brandy and Smart); second, £7, H. Overman (Brag and Short); third, H. W. Allen, Lynn (Smiler and Short). Highly commended: H. Overman. Commended: E. Lewell, Weston.

CART HORSES OF ANY BREED.

Stallion.—First prize, £10 and silver medal, W. May, Upwell (Emperor); second, £7, C. Boby, Stutton, Suffolk (Prince Royal).

Three-year-old stallion.—First prize, £8 and silver medal, W. Wilson, Bayham (Bismarck); second, £5, N. Catchpole (Emperor).

Two-year-old stallion.—First prize, £6 and silver medal, H. Birkbeck, Stoke Holy Cross (Proctor); second, £4, J. Grout, Woodbridge (Emperor).

Yearling entire colt.—First prize, £5 and silver medal, B. W. Ground, jun., Whittlesey; second, £3, W. Welcher (Roya Albert).

Mare and foal.—First prize, £10 and silver medal, J. Tomlinson, Sutton Marsh, Lincoln (Diamond); second, £7, Executors of the late Thomas Capon, Dennington (Matchet). Highly commended, B. Mitchell, Denver.

Gast mares.—First prize, £10 and silver medal, B. W. Ground, jun. (Diamond); second, £7, H. Wolton, Newbourn (Diamond). Highly commended, J. Lines, Thorpe Parva; commended, Col. F. M. Wilson, Stowlangtoft.

Three-year-old filly.—Prize, £6 and silver medal, Col. F. M. Wilson.

Two-year-old filly.—Prize, £5 and silver medal, T. Calver, Burnham Thorpe.

Yearling filly.—Prize, £5 and silver medal, E. Crowe, Denver (Flower).

THOROUGHBREDS.

Stallion.—First prize, £15 and silver medal, Major Barlow, Hasketon (Brennus); second, £3, J. H. Norgate, Sprowston (Christmas Chimney). Commended: H. Limmer, Rondham (Lawkshaw).

HUNTERS.

Mare or gelding, equal to carry not less than 14 stones.—First prize, £15 and silver medal, J. J. Clark, Southacre (Sammy); second, £8, R. G. Beart, Rainham (Salt Fish).

Mare or gelding, not equal to carry 14 stones.—First prize, £10 and silver medal, C. Crossley, Warham (Thirsk); second, £5, J. T. Mills, Clermont (Columbine). Commended, T. Everett, Creake (Peter).

Three and four year olds.—First prize, £10 and silver medal, J. T. Mills (Rateacher); second, £5, Major Barlow (Knight of Khars). Commended, W. Branford (Godwick).

Brood mare.—First prize, £10 and silver medal, Lord Sondes; second, £5, J. T. Twaites, Carleton Forehoe (Bloomer).

HACKNEY AND RIDING HORSES.

Stallion.—First prize, £15 and silver medal, H. Stebbing, Stow Bedon (The Norfolk Trotter); second, £8, H. Bultitaf, Ely (Clear the Way). Commended, J. Warth, Sutton; J. Howel, Runcton Holme.

Mare or gelding.—First prize, £10 and silver medal, W. Cann, Wymondham; second, £5, J. Warth (The General).

Hackney mare or gelding.—First prize, £10 and silver medal, W. Cann; second, £5, W. Case, Tuttington (Priam). Commended, J. J. Colman, M.P.; R. G. Beart.

Hackney brood mare.—First prize, £10 and silver medal, W. H. Jilings, Thetford (Favourite); second, £5, J. J. Clarke. Commended, H. Stebbing, C. Beart.

COBS.

Cobs.—First prize, £10, and silver medal, H. Overman (Miss Constance); second, £7, C. Cook, Grimston (Sir

William); third, £4, Rev. W. F. Thursby, Bergh Apton, (Wonder).

PONIES.

Pony, not under 13, not above 13 hands 3 inches high.—First prize, £8, and silver medal, G. Rolfe, Wymondham; second, £5, Lord Stafford, Costessey (Billy); third, £3, T. L. Taylor (My Lord Tom Noddy). Commended, A. Winter, Lenwade; W. D. Sutton, Thwaite; and G. A. Ashley, Litcham.

Pony, not above 13 hands high. First prize, £5, and silver medal, F. G. Flowerdew, Great Fransham (Kit-y); second, £3, G. M. Sexton (Matchless). Commended, G. Baly.

SHEEP.

SOUTHDOWN.

Shearling ram.—First prize, £10, and silver medal, J. J. Colman, M.P.; second, £7, J. J. Clark; third, £4, J. J. Colman, M.P.

Ram of any age.—First prize, £10, and silver medal, Lord Sondes; second, £7, Lord Sondes; third, £4, C. Boby.

Five shearling ewes.—First prize, £7, and silver medal, Lord Sondes; second, £4, J. J. Colman, M.P. Highly commended, Lord Sondes and J. Overman; commended, H. R. H. the Prince of Wales.

Ten ewe lambs.—First prize, £5 5s., and silver medal, J. J. Colman, M.P.; second, £3, Lord Sondes. Highly commended, H. R. H. the Prince of Wales; commended, Lord Sondes.

Ten wether lambs.—First prize, £5, and silver medal, Lord Sondes; second, £3, J. J. Colman, M.P. Highly commended: H. R. H. the Prince of Wales. Commended: Lord Sondes.

LONG-WOOLLED.

Shearling ram.—First prize, £10, and silver medal; second, £7; third, £4, T. Brown, Marham.

Ram of any age.—First prize, £10, and silver medal, J. Giblin, Bardfield, Essex; second and third prizes, £7 and £4, T. Brown.

Two ram lambs.—First prize, £10, and silver medal, T. Brown; second, £5, T. Brown.

Five shearling ewes.—First prize, £7, and silver medal, T. Gunnell, Milton, Cambs; second, £4, J. Giblin.

SHEEP OF ANY KIND.

Ten ewe or wether lambs.—Prizes not awarded.

Three shearling wethers.—First prize, £7, and silver medal, J. J. Colman, M.P.; second, £4, John Overman, Burnham, Sutton.

Ten ewes.—First prize, £10, and silver medal, H. Overman; second, £5, Lord Sondes.

Ten ewes, southdown or longwoolled.—First prize, £10, and silver medal, H. Overman; second, £5, T. Rose, Great Melton.

Twenty shearling ewes. First prize, £10, and silver medal, H. Overman; second, £5, J. J. Clark; third, £4, Edmund Farrer, Sporre.

PIGS.

LARGE BREED.

Boar, above twelve months.—First prize, £5, and silver medal, Messrs. Duckering and Son, Lincolnshire; second, £3, H. Neal, Welney.

Boar not above twelve months old.—First prize, £5, and silver medal, F. H. Everitt, Bridgham; second, £3, Messrs. Duckering and Son.

Breeding sow.—First prize, £5, and silver medal, Messrs. Duckering; second, £3, F. H. Everitt.

SMALL BREED (BLACK).

Boar above twelve months old.—First prize, £5, and silver medal, G. M. Sexton; second, £3, G. M. Sexton. Highly commended: S. G. Stearn.

Boar not above twelve months old.—First prize, £5, and silver medal and £5 5s., G. M. Sexton; second, £3, G. M. Sexton. Highly commended: S. G. Stearn. Commended: Messrs. Duckering.

Breeding sow.—First prize, £5, and silver medal, G. M. Sexton; second, £3, G. M. Sexton. Highly commended, S. G. Stearn.

Three breeding sows.—First prize, £5, and silver medal, G. M. Sexton; second, £3, S. G. Stearn.

SMALL BREED (WHITE).

Boar above twelve months old.—First prize, £5, and silver medal, Rev. T. L. Fellowes, Honingham; second, £3, Messrs. Duckering.

Boar not above twelve months old.—First prize, £5, and silver medal, Messrs. Duckering; second, £3, S. G. Stearn. Commended: S. G. Stearn.

Breeding sow.—First prize, £5, and silver medal, Messrs. Duckering; second, £3, H. Neal.

Three breeding sows.—First prize, £5, and silver medal, Messrs. Duckering; second prize not awarded.

At the dinner the Earl of LEICESTER said the Society was established, he believed, for the purposes of the promotion of agriculture, and, with the exception of the prizes which it awarded to implements, it utterly ignored all connection with the soil. If they were not great breeders of animals they were surely great feeders, and it must be all important for them to know what with their soil and in their climate was the best mode of cultivating the earth so as to produce a heavy root crop. Was steam cultivation, of which they had heard so much lately, applicable to the Norfolk soils? Last winter he subsided 400 acres of light land by the aid of steam twelve inches deep. Surely it must be important to many gentlemen to know what were the present and what would be the future results of this experiment. Again, was it not possible that they were sowing more seed per acre than was desirable? He had from time to time lessened the quantity of seed per acre, and with success; and this year he had sown some barley twelve inches from drill to drill, and when he last saw it, it promised to be a better crop than when sown more closely. There were many other subjects connected with the cultivation of the land upon which yet little light had been thrown, and which fairly came within the scope of this society. They might discuss the Game Laws, the question of hedgerow timber, and of larger enclosures, or they might discuss the best system of agreement between landlord and tenant. They might think that he was suggesting for their consideration subjects that were dangerous and delicate. He did not believe it. On the contrary, he believed that there was a great desire on the part of the landlords of the county to meet the views of their tenants. They acknowledged a community of interest; they knew that the prosperity of the tenant meant the prosperity of the landlord. He trusted that the time was not far distant when every unnecessary restriction which interfered with the proper cultivation of the land would be forever prohibited. It was for them to determine whether they would extend the operations of the Society. If they so determined, he would suggest for their consideration whether they might not offer prizes for the best essays on the most improved system of growing different crops on the Norfolk soils; whether they might not obtain reports upon the various experiments that were annually carried out by the members of the Society; and whether they might not start certain subjects for discussion at these annual gatherings. If they adopted any of these suggestions, or others which might occur to them, having the same object in view, extending the operations of the Society, and but slightly taxing its pecuniary resources, he would predict that they would give new life to the association, impart knowledge where knowledge did not at present exist, make the meetings interesting and profitable, which, he must say, he did not think they were at present, and afford information to every farmer in Norfolk.

Mr. SEWELL READ, the chairman, said it had been proposed that there should be a great East Anglian Association. By all means; but let not the Norfolk Association be "lugged" into it. Let the Norfolk Association continue its annual county meetings; and then, by all means, let there be a great East Anglian exhibition, if it could be accomplished. But it appears now-a-days as if everything must be done on some monstrous and inconvenient scale. That day's exhibition was good and large enough to satisfy anybody with reasonable expectations, and was quite extensive enough for anyone to inspect. In looking round the show he could not help thinking how much this country depended, and must depend for years, on the home supply of meat. One-third of the corn eaten in this country was produced abroad, but not above one-tenth of the meat eaten came from foreign countries. The other night in the House of Commons Mr. Forster made an attack upon the county of Norfolk. It was very good policy to carry the war into the enemy's camp, or, when one had no case to abuse the plaintiff. Instead of making any answer to the charge, he (Mr. Read) endeavoured to lay before the House of

Commons some facts with regard to the Veterinary Department of the Privy Council. Mr. Forster stated that Norfolk had not properly carried out the Cattle Diseases Act, and what was more, that they had offered it great opposition. Now he would appeal to any magistrate, and to the whole county, whether they had not right loyally endeavoured to carry out that Act, and whether it had not been administered with strictness and even with what some people would call severity. What was it to which Norfolk raised an opposition? The moment the Act came into force he endeavoured to instil into the authorities the fact that at the Quarter Sessions were adjourned and could not meet till Michaelmas, there would be a lapse of time before it could be brought into operation in Norfolk. But the Privy Council put the Act in force for them; and with what result? They forwarded instructions to all cattle-plague inspectors, numbering 53, telling them that they were to put the Act in force with regard to foot-and-mouth disease. In the course of four or five weeks some seven of these 53 inspectors took upon themselves to visit all the farms infected with foot-and-mouth disease, and sent in a "little" bill for something like £100. If the whole of the 53 inspectors had taken upon themselves to obey the dictates of the Privy Council, the bills would have amounted to something like £1,200; so that, to say the least, they would have been taxed to the tune of something like £10,000 a year. What was said at the time the Act was passed was, "Do not have any hard and fast line, and then you can carry out this Act well." But that was just what the Privy Council did not seem to see. They ordered the county to do certain things which would have been just and most expedient for other counties. Take some breeding counties in Wales for instance. The only animals introduced into the country during the three years he was there were three pedigree bulls. If there were an outbreak there of foot-and-mouth disease, how necessary and how easy it was to isolate the farm! Again, if there were an outbreak of pleuro-pneumonia, how easy and how necessary it was to isolate and slaughter the diseased animals at once. But to apply the Act to Norfolk, in 1869 it would have been necessary to isolate nine-tenths of the cattle, and to slaughter the other tenth, as nine-tenths of the stock in that year were suffering from foot-and-mouth disease, and the other tenth from pleuro-pneumonia. Moreover, it would have been also necessary to stop all fairs and markets, and all transit of cattle. Therefore, he contended that it was perfectly ridiculous for gentlemen in the Privy Council to suppose that they could frame orders which could be carried out in Norfolk as in Wales or Westmoreland, and that they must allow the local government of the county to have some voice in the way in which they should apply them. What he complained of was, not so much the Act of Parliament and the Orders in Council, but that Norfolk, which imported 19 out of the every 20 head of cattle they grazed, was made to cut off the disease by dribbles. Their stock came principally from Ireland. There was no law there concerning cattle. In Ireland they would not have the Orders in Council; and as to an Act, they dared not pass one; consequently there were cattle diseases in that country, and a month after they had broken out the beasts would be upon Norwich Hill. They therefore said to the Privy Council, "You ought not only to make us stamp out the disease in dribbles, but go to the fountain head—to those countries from which we import cattle, and there stamp it out also." Again, he saw a lot of Dutch heifers on Norwich Hill on Saturday. It was said on Tuesday at Lynn by a gentleman who ought to have known better, that there was no disease whatever among the cattle in Holland. Now in the month of April there were 483 cases of pleuro-pneumonia in one small province of Holland, from which they were going to import store stock, which they did not want, because it was dangerous. This stock would be imported after what was called "quarantine"—twelve hours detention at the ports. Then Mr. Forster told the House that the county of Suffolk carried out the Act much better than Norfolk did, and also much more economically. He stated that Suffolk paid only £253 in carrying out the Act, while Norfolk paid £841. Now what were the figures? He (Mr. Read) had received them from the Clerk of the Peace for Suffolk, who stated that for that county on the 31st of March the cost had been £1,128; whereas up to the last Quarter Sessions the amount that had been ordered to be paid for Norfolk was £946. Mr. Forster no doubt had his information from the Veterinary Depart-

ment, which was always somehow or other in the wrong, and which must have inverted the figures to make Norfolk appear expensive and extravagant. Now, it was well known that in Suffolk 42 of the police were employed as inspectors. Therefore, not only had Suffolk paid more than Norfolk, but if the police were only now sufficiently employed they must at any rate have had precious little to do before. But the police were not the right men to select as judges of cattle diseases. While on this subject he would remark that the present position of the cattle trade was most unsatisfactory. The great London market was shut against all country buyers. That to Norfolk men was a most serious detriment and hindrance. They were told that there would be a new market opened for the sale and slaughter of foreign stock on the 1st of January. And then what would happen? Why, all their tolls would be doubled in the Metropolitan Market. Let them be doubled by all means if there would be ensured some security against foreign diseases. But he did not think that would be the case. The market was not begun. There was simply a wall built up to separate the site from the adjoining land. But there was now a good market if they liked to use it, and he contended that they ought to continue to make use of the wharf, and to remove the cordon from London, and to let their cattle come free. The Veterinary Department of the Privy Council had spent £12,000 a year besides law expenses and stationary; and for the purpose of collecting imperfect, unsatisfactory, and unreliable statistics £16,000 was expended, altogether about £30,000, which might be employed in providing a good department to be attached, say, to the Board of Trade, though, as far as he had seen of Government departments, he had come to the conclusion of Mr. John Bright that farmers had better think more of sunshine and showers than of any assistance they were likely to receive from the Government. But Government would not let them alone. There was never a year without its imposing upon them new taxes and new rates. It was therefore the duty of agriculturists to be more united and more stirring than they had been hitherto.

Mr. FOWLER, one of the judges, said that the show was an admirable one, and far beyond the expectations of those who like himself, came from a distance. He was struck with the remarkable usefulness and value of the cattle of this district. The cows had good useful udders, so that they were likely to be capital cows for the dairy; while the bullocks had capital clines and good backs, but they were somewhat deficient in springing of ribs and in the hind-quarters. Amongst the lot they scarcely found an animal but what was fit for a show-yard. As a Shorthorn breeder, he wished he could put some of the good points he found upon the Norfolk poiled cattle on the animals which he was breeding. No doubt there was scarcely a county in England in which were not to be found peculiarities and specialities of cattle, pre-eminently adapted for the districts in which they were grown; and he should be the last to recommend practical agriculturists to depart from that class of animals which they found so useful, to Shorthorns which were so much talked about, and which were, he believed, the most valuable and beautiful kind of stock. At the show they found some of the most exquisite specimens of this beautiful breed ever seen in a show-yard. This proved that they had their eyes upon the best form and the best class of animal they could possibly find, and that they were willing to try them in this district, in which the local breed was so valuable and so good. Having stated this with regard to the show, he might say how cordially he endorsed the President's remarks as to the conduct of the Government with regard to cattle; but, perhaps, he might be pardoned for saying before the members of a large and important agricultural county he deeply regretted to find that when their excellent member, Mr. Read, brought forward a matter so greatly affecting the interests of the farmers of England, and when their flocks and herds were in imminent danger, a count-out was the result. It did not speak well for the cordial feeling that ought to exist between county members and their county constituencies, when they allowed a gentleman like Mr. Read to bring forward a question and not give him the opportunity of having it fairly and honestly discussed. He came from a county which was proud of being represented by one of the most eminent statesmen in England, and, indeed, in the world, and he should feel it his duty to draw that right hon. gentleman's (Mr. Disraeli) attention, as also that of the members for his county, to this

matter, so that they might not again have their interests neglected, or be deserted in the hour of need.

Sir WILLIAM BAGGE, M.P., explained that Mr. Read would not have been left alone had his colleagues been aware that the question was coming on that night, but they made inquiry, and they were informed that there was no probability of its doing so. They, therefore, went and enjoyed a little rest.

Sir WILLOUGHBY JONES said the pastures of Norfolk might be divided into two categories. The rich pastures on Marshland and in the valleys would carry Shorthorns as breeding stock extremely well, and there he often found fine specimens reared. But he did not think that their light acres in a light land country would enable them profitably to breed Shorthorns. If they would they could fatten them better than any people in the world, because they knew better how to use turnips and cake. But it was a different thing to breed animals upon thin and wiry acres. He did not believe it possible to breed Shorthorns satisfactorily on the upland farms. They would have to keep a succession of vetch crops growing in the summer, for somehow a cow would have succulent food or she would not give her calf the milk required. In cultivating home-breds and bringing them to a great state of perfection, Mr. Hammond and Mr. Browne among others had done a great and important work, for which they ought to thank them. No doubt where a county had a speciality—a particular class of stock that bore its name was known to be found within its borders, and was a very marketable commodity which gave it elsewhere an enhanced price—it ought to be cultivated. If the Norfolk stock became fashionable, as he believed would be the case, they would find many people who would come to Norfolk to buy bulls and cows, and that they would drive a profitable trade; and after all that was their principle business. Therefore, he thought that they should not do wisely if they dispensed with the prizes they now gave to cattle and sheep, because the use of prizes was, by competition, enabling persons who wanted males or females of those animals to know where to find the best; where the best were to be found was where the chief prize winner at these shows came from, and there the buyers would resort. If at any time this show was dropped, it would be a matter of question where the best Southdowns, home-breds, or Shorthorns, were to be found, and a very great facility would be removed from the purchaser, while a man would not get that profit which he deserved for the care and expense he had taken with his flock or herd. He was a great believer in Darwinism; he thought that they might modify an animal to almost anything. They had not yet reached perfection; and he would just throw out a question for solution by the next meeting, namely, who would tell them of a plant that would give them a good crop of hay, and afterwards a good crop of wheat. That was a great desideratum to farming. If they had a good plant of clover, they would get a good plant of wheat; but then they would not get a good plant of clover afterwards. There was another nut which he would give the members of Parliament to crack. The farmer and the labourer both produced genuine unadulterated goods; but the groceries bought by the one and the oilcake and manures purchased by the other were sadly adulterated. He suggested to their representatives that they should find out some means of checking this state of things. It was checked in America, where adulteration was made a penal offence; consequently the oilcake there was worth £2 a ton more than the English cake. Many present would not object to buy a ton of American cake without seeing it; but who would like to buy a ton of English cake without seeing a sample?

Mr. TAYLOR, one of the judges, suggested that the Suffolk horses should be exhibited in a class by themselves, as was done at the Royal shows. Nine years ago, when he judged at Dereham, he told the noblemen present at the dinner that the Suffolk horses were nice ornaments for their parks, but not useful to farmers. He thought so still. Suffolk horses could not be compared with Shire horses; they might as well compare a pony with a hunter.

Mr. BENNETT, another of the judges, said there was a good exhibition of animals in the thorough-bred or hunting classes, but he should have been more satisfied if he had seen a larger show of heavy weight-carrying hunters.

Mr. HENRY OVERMAN recommended farmers to grow beef and mutton rather than horseflesh, as the one paid better than the other.

Mr. J. T. MOTT described how he bought his experience in farming, and remarked that perhaps they would "pity the sorrows of a poor old man" who was once such a fool as to occupy 1,500 acres. That was twenty years ago, when he began by farming 800 acres of light land, which was then but in very poor condition. He knew that a root crop was the foundation of good farming. He would not stay to tell them how he burnt his fingers in dissolving bones, or how many big-bellied earboys of sulphuric acid he considered did not pay; but as the stench was not agreeable, he determined to purchase his superphosphate from a manufacturer. His first ten tons were so satisfactory that the next year he took the trouble to carry a pot of this savory composition to Professor Voelcker for analysis. This cost him 20s., but that was no object to such an enterprising farmer. The report was favourable, the analysis was printed on the hand-bills of the manufacturer as a voucher of quality, and he gave an extensive order. Everything promised well. The turnip ground was like a garden; the season was most favourable; but, alas! by some mysterious process the article,

which was called genuine, had lost its virtue. His turnips never came to the hoe—he dropped £250, and the bullock account did not look quite so well probably as the return made by the manufacturer of manures. This taught him never to deal with advertising quacks, and he had never been victimised since. But it must be allowed that in no article was there so much deception and difficulty in securing the money's worth as in the purchase of manures. The old proverb, "Muck is the mother of money" did not apply to all the infallible specifics which were thrust upon the farmer every market-day. After holding 1,200 acres for twelve years he let off 800 to one of the best tenants in the county at double the original rent. He had held it for eight years and had just taken a new lease, so he did not think that farming was such a bad thing after all. With regard to the exhibition, one of the most practical of its results was that an exhibitor soon discovered that his own animal was not the perfect beauty he imagined, and having the conceit knocked out of him went home a wiser if not a happier man.

THE CAMBRIDGESHIRE AND ISLE OF ELY AGRICULTURAL SOCIETY.

MEETING AT ELY.

Of cart-horses there was a remarkably good show; Mr. Cox, the well-known London dealer, purchased three entered by Mr. Warth, of Sutton, stating that three such together, within his experience, had never been seen at any previous show, or even three better by different exhibitors. In class I, Honest Tom" was again decorated by the blue ribbon. We need say no more of it than this, Tom being so very well-known. There were some very good entire two-year-old colts. The prizes were taken by Messrs. Gittus and Fyson. There were some commendable carts mares, Mr. E. Crowe's (Denver), "Smart," Mr. C. Male's (Cottenham), and Mr. J. Warth, jun's (Sutton) mare been especially praiseworthy. There was by no means a despicable lot of mares and foals, and the judges found some difficulty in arriving at their decisions. The reason there was so much difficulty in making the awards was, that many of the good mares had bad foals, or the foals were good while the dams were indifferent. The two-year-old geldings were passably excellent. The two-year-old fillies included some useful animals. Mr. J. Linton's two-year-old, by Honest Tom, being well-deserving the chief distinction and designated A. 1. by the judges, who expressed their opinion that this filly would take the first prize at the Royal Agricultural Society, at Wolverhampton, next week. He was pronounced to be one of the most extraordinary animals ever exhibited. There were some very good plough teams, Mr. J. Warth, sen., shewing two superior brown's. Next came four premiums offered by the city of Ely and neighbourhood. For premium 5, there was a lot of very moderate merit, under the head of three-year-old colt, gelding, or filly. Colts were but indifferently good. The whole of the animals shown in these four classes were not so good as might have been expected, considering that the neighbourhood of Ely is somewhat famous for this description of horses. There were some good entries for the special prize given by Viscount Royston, M.P., under the head of the best pair or team of cart horses. The entries successful for premium 7 were again victorious, while two of Mr. Warth's were second. Taken collectively, the horses for agricultural purposes were much better than those exhibited at March in 1869. The other section was composed of riding and coaching horses, the first five premiums being awarded by the Society for weight-carrying hunters, hackney stallions, and stud mares. There were 13 hackney stallions, 18 mares and geldings, 17 hackney mares and geldings, 8 stud hackney mares, 11 under the head of "cob, mare, or gelding," and a few for the premium to "pony, mare, or gelding, under 12 hands." The last four premiums were offered by the city of Ely. The special prize given by Mr. Evans produced 13 entries for the best pony, mare, or gelding not exceeding 13 hands high. The best saddle horse in the yard was Mr. J. M. Tharp's Phalanx, and this deservedly obtained the prize offered by Lord Royston. The same exhibitor, it will be seen, was also successful with the prize offered by the president,

Mr. O. C. Pell. This class was open to all England, and Mr. Tharp secured the honour of the judges' award. The prizes offered by Messrs. J. and H. Hall, Ely, for the second best hunter produced eight entries, and Mr. Tharp was again successful. Mr. M. Slater carried off the prize for the best light weight hunter. Mr. G. S. Hall, Ely, Mr. J. Linton, Westwick Hall, and Mr. Long, of Carlton, were competitors in the former division, with Mr. Nash, of Royston, who showed also in the light-weight department, with Mr. Briggs, Babraham; Mr. T. Gardner, Moulton; Mr. G. S. Hall and Mr. H. Long, jun., Shippey Hill. Major Pemberton's prize for heavy hunters brought out six up to fifteen stones, owned by Messrs. H. Jones, Littleport; W. Goulder, Wimbotsham; Linton Long, and G. S. Hall, the first named being successful.

There were fifteen pens of sheep, and among the short wools there were some very fair shearing rams, and also some cross-bred lambs. They were small, but thought to be creditable to the district. The specialities of sheep were two Shropshire shearlings, the property of Lord Chesham. The sheep shown against them included Shropshire Downs, Southdowns, Hampshire and Oxfordshire Downs. His lordship took first and second prizes. Mr. F. Street, of Bedford, was highly commended for his Oxford, being larger than Lord Chesham's, but with not the equal style. For the best pen of five short-wooled ram lambs, Mr. Street was again successful with his Oxfords, which easily beat the Hampshire Downs. Mr. G. Cooke, of Horsehead Park, Linton, was the only exhibitor of black short-wooled ewes, certified to have brought up a lamb. In the class of shearing short-wooled ewes, Mr. Clayden, of Littlebury, and Mr. Street competed, the former with Southdowns, and the latter with Oxfordshire Downs, making it rather awkward to decide between the different breeds. The Suffolk ewes were not very attractive, though good examples of this contiguous race. Mr. T. Gunnell was again successful, taking the first and second for Leicester or Lincoln rams and ewes, for breeding, and another premium for the best pen of fat shearlings.

With Shorthorns Lady Pigot was chiefly successful in this department, taking numerous prizes. Her ladyship was first and second for bulls exceeding two years old, and for heifers not exceeding 1 year old; she also ranked second for the best bull not exceeding 2 years old. The chief premium for this class was taken by Mr. F. E. Pawlett, of Beeston, who also exhibited the best bull not exceeding 1 year old as well as the best heifer twelve months old. Mr. J. How, of Broughton, sent his capital cow in calf, with heifers and steers; while he and Lady Pigot were again winners in the classes open to all England, the former with the best cow or heifer for breeding purposes, and her ladyship with the best bull in the yard, the much abused and equally be-praised Bythus. Mr. Martin, of Littleport, has some good grazing steers, while Mr. H. Tuck, of Ely,

showed two fat Devon steers. Mr. J. Clayden was the only competitor in the new class of "Bull, Cow, and Produce," with his Romford entry.

The pigs were moderately good, and about as numerous as before.

Of implements the following were the chief exhibitors:—Wilkinson and Son, Ely; Healdy and Son, Cambridge; Peck, Ely; King, Ely; Cutlack, Ely; Edwards, Soham; Cowell, Soham; Garrett and Sons, Leiston Works, Suffolk; F. Savage, Lynn; Maude and Walker, Shrewsbury; Ward and Silver, Long Melford; Ransome, Sims, and Head, Ipswich; Mote and Son, March; G. Hamit, Haddenham; Burrell, Thetford; and Woods and Co., Stowmarket.

PRIZE LIST.

JUDGES.

CART HORSES.—J. Martin, Wainfleet, G. Bedford, Abbots Ripton. NAG HORSES.—T. M. R. Elliott Heathencote, Towcester, J. E. Bennett, Husbands Bosworth Grange, Rugby.

CATTLE.—J. Lynn, Strocton, Grantham, W. Ladds, Ellington, Huntingdon.

LONG-WOOLLED SHEEP.—T. Cartwright, Dunston Pillar, C. R. Fieldsend, Kirmoud, Market Rasen. SHORT-WOOLLED AND CROSS-BRED SHEEP AND PIGS.—H. Overman, Weasenhams, Brandon, C. Howard, Biddenham, Bedford.

IMPLEMENTS.—H. Long, Carlton, J. O. Daintree, Lolworth Grange.

WOOL.—W. J. Mawby, Downham.

BUTTER AND CHEESE.—T. Nichols, Cambridge.

POULTRY.—E. Hewitt, Eden Cottage, Spark Brook.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallion.—First prize, £10, W. Welcher, Brandon, Norfolk; second, £5, J. How, Denver. Commended: W. May, Upwell.

Entire two-year-old colt.—First prize, £5, E. Gittus, Snailwell; second, £3, A. Fyson, Stuntney.

Cart mare, not under four years old.—First prize, £5, E. Crowe, Denver; second, £3, C. Male, Cottenham. Commended: J. Warth, jun., Sutton.

Mare and foal.—First prize, £5, W. Nix, jun., Somersham; second, £3, D. Camps, Haddenham. Commended: B. Mitchell, jun., Downham Market.

Two-year-old cart gelding.—First prize, £4, H. Green, Nordelph; second, £3, G. E. Daintree, Fenton.

Two-year-old filly.—First prize, £4, J. Linton, Westwick Hall; second, £2, C. Ambrose, Stuntney Hill. Commended: G. Inskip, Kneesworth.

Plough team.—First prize, £6, J. Warth, sen., Sutton; second, £3, J. Dawson, Newmarket. Commended: W. C. Little, Stag's Holt.

Three-year-old colt, gelding, or filly.—First prize, £4, R. Hopper, Whittlesey; second, £2, W. M. Pate, Ely. Commended: W. Mitchell, Wilburton.

Yearling colt, gelding, or filly.—First prize, £4, B. W. Grounds, jun., Whittlesey; second, £2, H. Green, Northdelph. Commended: E. Crewe, Denver.

Foal.—First prize, £3, W. Nix, jun., Somersham; second, £2, C. Ambrose, Stuntney Hill. Commended: T. Gunnell, Milton.

Pair or team of cart horses.—Prize, £10, J. Warth, sen., Sutton.

Entire horse for agricultural purposes, open to all England.—A cup, value £20, J. How, Denver.

RIDERS AND COACHES.

Stallion calculated to get weight-carrying hunters.—First prize, £10, H. Dench, Ely; second, £5, no award.

Hackney stallion.—First prize, £10, H. Bultitait, Bedwellhay; second, £5, W. Flauders, Mildenhall. Commended: J. W. Gosling, Little Bradley-place, Newmarket.

Mare calculated to breed weight-carrying hunters and foal.—First prize, £5, H. Jones, Littleport; second, £3, J. Goodliff, Conington-lane, near Stilton. Class commended.

Mare or gelding, under five years old, adapted for hunting purposes.—First prize, £5, T. Gardner, Moulton; second, £3, Mr. Cockerton, Girton. Commended: T. Briggs, Babraham.

Hackney mare or gelding.—First prize, £4, J. Warth, jun., Sutton; second, A. Gittus, Worlington. Highly commended: W. Staples, Moulton.

Mare calculated to breed hackneys, with foal at foot.—First prize, £5, J. Martin, Littleport; second, £3, C. Beart, Stow. Commended: J. Martin, Littleport.

Cob, mare, or gelding, not exceeding 14 hands 2 inches high.—First prize, £4, Mr. Hayes, Harston; second, £2, F. Reynolds, Chatteris. Commended: Dr. A. J. Mackintosh, Downham Market.

Pony, mare, or gelding, not exceeding 12 hands high.—First prize, £3, J. Goodliff, Conington-lane, near Stilton; second, £2, T. Wallis, Witchford. Commended: C. Clark, St. Neots.

Pony, mare, or gelding, not exceeding 13 hands high.—Prize, £5, H. Jones, Littleport. Commended: J. Goodliff.

Saddle horse exceeding 13 hands high, the *bono fide* property of a resident or occupier in the Isle of Ely or county of Cambridge, and which shall have been in the possession of the exhibitor for the six months previous to the day of exhibition.—Prize, a cup value £10, J. M. Tharp, Chippenham Park.

Hunter (open to all England), the exhibitor being a member or paying an entrance fee of one guinea.—Prize, £10, J. M. Tharp.

Hunter.—Prize, £5, M. Slater, jun., Trumpington.

Light-weight hunter.—Prize, £5, M. Slater, jun.

Weight-carrying hunter up to 15 stones, not exceeding seven years.—Prize, £10, H. Jones.

Horse or mare that shall jump the fences in the best form.—First prize, £6, G. S. Hall, Ely; second, £4, Rev. A. Wilder, Newmarket; third, £2, H. Jones.

CATTLE.

Bull, exceeding two years old.—First prize, £8, and second, £4, Lady Pigot, Branches Park. Highly commended, J. Clayden, Littlebury. Commended: C. Ellis, Meldreth.

Bull, not exceeding two years old.—First prize, £8, T. E. Pawlett, Beeston; second, £4, Lady Pigot.

Bull, not exceeding one year old.—First prize, £4, T. E. Pawlett; second, £2, J. Clayden.

Cow in-calf or in-milk.—First prize, £6, J. How, Broughton; second, £3, H. W. Martin, Littleport. Highly commended: J. Clayden, H. W. Martin.

Heifer, not exceeding three years old, in-calf or in-milk.—First prize, £4, Capt. Catling, Needham Hall; second, £2, J. How. Highly commended: Lady Pigot.

Heifer, not exceeding two years old.—First prize, £4, T. E. Pawlett; second, £2, J. How. Commended: Lady Pigot, H. W. Martin.

Heifer, not exceeding one year old.—Prize, £3, Lady Pigot.

Cow, in-calf or in-milk, not eligible to be entered in Herd Book.—First prize, £5, H. W. Martin; second, £3, A. Fyson, Stuntney. Commended: E. J. Ekins, Chatteris.

Heifer, not exceeding two years old, not eligible to be entered in the Herd Book.—First prize, £4, H. W. Martin; second, W. M. Pate, Ely.

Cow or heifer, for dairy purposes.—First prize, £4, J. Rush, Babraham; second, £2, J. Martin.

Alderney or Gurnsey cow or heifer.—First prize, £4, C. M. Bidwell, Ely; second, E. W. Harlock, Ely.

Polled cow or heifer.—First prize, £3, and second, £2, J. Martin.

Fat steer or heifer.—First prize, £4, G. E. Daintree, Fenton; second, £2, J. How. Highly commended: J. How, W. Sisman, Buckworth.

Pair of grazing steers, bred by and the property of the exhibitor.—First prize, £5, G. E. Daintree; second, £3, J. Martin. Highly commended: J. Martin.

Best bull in the yard, the exhibitor being a member or paying an entrance fee of half-a-guinea, open to all England.—Prize, £10, Lady Pigot.

Cow or heifer for breeding purposes, the exhibitor being a member or paying an entrance fee of half-a-guinea, open to all England.—Prize, £10, T. E. Pawlett.

Pair of fat bullocks fed by the exhibitor.—Prize, £5 5s., W. Sisman, Buckworth.

Bull, cow, and produce, the exhibitor being a member or paying an entrance fee of half-a-guinea, open to all England.—Prize, £10, J. Clayden.

SHEEP.

Shearling Leicester or Lincoln ram.—First prize, £5, and second, £3, T. Gunnell, Milton.

Five Leicester or Lincoln ram lambs.—First prize, £4, and second, £2, R. Sparrow, Chesterton. Commended, T. Gunnell, S. Wallis, Grantchester.

Five shearling black-faced Suffolk ewes.—First prize, £5, and second, £3, H. Long, jun., Shippey Hill, Ely.

Five Leicester or Lincoln ewes, certified to have brought up a lamb this year.—First prize, £5, Captain Cathing, Needham Hall.

Five shearling Leicester or Lincoln ewes.—First prize, £5, and second, £3, T. Gunnell.

Five Leicester or Lincoln ewe lambs.—First prize, £4, and second, £2, R. Sparrow.

Shearling short-wooled ram.—First prize, £5, and second, £3, Right Hon. Lord Chesham.

Five short-wooled ram lambs.—First prize, £4, F. Street, Bedford; second, £2, Nockolds and King, Saffron Walden.

Five short-wooled ewe lambs, certified to have brought up a lamb this year.—First prize, £5, G. Cooke, Horseheath Park, Linton.

Five shearling short-wooled ewes.—First prize, £5, J. Clayden; second, £3, F. Street.

Five short-wooled ewe lambs.—First prize, £4, F. Street; second, £2, G. Cooke.

Five cross-bred wether lambs.—First prize, £4, J. J. Ellis, Thriplow; second, £2, J. Rush, Babraham.

Five long-wooled fat shearlings.—First prize, £4, and second, £2, T. Gunnell.

Five short-wooled fat shearlings.—First prize, £4, and second, £2, H. Long, jun.

PIGS.

Boar, large breed.—First prize, £3, H. Neal, Welney; second, £1 10s., G. E. Daintree, Fenton.

Boar, small breed.—First prize, £3, E. King, Ashley Hall.

Sow, in-pig or suckling, small breed.—First prize, £3, E. King, Ashley Hall; second, £1 10s., H. Neal, Welney.

Three sow pigs, not six months old, large breed.—Prize, £3, H. A. Kilham, Tydd St. Mary.

Three sow pigs, not six months old, small breed.—Prize, £3, E. King, Ashley Hall.

IMPLEMENTS.

Collection of agricultural implements.—First prize, £10, H. and J. Cutlack, Ely; second, £5, W. Wilkinson and Son, Ely.

HARNESS.

Collection of cart and uag harness.—First prize, £4, R. King, Ely.

BUTTER AND CHEESE.

Three pounds of butter, made up in single pounds.—First prize, a patent churn, J. Stanford, Ely; second, £1, T. Gunnell, Milton. Highly commended, J. Bailey, Ely.

Cream cheese (not less than 1lb.).—First prize, £2, W. Cutlack, Littleport; second, £1, J. Cutlack, jun., Littleport.

At the Dinner, Lord ROYSTON said, the show of cart horses had been, as everybody must admit, as good as could be attained in any county. The show of horned stock had also been very good; he believed the only animal which had deteriorated had been the sheep—he supposed because that was not a great sheep-growing district. The Society was larger than last year, and the entries for this show larger also.

The Rev. Cannon HOPKINS said he was "an animal" and a man, and also a clergyman. He thought no excuse, therefore, was wanted to support any great society like that, or any great object like that which had brought them together, that was intended to elevate the human species, and set them thinking—to promote intelligence, and usefulness, and happiness, in the country. Such objects were certainly deserving of all the support of the clergy.

THE NORTH-EAST AGRICULTURAL ASSOCIATION.

MEETING AT BELFAST.

Good as the shows of this Association have been of late, that of this year surpassed in many particulars any former show held in Belfast. There was a capital entry of Short-horns, both in the general and farmers' classes, a fair show of sheep, a very superior lot of pigs, and a better show of horses than we have ever seen in the North. The implement department was so well filled that it resembled a Royal show more than that of a provincial meeting. Mr. Campbell's Mameluke, the first prize aged bull of the Short-horn breed had a good fore-end, but he did not carry his good points through, and for choice between the two, we would have taken Mr. Moutray's Governor, which was put second. Mr. Beresford showed Knight of the Thistle in this class, a long, good bull, but a little too much on the leg, and his white colour did not seem to please the judges, who gave him the reserved number; but nevertheless, he is a good one. In the two-year-old class the first prize was given to Mr. Moutray's General Prim, a nice, compact, promising bull; and the others were all good of their kind, although we do think the judges left one of the best, if not altogether the best, of the lot out in the cold. The yearling bulls were very fair, and the first prize went, we think very rightly, Mr. Maxwell's Half-Sovereign, a prize bull of the last Kildare-street spring show. The calves were also very promising. Mr. Beresford's first prize cow is a nice topped, even animal, and Mr. Moutray's Princess of Warlabry, the second in the class, was also a very even cow, as this was altogether a good section. The heifers in-calf and in-milk were useful; and in the class of the two-year-old heifers Mr. Moutray took first and second prizes, and also first in the class of yearling heifers, together with the Ulster cup, which he has now won for the third and last time. Mr. Innes' calf bids fair to be a future winner. The show of Ayrshires was uncommonly good—quite good enough, in fact, to make a show in their native country; and

Mr. Peake's Devons might have been shown at the Bath and West of England with credit to the owner, who took all the prizes with them.

In the thorough-bred stallions the judges had little trouble in putting Mr. Batt's Duke of York first, as he is a compact grey horse, with strength, style, and shape enough to please any one; and we consider him a great acquisition to this part of the kingdom. Mr. O'Malley's Orphan is a sweet draught stallion, and deserved the place he got; and so also is Mr. Todd's second prize horse—a nice, short-legged, compact bay, which was put second in his class. Mr. Lindsay showed in the extra stock Young Harkaway, nearly thorough-bred, to which the judges gave a prize, believing him to be a very useful sire for getting carriage horses. There were, no doubt, a good many horses, and on the whole, these sections showed that a considerable improvement is going on in the north-east district in this way.

There was a good show of sheep, of Leicesters and Shropshires. Col. Leslie, Mr. Moutray, and Captain Montgomery were the leading exhibitors of Leicesters; and Mr. John Peake and Mr. Richardson, Glenmore, of Shropshires, which were very good. Mr. Richardson's excellent ram, bred by Lord Chesham, got the cup, while his pen of ewes also took a cup.

We have said that the show of pigs was superior, and this will be understood when it is stated that Lord Clermont was a leading exhibitor, and his lordship was well supported in the Berkshires by Mr. M'Clintock, Lord O'Neill, Lord Downshire, Mr. Perry, and Mr. Glenn. In the white breeds Mr. Holmes showed some very superior Yorkshires, and Mr. Perry took the cup, with a first-rate Yorkshire sow, bred by Mr. Cooper of Limerick.

In the poultry department, which was filled, the Dorking and Spanish breeds made the best appearance, and the prizes

in the former class fell wholly to Mr. George Martin, while the cup fell to Mr. Mulligan, who won the most points in the class. The display of butter was small, and in that of green flax the samples exhibited were much better than the appearance of the fields under that crop would have led us to expect.

A great source of attraction was presented in the exhibition of Lord Lurgan's celebrated greyhound Master M'Grath, who had a house specially erected for his accommodation, where he received his visitors.

The show of implements was the largest ever seen at a show of the North-East Association, comprising as it did sixty stands, and although a mere enumeration of the names of exhibitors does not convey a sufficient impression of the extent of this part of the show, we must confine ourselves to it for the present. Most of these exhibitors at Belfast will have stands at the ensuing Royal Irish Show, and these were: M'Kenzie and Sons, Abercorn Buildings, Belfast; Jacques, Capel-street, Dublin; Hillsborough Woollen Company (limited), Hillsborough; Riddell and Co., Donegall-place, Belfast; Harbinson and Co., High-street, Belfast; Gorton and Co., Queen's quay, Belfast; Daniel C. Magee, Gloucester-street, Belfast; Mairns and Co., High-st., Belfast; Hugh Rankin, Cromac-street, Belfast; Patterson and Sons, High-street, Belfast; Kennedy, Ballyme-glaif, Dumdonauld; Musgrave Brothers, Ann-street, Belfast; Picketsley, Sims, and Co. (limited), Leigh, Manchester; Taylor and Wilson, Accrington, Lancashire; Nicholson, Newark;

Wilson, Clough-mills; Scott and Co., Chemical Works, Belfast; Boucher, Moneyrea, Ballygowan, Belfast; Anderson and Sons, Ballymacarrett, Belfast; Liltigow, Downpatrick; Houghton and Thompson, Carlisle; Carlile and Co., May-street, Belfast; Tate, Downpatrick; Young, Ayr; Firth and Sons, Fall's-rd., Belfast; Lowther, Clontagh, Killyleagh; M'Ervil, Police-square, Belfast; M'Cutcheon, Ballysleagh, Newtownards; Scott, May-street, Belfast; Gray and Co., Cromac-street, Belfast; Arnold, Stockbridge, Donaghadee; Kane and Sons, Broughshane; Lyall, Glasgow; Scott, Killyleagh; Jack and Sons, Maybole; M'Kerrell, Mallusk, Belfast; Cashell, Main-street, Newton, Ayr; Gray and Co., Uddington, Glasgow; Barr and M'Jannett, Ardrossan; Askin, Newtownards; Peddie and Co., Princess-street, Edinburgh; Brown and Son, Ferguslie, Queen's-quay, Belfast; Gillis, Haydon Bridge, Newcastle-on-Tyne; Morrow, Crossnacreevy, Newtownbreda; Marsden, Solho Foundry, Leeds; Ransomes, Sims, and Head, Ipswich; Greenhill Brothers, Belfast; Richardson Brothers, Belfast; Ritchie and Sons, Belfast; Carson and Sons, Bachelors-walk, Dublin; Hunter, Maybole; Kemp, Murray, and Nicholson, Stirling; Richardson, Carlisle; Lillie and Elder, Berwick-on-Tweed; Brigham and Co., Berwick-on-Tweed; M'Kinlay and Son, Strabane; W. Pim, Belfast; Gordon and Co., Newton Works, Ayr; Scott, Killyleagh; Bingham, Ulster-buildings, Waring-street, Belfast.

There were trials of machines at the Ulster Model Farm, but no official adjudication.—From *The Irish Farmers' Gazette*.

SALE OF THE LATE LORD WALSLINGHAM'S SOUTH DOWNS,

AT MERTON, NORFOLK, ON THURSDAY, JUNE 29.

BY MR. J. THORNTON AND SALTER AND SIMPSON.

BY FARMERS AND FRIENDS IN MANY LANDS—as the brief inscription runs, when out for a stroll through King's, Trinity and St. John's, we encounter the anathema of Jonas Webb, as it looks on to old St. Mary's. And thus the glories of Babraham do *not* quite pass away; although John Day does, as he travels still further on to establish another Eastern Empire for the Southdowns at Merton. And precisely as one flock withdrew did the other advance. The opening page of the catalogue tells us how these "pure Southdown sheep have been very carefully reared for the last quarter of a century. The ewes were originally selected from the flocks of Mr. John Ellman, of Glynde, and Mr. Robert Boys, of Eastbourne; and the rams used were from Mr. Hart, Mr. Lugar, Mr. T. Ellman, Mr. Jonas Webb, and Mr. Rigden." But it was to Babraham they mainly looked for inspiration, and where they obtained not merely the model but eventually the modeller. The sale of Thursday last was not altogether unreserved, as there have been retained for further use at Merton "the first prize Royal Manchester yearling ram, a son of this ram, and a son of the first prize yearling ram at the Royal Meeting at Bury St. Edmunds, with a small flock of ewes that have been kept distinct at the Stanford farm;" and, as there might have been added, the services of John Day, the shepherd, so that it is probable enough that we shall soon see the Merton flock figuring again on the prize-list.

It is a curious feature in the history of the Southdown that since the time of the first Ellman much of his progress towards perfection has been achieved rather on the turnip lands of the east than from the sweet sorth bite of his native range. There have so flourished in turn, the flock of Henry Overman in Norfolk, of Jonas Webb in Cambridgeshire, of Henry Lugar in Suffolk, and of Lords Walsingham and Sondes, again, in Norfolk. A somewhat involuntary homage was offered to this transplanted excellence in the attendance at Merton, where

Mr. Rigden, "years ago a very great man," as the chairman put it, returned thanks for the breeders of Southdowns, while Mr. Hart was a buyer, the Duke of Richmond secured the second lot put up, and the Heasmans were amongst the longest bidders for one of the best rams. As, however, the price-list will show, almost every Down flockmaster of any eminence was anxious for a taste, as ever and anon a sheep was booked for Australia, Peru, Germany, Denmark, or Prussia; while Mr. Stone's three first lots go to Canada. It was, in fact, a most business-like meeting, conducted in the most business-like manner.

Nothing, indeed, could well have been more perfect than the general arrangements. The ring-side was so mapped out that, however large the company, every one could stand or sit, as he chose, and see, hear, and bid without any inconvenience or unseemly jostling of persons or interests. The lots, again, were changed with the most admirable order and promptitude, thanks to the good offices of Mr. Woods and the acting steward, Mr. Fooks; while the name of every buyer was audibly announced, without any of that attempted secrecy or suppression of intelligence which has too often been the rule on these occasions. Mr. Thornton, in truth, continually gave, "The Prince of Wales!" much after the manner of proposing the health of his Royal Highness, although any such formalities were very discreetly curtailed at the luncheon. In the absence of Lord Vernon, who was engaged on a traction-engine committee of the Upper House, Sir William Bagge discharged the duties of president with laudable decision, as there was not a word too much uttered by anybody, until Mr. Thornton, having replied for the auctioneers in a half sentence or so, his colleague was seized with the ambition to make a speech, and having, as it seemed, nothing particular to say, the company gradually dispersed under cover of an eloquent peroration.

A previous look through the sheep went to show that,

as might have been expected, the chief attraction of the sightseers centred in the covered avenue or well furnished tent of old sheep. Here were a number of rams famous on the records of the Royal meetings—prizes of different degree at Manchester and Oxford, relieved by commendations, special or simple, or pointed by relative worth, as with own brothers and half-brothers. These rams were of course very beautifully got up, if anything only too high in condition for mere use, although a magnificent illustration of the size to which a South-Eastern Down may be brought and the mutton he may be made to carry. Perfection, a well-preserved stylish three-year-old of fine character made 65 gs., a long price at his age; the buyer being Mr. Colman, the new member for Norwich, who made his mark at Dereham last week with every promise of coming still more to the front. One of the neatest of the old sheep was the third prize shearing at Oxford but, unfortunately, lame, as it was said, in the shoulder, and so sold for anything which anybody would give. The first prize shearing of last year was always remarkable for his size and weight, but it was a much mooted question at Oxford, as we wrote at the time, whether the second prize was not a better specimen of the South-down, and the sale went to correct the award. The Prince of Wales obtained the first prize for 50 gs., and Lord Portsmouth the rounder, smarter, and altogether more taking second prize for 54 gs. The choice, however, as it seemed to us of all the old rams was the last offered, a merely commended ram at Oxford, but one which must have gone on admirably in the interim. He showed more breeding, compactness of frame, or that "neatness" so essential in Southdown, than anything in the catalogue; while he began, moreover, with a capital head, not always an excellence in the Merton Downs. They coveted him in vain for Angmering, but the hammer fell—and how far more inspiring is that incisive *tap* of the hammer than the dull dribble of the sand-glass!—to 60 gs. for Sir Robert Throgmorton, from this time forward, a still more rising man on South-country, West-country, or All-England show grounds. There were no fewer than sixty-five shearing rams in the catalogue, and as something of a consequent necessity a number of very indifferent sheep, amongst them. There were mealy white-faces, weak necks and slack frames, and these sold dearly or cheaply enough, just as the market may write a fancy article. The top prices of the day were naturally to be found here, and a son of Royal Manchester reached to 180 gs., at which figure he was secured for Mr. Taylor, who is cultivating a Devon herd and Southdown flock at Westham in Sussex. This sheep is one of great substance and fine quality, but he has a bad lop, or almost Hampshire head; nor is he quite right in his shoulders, as we should be inclined to think just the sort of sheep Lord Portsmouth does *not* want as a cross for his flock, although the agent fought very gamely for him. A far better type of sheep, lively, handsome, and symmetrical, was bought for the Prince of Wales at 100 gs.; and there were other lots infinitely preferable at the price to the 180 gs., which is about the highest price we have ever seen given for a Southdown, as Sir Thomas Lennard only went as far as 170 gs. at Babraham.

The yearling ewes were not well sorted, two or three good being often balanced by a couple of culls; but they had mostly famous pedigrees; and some of the dowagers, the two and three-year-olds, answered for their high descent in their appearance. They looked, indeed, a deal more bloodlike than when made up for the Royal or the Smithfield Club, as the case might be. The lambs were not very blooming, and people seemed to think that buying a pure Southdown lamb was very like investing in

a thorough-bred yearling colt—that is, give what you would for him, he might be the best or the worst of his year. And no doubt they have often found it so at Merton—first favourites are so apt to go wrong. Still, they sold well, the general average being 6 gs. for 871 sheep, 280 of which were lambs. At Babraham Mr. Jonas Webb's general average was £11 17s. 3d. for 1,404 sheep; but he never offered a lamb, but kept these all until shearlings. Mr. Lugar's average was £6, but Mr. Sexton's and Mr. Overman's were under this, as well as Mr. T. Ellman's in 1867; so that the Merton sale will rank next to Babraham in Southdown history.

The attendance of visitors was noticeably not so large as that at the Shorthorn sale a few weeks since; but as we have already intimated, and as the names of purchasers will further show, this was of a very good order. After the absurd list given in *The Times'* paragraph, where certain nobodies were exalted, and many good men, as it would seem, as carefully kept out, we are the more inclined to hold to our rule of letting the proceedings speak to "the company present." During the earlier part of the day there was none more active amongst the crowd at the ring-side than Mr. John Clayden, who was in unusually good spirits, even for so generally cheery a companion. He was seized, however, with an apoplectic fit during the afternoon, and now lies in an almost hopeless condition at Merton; having never been conscious since he was struck down. His eldest son was fortunately at the sale, and other members of the family at once hastened to his aid. In the autumn of last year Mr. Clayden had a bad accident from his horse falling and rolling over him, when going at a smart gallop, but though much shaken at the time, he seemed to have thoroughly recovered from the shock.

YEARLING EWES.

- Five, by Royal Manchester, 10½ gs. each.—Prince of Wales.
- Five, by Manchester Reserve, 10 gs. each.—Duke of Richmond.
- Five, by ditto, £5 10s. each.—Sir G. Musgrove.
- Five, by ditto, £5 each.—Mr. J. White.
- Five, by Perfection, £14 each.—Mr. Banks.
- Five, three by Perfection, one by son of Royal Bury St. Edmund's, and one by Royal Worcester, £8 each.—Mr. E. Wilson.
- Five, by Third Manchester, £8 each.—Mr. H. Gorringe.
- Five, by ditto, £10 each.—Prince of Wales.
- Five, by ditto, £9 each.—Hon. E. Kenyon.
- Five, by Royal Manchester, £9 each.—Mr. E. Wilson.
- Five, by Manchester Reserve, £10 each.—Mr. H. Stone.
- Five, by Royal Manchester, £7 10s. each.—Lord Soudes.
- Five, by Third Manchester, £10 each.—Mr. H. Gorringe.
- Five, by First Prize Attleborough ram, a son of Royal Bury St. Edmund's, £6 10s. each.—Sir Geo. Musgrove.
- Five, by son of Royal Worcester, £8 each.—Prince of Wales.
- Five, by Viceroy, £6 each.—Mr. J. White, Australia.
- Five, two by a son of Royal Worcester, two by a son of Viceroy, and one by a son of Clipper, £5 each.—Mr. Majoribanks.
- Five, by a son of Clipper, £4 15s.—Mr. E. Wilson.
- Five, four by Viceroy, and one by a son of ditto, £5 15s. each.—Mr. J. Lloyd.
- Five, by a son of Clipper, £6 10s. each.—Prince of Wales.
- Ten, one by Royal Manchester, one by Perfection, one by Royal Bury St. Edmund's, one by a son of Royal Worcester, one by Viceroy, one by a son of Prince, two by Lot 1, one by a son of Clipper, and one by a son of Royal Bury St. Edmund's, £6 10s. each.—Mr. Scott.
- Ten, two by a son of Royal Worcester, two by a son of Norwich, two by a son of Clipper, three by a son of Viceroy, one by Viceroy, £5 5s. each.—Mr. J. White.
- Ten, one by Royal Manchester, two by a son of Royal Worcester, two by a son of Viceroy, two by first Attleborough, two by Viceroy, and one by Manchester Reserve, £4 5s. each.—Mr. H. Stone.
- Ten, one by Royal Manchester, two by Lot 1, two by a son of Clipper, one by a son of Royal Bury St. Edmund's, one

by Viceroy, one by Manchester Reserve, one by a son of Viceroy, and one by a son of Royal Worcester, £4 10s. each.—Mr. H. Gayford.
Ten, six by a son of Royal Worcester, two by Manchester Reserve, one by Viceroy, and one by a son of ditto, £6 each.—Mr. J. Lloyd.
Ten, two by third Manchester, one by a son of Royal Worcester, one by a son of Prince, two by Viceroy, two by Manchester Reserve, and one by a son of Clipper, £1 5s. each.—Mr. Stone.

THREE-YEAR-OLD RAMS.

Highly commended at Oxford, 25 gs.—Lord Sondes.
Third prize yearling at Attleborough, 12½ gs.—Mr. Hart.
Perfection, second prize yearling at Manchester, and first prize two-year-old at Oxford, 65 gs.—Mr. J. J. Colman, M.P.

TWO-YEAR-OLD RAMS.

By Young Gaiety, 25 gs.—Hon. E. Kenyon.
Third prize yearling at Oxford, 6 gs.—Mr. Griggs.
By a son of Young Gaiety, 13 gs.—Mr. Ahrens.
By a son of Young Gaiety, 8 gs.—Sir W. Fookes.
By Viceroy, 20 gs.—Mr. Uhden, Prussia.
By Viceroy, dam by Webb's 102, 40 gs.—Mr. Wachter.
First prize yearling at Oxford, 50 gs.—Prince of Wales.
Highly commended at Oxford, 10½ gs.—The Duke of Manchester.

By Young Gaiety, 16½ gs.—Mr. Richardson.
By ditto, 17 gs.—Mr. Barnes.
By Viceroy, 11½ gs.—Mr. Storie.
Second prize yearling at Oxford, 84 gs.—Lord Portsmouth.
By a son of Young Gaiety, 11 gs.—Mr. Henty.
By Royal Bury St. Edmund's, dam by Hart's ram, 5½ gs.—Mr. Hart.
By a son of Royal Worcester, dam by Webb's 107, 20 gs.—Count Fries.
Commended at Oxford, 60 gs.—Sir W. Throckmorton.

YEARLING RAMS.

By Perfection, dam by Royal Worcester, 17 gs.—Mr. White.
By Manchester Reserve, dam by Royal Newcastle, 7½ gs.—Rev. W. Holcombe.
By ditto, dam by Fat Back, 40 gs.—Marquis of Bristol.
By ditto, dam by Royal Newcastle, 18½ gs.—Mr. Ahrens.
By Royal Manchester, dam by Webb's 107, 150 gs.—Mr. H. Chappel.
By Manchester Reserve, dam by Fat Back, 15 gs.—Sir Charles Rowley.
By Third Manchester, dam by Royal Plymouth, 12½ gs.—Mr. Stone.
By ditto, dam by Young Reserve, 21 gs.—Mr. Seaward.
By a son of Viceroy, dam by Royal Newcastle, 10½ gs.—Mr. Cheesman.
By Royal Manchester, dam by Fat Back, 35 gs.—Mr. Banks.
By ditto, dam by Young Reserve, 16½ gs.—Mr. White.
By Perfection, dam by a son of Royal Worcester, 21 gs.—Mr. G. Smith.
By Third Manchester, dam by Clipper, 22 gs.—Marquis of Bristol.
By First Prize shearling at Attleboro', a son of Royal Bury St. Edmunds, dam by Royal Worcester, 5½ gs.—Mr. Rose.
By Royal Manchester, dam by Webb's 107, 41 gs.—Mr. Turner.
By ditto, dam by Viceroy, 16 gs.—Duke of Portland.
By ditto, dam by Webb's 107, 17½ gs.—Sir Charles Rowley.
By ditto, dam by Webb's 107, 41 gs.—Mr. Smith.
By Viceroy, dam by Webb's 102, 8 gs.—Mr. Gamble.
By a son of Viceroy, dam by Royal Newcastle, 22 gs.—Mr. J. Lloyd.
By Royal Manchester, dam by Young Reserve, 31 gs.—Duke of Manchester.
By Royal Bury St. Edmunds, dam by young Reserve, 14 gs.—Mr. Ahrens.
By Third Manchester, dam by Webb's 102, 23 gs.—Mr. Ramsden.
By ditto, dam by Clipper, 24 gs.—Duke of Portland.
By Perfection, dam by Royal Worcester, 30 gs.—Mr. Wilson.
By Royal Manchester, dam by Royal Plymouth, 11 gs.—Mr. H. Gayford.
By a son of Royal Worcester, dam by Lord Walsingham's First York, 16 gs.—Mr. Cooper.
By Manchester Reserve, dam Lord Walsingham's First York, 8 gs.—Mr. Wilson.

By Lot 1, which is a grandson of Clipper, dam by Royal Plymouth, 8 gs.—Mr. Stone.
By Perfection (Lot 3), dam by H. Webb's ram, 100 gs.—Prince of Wales.
By ditto, dam by young Reserve, 45 gs.—Mr. Homer.
By Lot 1, dam by Viceroy, 35 gs.—Duke of Portland.
By Third Manchester, dam by Webb's 102, 32 gs.—M. De'Vome.
By Lot 1, dam by royal Worcester, 7½ gs.—Mr. Rose.
By Lot 1, dam by T. Ellman's ram, 34 gs.—Duke of Portland.
By Lot 1, dam by Prince, 7 gs.—Mr. Wilson.
By First Prize yearling at Attleborough, a son of Royal Bury St. Edmund's dam by Lord Walsingham's Second York, 5½ gs.—Mr. C. Marshall.
By Third Manchester, dam by Webb's 102, 30 gs.—Mr. Turner.
By Third Manchester, dam by Royal Worcester, 23 gs.—Mr. Penfold.
By a grandson of Clipper, dam by Young Reserve, 11 gs.—Mr. Penfold.
By son of Viceroy, dam by Lord Walsingham's Second York, 7 gs.—Mr. Rose.
By a grandson of Prince, dam by Young Gaiety, 7½ gs.—Mr. Scott.
By a son of Viceroy, dam by Prince, 23 gs.—Duke of Portland.
By Lot 1, dam by Royal Newcastle, 5½ gs.—Mr. Parfit.
By a son of Royal Worcester, dam by Young Gaiety, 25 gs.—Mr. Bobby.
By Third Manchester, dam by Clipper, 20 gs.—Duke of Portland.
By Third Manchester, dam by Lord Walsingham's Second York, 18 gs.—Mr. Brackenbury.
By Manchester Reserve, dam by Royal Newcastle, 6 gs.—Mr. Rose.
By Royal Manchester, dam by Royal Plymouth, 10½ gs.—Mr. Gibson.
By a grandson of Clipper, dam by Viceroy, 19 gs.—Mr. Hart.
By Manchester Reserve, dam by Royal Newcastle, 16½ gs.—Mr. Gibson.
By Third Manchester, dam by Clipper, 5½ gs.—Mr. Rose.
By Third Manchester, dam by Lord Walsingham's First York, 20 gs.—Sir Geo. Musgrove.
By a son of Viceroy, dam by a son of Royal Worcester, 6½ gs.—Mr. Broughton.
By a son of Viceroy, dam by a son of Royal Worcester, 5 gs.—Mr. J. Pellett.
By Viceroy, dam by Clipper, 7½ gs.—Mr. G. Barton.
By a son of Royal Worcester, dam by Young Gaiety, 12½ gs.—Lord Sondes.
By Manchester Reserve, dam by Fat Back, 6 gs.—Mr. Smith.
By ditto, dam by Royal Newcastle, 7 gs.—Mr. Rose.
By ditto, dam by Prince, 22 gs.—Mr. Gibson.
By Viceroy, dam by H. Webb's ram, 6 gs.—Mr. Rose.
By Third Manchester, dam by Webb's 102, 17 gs.—Duke of Grafton.
By ditto, dam by Clipper, 10½ gs.—Mr. Jonas.
By ditto, dam by Young Gaiety, 7½ gs.—Mr. Cheesman.
By ditto, dam by Viceroy, 5 gs.—Mr. Rose.

TWO-YEAR-OLD EWES.

In lots of five each.—Count de Fries 80s., Mr. Turner 90s., Mr. E. Wilson, 115s., Count de Fries 95s., Lord Portsmouth 175s., Lord Portsmouth 145s., Mr. J. J. Colman, M.P., 75s., Mr. Turner 95s., Lord Sondes 90s., Mr. E. Wilson 135s., Prince of Wales 95s., Mr. H. Stone 85s., Mr. G. Smith 75s., Lord Sondes 70s., Mr. G. Smith 80s., Duke of Grafton 70s., Mr. E. Wilson 75s., Mr. H. Stone 85s.

THREE-YEAR-OLD EWES.

In lots of five each.—Lord Sondes 100s., Mr. J. J. Colman, M.P., 125s., Count de Fries 55s., Mr. H. P. Hart 80s., Mr. Henty 70s., Mr. N. Greenville 55s., Mr. G. Jonas 75s., Prince of Wales 85s., Prince of Wales 80s., Mr. J. Clayton 75s., Count Fries 75s., Mr. Brackenbury 75s., Mr. Homer 60s.

FULL-MOUTHED EWES.

In lots of five each.—Lord Sondes 65s., Mr. G. Smith 70s., Duke of Richmond 130s., Mr. G. Smith 85s., Duke of Richmond 90s., Mr. G. W. Homer 85s., Duke of Grafton 75s., Mr. W. Taylor 80s., Duke of Richmond 120s., Mr. J. J. Colman,

M.P., 90s., Mr. Henty 70s., Mr. Hawkins 75s., Mr. J. J. Colman, M.P., 105s., Mr. C. Jonas 75s., Mr. H. Stone 80s., Mr. G. Smith 160s., Prince of Wales 140s., Mr. Hurnard 80s., Mr. J. J. Colman, M.P., 80s., Mr. Hawkins 75s., Mr. C. A. Barnes 100s.

In lots of ten each.—G. W. Homer 70s., Mr. G. Smith 60s., Mr. J. J. Colman, M.P., 80s., Mr. G. W. Homer 65s., Mr. Henty 65s., Mr. Henty 65s.

BROKEN-MOUTHED EWES.

In lots of ten each.—Prince of Wales 75s., Mr. C. Jones 60s., Mr. J. Lloyd 55s.

RAM LAMBS.

One in each lot.—Mr. J. Haan £2 5s., Duke of Richmond £5 10s., Mr. J. A. Hempson £3, Mr. G. Smith £5 5s., E. Wilson £5 5s., Mr. Newcombe £3, Lord Sondes £3 5s., Mr. J. A. Hempson £3 15s., Mr. N. Greenville £8, Mr. Del'ome £17 17s., Mr. F. J. S. Foljambe £21, Mr. J. Haan £5 5s., Mr. DePome £10 10s., Mr. Jonas £2 15s., Mr. G. W. Homer £17 17s. 6d., Marquis of Bristol £5 5s., Mr. J. Haan £3 5s., Prince of Wales £12 1s. 6d., Mr. Jonas £4, Mr. Jonas £5 10s., Mr. G. George £4 10s., Mr. Majoribanks £21, Mr. Jonas £5 5s., Lord Sondes £5, Mr. G. W. Homer £2 15s., Mr. Jonas £2 15s., Mr. Rix £2 15s., Lord Sondes £7 10s., Mr. G. W. Homer £4 10s., Mr. A. Greenville £20, Mr. J. Gamble £2 5s., Mr. Majoribanks £4 10s., J. A. Hempson £5, Mr. J. Lloyd £10, Mr. Seaward £20, Mr. H. Stone £2 5s., Mr. Jonas £5, Mr. G. W. Homer £3 5s., Mr. J. A. Hempson £6 10s., Lord Sondes £5, Mr. Sewell £3, Mr. J. A. Hempson £5 10s., Mr. Sewell £6 10s., Mr. G. W. Homer £7, Lord Sondes £5 10s., Mr. C. A. Barnes £3 10s., Mr. Jonas £2 10s., Mr. Stenning £5 10s., Mr. Penfold £6 5s., Mr. Majoribanks £15 10s., Mr. G. W. Homer £5, Mr. Hempson £5 10s., Mr. Jonas £5 5s., Mr. G. Smith £2 10s., Mr. Pellett £2 5s., Mr. T. Gayford £2 5s., Mr. C. Newcombe £2 10s., Lord Sondes £5 15s., Mr. Hempson £3 5s., Mr. Jonas £4.

In lots of two each.—Mr. G. Wilson £6 10s., Mr. Pellett £4 5s., Marquis of Bristol £7, Mr. Hempson £4 10s., Mr. Jonas £5 10s., Lord Sondes £5 5s., Mr. J. Gamble £4 10s., Mr. Stenning £5 10s., Mr. Farrer £4, Mr. Jonas £4 5s., Mr. H. Gorringe £5, Mr. G. Pitts £4, Mr. G. Pitts £4, Mr. C. Roper £5 15s., Marquis of Bristol £9, Mr. G. W. Homer £4 5s., Mr. C. Beart £6, Mr. C. Roper £4 5s., Mr. Jonas £4 5s., Mr. H. Gorringe £8 10s., Mr. Farrer £4 10s., Mr. Beart £4 5s., Mr. Beart £5, Mr. G. W. Homer £4 5s., Mr. Pellett £4 5s., Mr. G. W. Homer £4 5s., Mr. Turner £4 5s., Mr. Farrer £4, Mr. H. Gorringe £4 5s., Lord Sondes £4 5s.

EWELAMBS.

In lots of five each.—Mr. J. Haan 77s. 6d., Mr. Del'ome 62s. 6d., Mr. H. Gayford 45s., Mr. G. Jonas 62s. 6d., Mr. Del'ome 65s., Mr. Beart 62s. 6d., Mr. Majoribanks 80s., Mr. Jonas 62s. 6d., Mr. C. A. Barnes 80s., Mr. J. Lloyd 62s. 6d., Mr. Del'ome 80s., Mr. Jonas 50s., Mr. Beart 52s. 6d., Mr. J. Lloyd 62s. 6d., Mr. C. Marshall 57s. 6d., Mr. H. Gaybird 45s.

In lots of ten each.—Mr. Jonas 35s., Mr. Durrant 40s., Mr. Beart 45s., Mr. Durrant 41s., Mr. Jonas 39s., Mr. J. Lloyd 40s., Mr. Durrant 35s., Mr. J. Lloyd 36s.

SUMMARY.

	£	s.	d.	£	s.	d.
19 old rams	27	13	2	525	10	6
65 shearlings.....	22	0	6	1,431	13	6
120 ram lambs	4	10	8	543	16	0
192 old ewes	4	0	4	771	5	0
65 three-year ewes...	4	2	4	267	10	0
90 two-year ewes ...	4	16	1	432	10	0
160 shearing ewes....	6	18	9	1,110	2	6
160 ewe lambs.....	2	11	0	407	7	6
571 averaged £6 6s.				Total.....	£5,489	15 0

THE WEIGHT AND VALUE OF LIVE STOCK.

For the benefit of young beginners in agriculture, I make the following observations: If you are wrong in the buying, selling, and management of live stock, you may bid adieu to comfortable profits. How to buy and how to sell well are two axioms of the utmost importance to successful farming, therefore if you cannot trust your own judgment, get if you can the unbiassed opinion of some competent friend. It is worth even paying for if you have it not. But in the absence of both, let me commend to you the weighing machine, which will put you on a par with some of the best judges, and give you confidence in your selling, and reprove you, if in buying you pay too dear. The weighing machine clears up many doubts. You should remember that in selling to the buyers (butchers or dealers) you have to do with practised hands, who, as a rule, thoroughly understand their business, and can judge closely of animal weights, so that the odds are sadly against you, unless you know the weight, and can therefore insist on a fair market price, which you are sure always to get, either from one or another. I have known of many a rare "picking" got out of farmers who do not know what proper price to ask; and that reminds me that it is very false economy not to have a knowledge of the state of the metropolitan and other markets. The penny, or even halfpenny, daily papers convey this information, so do the ordinary farm periodicals. I quote the following extract from the late Mr. Horsfall's most valuable paper on cattle feeding and dairy management, Royal Agricultural Society's *Journal*, volume 17, p. 275, and I hope to see the time when those two papers shall be made available to the general farmer in the form of a cheap pamphlet, for I know of no other treatise so valuable and comprehensive as that on the subject of cattle management and dairying. "I have weighed my fattening cattle for a number of years, and my milch cows for more than two years; this practice enables me as once to detect any deficiency in the performance of the animals, it gives also a stimulus to the feeders, who attend at the weighings, and who are desirous that the cattle entrusted to their care should bear comparison with their rivals. Another obvious advantage is in avoiding all cavils respecting the weight by my purchasers, who, having

satisfied themselves as to the quality of the animal, now ask and obtain the most recent weighing. The usual computation for a well-fed, but not over fat, beast is, live to dead weight as 21 to 12, or 100 to 59 1-7th, with such modifications as suggest themselves by appearances." I recommend also in this matter a reference to those valuable and laborious investigations and tables by Messrs. Lawes and Gilbert in the Royal Agricultural Society's *Journal*, vol. 13, p. 193, and in vol. 21, p. 454. They say: "Well bred and moderately fattened oxen should yield 58 to 60 per cent. carcass in fasted live weight; excessively fat oxen may yield from 65 to 70 per cent. Moderately fattened sheep (shorn) should yield about 58 per cent. carcass in fasted live weight; excessively fat sheep may yield 64 per cent. or more. Moderately fat pigs, killed for fresh pork, should yield (including head and feet) about 80 to 82 per cent., carcass in fasted live weight; large, well fattened pigs, fed for curing, will yield a considerably higher proportion. In each of the three descriptions of animal the proportion will, however, vary much, according to breed, age, and condition." In conclusion, when you wish to invest capital profitably in agriculture let me advise you to purchase the volumes of the Royal Agricultural Society, and study their contents so far as they have a bearing on your particular case of farming. The investment will be one of the best you ever made. Knowledge is power, and therefore ignorance must be weakness. I get up every morning with a conviction that I have still much to learn, and although 69 years of age, I do pick up almost daily some additional knowledge. Let me advise my young friends to do the same, and never to believe that they are already so wise that they have nothing to learn. Every practical man would be all the wiser for knowing why his practice was successful. It is a painful truth that an agricultural library rarely forms a part of a farmer's investment; but the schoolmaster is abroad now, so that we may reasonably hope for better things; and I never met with a farmer who was educated at our Royal Agricultural College at Cirencester who did not show the good effects of theory combined with practice—the why and the wherefore. Out of a million farmers, great and small, in the United Kingdom, there are not

20,000 who belong to the three great agricultural Societies of England, Ireland, and Scotland, and who benefit by their publications. This is sad evidence of the lack of literature in agriculture. I hope the time will come when no British farmer can be found who would say: "None of your theory and book farming for me, I am a practical man;" for as that great man, Baron Liebig, truly says, "Theory is not opposed to successful practice, but is an explanation of the cause of its being successful."

J. J. MERRI.

P. S. Since writing the foregoing I have a striking instance of the necessity for the weighing machine. Two practical farmers, previously unacquainted with each other, met at my farm last week. My bailiiff asked their opinions of the value of some bullocks; one said £27, the other £18 to £20. The latter was nearly correct, 20 having been sold at £22 each, of which the remaining 12 were the youngest and lightest. We bought the 20 on July 20, 1870, at £6 10s. each.

THE CULTIVATION OF THE SOIL.

At the monthly meeting of the Whitby Chamber of Agriculture, Mr. G. J. W. Farsyde in the chair, Mr. Martin Simpson, a curator of museums, delivered a lecture on Soil.

Mr. SIMPSON said: That, as he had travelled over all the counties from Whitby to the metropolis, and also over many counties in the north, studying the various natures of the soil in each county, he thought he could not be charged with presumption in venturing to address a few remarks upon the soil in the neighbourhood of Whitby. The richest of the soil is composed of vegetable substances which have gone on decaying for some considerable time without being disturbed by artificial appliances, as in America. In these extensive regions large crops of grain are capable of being produced with comparatively little labour or skill. Though great improvements in science and skill had been brought to bear on the cultivation of land in America, it was in this country that the greatest perfection, especially in the way of making agricultural implements, had been attained, thus enabling the farmers in this country to compete much better than they otherwise would in the production of food with those in the more favoured regions. He then described minutely the geological peculiarities of the Whitby district, and explained, very learnedly and explicitly, the nature of various soils that exist in certain districts. He alluded particularly to the moors, and mentioned that he had no doubt that they can be much improved. In some of the more exposed places, rising many hundred feet above the level of the sea, it would be useless to attempt anything like cultivation; but in some of the lower moor lands a great improvement could be made. Some small portions had been enclosed, and had produced fair crops of grass, but it was a question whether it would be worth while to pursue a more extensive system. It would require a very large capital, without the prospect of any immediate return for the outlay. He was of opinion that trees could be grown. At the present time, larch was the tree that could be turned to the best profit. In speaking of ploughing, he mentioned an instance that had come immediately under his notice, and which, he said, strikingly illustrated the difference in deep and shallow ploughing: the advantage of the former over the latter. He saw a piece of land ploughed to the extent of 11 or 12 inches deep. This land was joined by another which was ploughed to about only half this depth, and both were planted with potatoes. A dry season came on, and what was the consequence? Those potatoes planted in the land deeply ploughed sprung up, and were a good crop, whereas those planted in the other withered away and died. Were a system of deeper ploughing adopted, there would be greater and better crops. Though deep ploughing was found sound philosophy, it was a question for the farmer to think whether it would pay, but he believed that this sound philosophy would

prove to be, if carried out, a sound commercial success. But there were many things that exerted themselves against the farmers which prevented them adopting systems of agriculture which they were convinced would prove of benefit. For instance, there was often a doubt about the permanency of tenancy, and it was only reasonable to suppose that no man would hire a piece of land and adopt new systems without fair prospects of some reasonable means of profit.

Mr. NORMAN deprecated very deep ploughing. If land was deep, it exhausted it; the plough entered the sub-soil and drained the very last nerve. If they wanted deep ploughing, it would be better to go down gradually.

Mr. PEARSON said you want to plough into the pan eight or nine inches and turn it up; the subsoil on the top and the top soil at the bottom. The roots of the plants don't feed upon the top, but the leaves do. He would advocate the plentiful use of lime, but it requires being judiciously laid out. Some land requires lime every year, while others only require it every four or five years.

Mr. WM. HARRISON (Underpark) wished to allude particularly to the restoration of our waste lands into a state of cultivation. Whitby was surrounded by a great quantity of waste land consisting of moors. He thought that those waste lands could be restored by the various chemical agencies which are now afloat. It could not be expected that we can improve these high lands without robbing the lower lands by transferring manure, but by the agency of chemistry we can act somewhat independently of this, and make them produce good grazing. It was true that there are hundreds of black-faced sheep kept upon the moor, but, if it were brought into a decent state of cultivation, it would be capable of sustaining thousands instead of hundreds.

Mr. ROBINSON said that he had had a good deal of practical experience, and he had discovered that lime was the most beneficial thing that could be put upon land. Where it was liberally and judiciously applied, it would produce, even on poor lands, crops that would pay better than those usually produced. With respect to the question of the best time in the year for ploughing land, there were many things that proved that the back end of the year was the best. He advocated moderately deep ploughing, but different lands required different treatment. Thus in some land, where the plough entered to the extent of nine inches, such stuff would be turned up that a practical man would much dislike to see. He thought that if land was properly drained so much deep ploughing would not be required, and the land would still be of all practical use to the farmer.

A vote of thanks was passed to the lecturer, who briefly acknowledged.

THE LICENSING QUESTION.

At the June meeting of the Essex Chamber of Agriculture at Rochford, Mr. A. Johnston, M.P., the President, said: You all know the main points of the Government Licensing Bill, some of which points were undoubtedly very bad and very inadmissible. My own conviction, which I have expressed in public and in private when called upon, is that you must face the question of compensation for any vested interests which you take away. I think it was rather overlooked by the opponents of the bill how much compensation really was provided by it, but at the same time it was not provided in a practical way, or in one that could be accepted by those to whom it was offered. Therefore I think it must be regarded as having fallen to the ground, and as not being likely to show its face again. But there is an alternative scheme, which I believe has been actually proposed to the Government by the Licensed Victuallers' Association, and the more I think of it the more it seems to me that it is the most likely plan that has been proposed, and a plan that demands our very serious attention. Some of you may have seen it. It is this: The Licensed Victuallers say they see the difficulty; they know there must be a Licensing Bill, and they have no desire to offer a blank opposition to all reform; they see the necessity and desirability of greatly reducing the number of licensed houses in many neighbourhoods, and they are willing to submit to a licence rent as proposed by the bill, which licence rent should accumulate and form a fund of which those houses which it is desirable to extinguish should be compensated. I know there are a great number of practical difficulties in carrying out such a proposal as that, but I would ask what proposal can be brought forward or mentioned which does not contain great practical difficulties? Of course it would want endless elaboration and discussion; but it does commend itself to me as a scheme worthy of most careful consideration. Well, those are things that are not in the bill. Another thing that is not in the bill and could not be in a Licensing Bill, is what I believe to be an absolutely necessary portion of any great scheme to further the temperance of the people, viz., the abolition of the Malt-tax, which, I firmly believe from the evidence that has been given by people who thoroughly understand it, would lead to the brewing by labouring men at their own homes, of a light, wholesome, perhaps rather nasty—but still, if they like it, that is nothing to me—beverage, which would keep them from the temptation of intemperance. Now, I come to what is strictly within the terms of the notice, viz., the points upon which the bill seems to me to be thoroughly good as a suggestion for future legislation. First, I think it faces the difficulty of finding some fixed principle upon which the grant of licences should be made. Whether it is the best principle or not may be a subject of discussion, but at any rate it does attempt to fix a scale which shall be some guide to the licensing authority as to how many licences they shall grant. At present it is a matter of sheer gambling. One bench of magistrates takes one view of its duties, another bench takes another, and even the same bench in different years will take different views of the number of public-houses that are wanted in a given neighbourhood. This difficulty, of course, is more rampant in those suburbs of large towns which are rapidly increasing. Therefore in so far as the bill pretends to find some fixed principle by which the licensing authority shall be guided, I think it is undoubtedly good. In the second place, the bill recognises the inhabitants or the rate-payers so far as to give them a veto on any licences which the licensing authority may propose to give beyond a certain scale, and I think that to that extent the voice of the rate-payers would be most beneficially exercised. This Chamber can hardly refuse to assent to that feature unless it is prepared to rescind the resolution we arrived at in Colchester on the 13th Feb., some weeks before the bill was introduced, by which resolution it was declared "that the licensing laws as at present in force are so prejudicial in their effects, especially on the labouring classes, that their amendment is urgently required at the hands of the present parliament, by giving the ratepayers some voice in the matter." Well, that disposes of

two points. The third is a very important one indeed. Everyone is alive to the gross anomaly of the mere granting of a licence to a given house immediately raising the value of that house, sometimes £500, sometimes fifteen, and I have heard of a case in which the value of the bricks and mortar was immediately raised by £17,000. That increase in value will always take place, and the question is, "Who ought to have it?" It seems to me absurd and altogether unreasonable that because the magistrates think right to license a given house, the State, for whom the magistrates are acting, should immediately, and on the spot, make a present of what may be an enormous sum of money to the individual who happens to be the owner of that house. It seems to me that the Bill is good, inasmuch as it proposes a method of intercepting, for the benefit of the public, that increased value. The fourth point is, that the Bill recognizes the desirability of diminishing the number of public-houses where there are too many. The fifth is, that it draws a much needed distinction between inns which are strictly so in the old sense of the word—perhaps I may say in the present sense of the word—and places which have no real title to that designation; it distinguishes, I mean, between houses in which necessary refreshment—meat and drink for man and beast—may be had, and those mere tipping bars in the towns which are the source of so much evil. If I understand the Bill aright, the limitation of the number of licensed houses would only apply to those tipping bars, and the magistrates would be at liberty, under proper restrictions, to license as many of what are strictly to be called "inns" as are thought proper. I do not think that point was sufficiently understood in the discussions which took place upon the Bill. The sixth point is, all those provisions for special inspection, for earlier closing, and for improved regulations. I think it cannot be doubted that special inspection would be a very good thing—that it is desirable to have a class of men drawn from a class above that of the ordinary police, and superior to the temptations which, at any rate in the towns, they sometimes succumb to. I know very little of large towns, but I have been told by the representative of one of those towns in the north that the police generally succumb to the seductions of the public-house, and look very little after their duties there; and when a man, supposing he is a teetotaler, does really endeavour to carry out his duty, the pressure which is brought to bear on the town council to get him removed on any pretext that comes uppermost is something too great to be resisted. If that be the case it is clearly a most indefensible state of things, and I think the idea of appointing a class of special inspectors, who would be superior to such influences, is an extremely good one. But I also think there is a good deal in what the licensed victuallers say, that they should not be marked out for this special inspection as if they were a class habitually intending to break the law, but that it should extend to all those who sell food and drink in any shape to the public. I think myself that that might be extended into a general inspection of all food and drink that is sold, whether for consumption on or off the premises, including not only our own food and drink, but also the food that is sold to us for our cattle, and even the manures which we put upon our land, because, I suppose, there is more swindling, adulteration, and rascality in those trades than in almost any other you could name. I submit the resolutions which I have drawn up on the subject of the Licensing Bill as under:

1. That the Government Licensing Bill lately withdrawn may be approved as a suggestion for future legislation, in so far as it recognizes the desirability of

- (A.) Some fixed principle being laid down as to the maximum number of licences in each district.
- (B.) A veto of the inhabitants on such number being exceeded.
- (C.) Securing for the benefit of the public, instead of making a present to individuals, of the large immediate extra value conferred on a property by the grant of a new licence.

(D.) A distinction being drawn between inns for necessary refreshment and mere tipping bars.

(E.) Earlier closing, better regulations, and special inspection.

(F.) A reduction of the number of licences where excessive.

2. That no licensing bill will be satisfactory which does not face the question of compensation for vested interests extinguished. That the "alternative scheme" of the licensed victuallers deserves serious consideration, but that its value greatly depends on the amount of the licence rent proposed to be paid.

3. That legislation as to licensing alone cannot be expected seriously to diminish intoxication. That education and other good influences may be expected to do much, but that the abolition of the malt-tax is a *sine quâ non*, there being abundant evidence that it would lead to the brewing of pure and wholesome beer by the labourers at their own homes, thus diminishing enormously incentives to intemperance.

Mr. YOUNGMAN, pointing to the fact that the first resolution approved the bill so far as it recognised the desirability of some fixed principle being laid down as to the maximum number of licences in each district, asked whether this implied that there would be no district without a licence required in it?

Mr. JOHNSTON: No; I take it that the bill would lay down a maximum; it does not compel the licensing authority to have any licences at all.

Mr. A. HOLT-WHITE: You have said nothing at all about beershops, but I suppose you include them under the term "public-houses."

Mr. JOHNSTON: Yes, they form one of the classes.

Mr. HOLT-WHITE: In the term public-houses you take them all in.

Mr. JOHNSTON: Yes.

Referring to that part of the resolution expressing approval of the bill because it secured for the benefit of the public the immediate extra value conferred on a house by the grant of a licence.

Mr. HOLT-WHITE asked how such a provision would work as regarded the old public-houses—those that already had licences, and whose owners claimed a vested interest in them? If they made these houses pay for the licence in the way indicated they would immediately infringe on the "vested interest."

Mr. JOHNSTON: I would limit the provision to new licences only.

Mr. HOLT-WHITE: In country districts, then, it would fall a dead letter, for in neighbourhoods like this for many years to come the tendency ought to be to diminish the number of licences, and not to grant new ones. No doubt in a place like Southend, where considerable building may be expected to go on, there may be a call for new public-houses, but if you take all the rest of the district there is no call for more public-house accommodation, and therefore you will get nothing from a licence tax unless you impose that tax upon those who already hold licences.

Mr. J. G. FRY: In legislating as regards the number of

public-houses in a district I suppose you will be entirely guided by population, not by area?

Mr. JOHNSTON: I think it is contemplated that we should have regard to both points—mixed population and area. They allow a smaller maximum of population in a country district than in a town. I think Mr. Holt-White's remarks were perfectly justifiable; this section would have no effect in those growing districts where new licences will be granted. The subject of a licence rent on old houses comes into the second resolution, and would be, as I understand it, the proposal of the licensed victuallers themselves.

Before putting the resolution to the meeting, the chairman read the following letter, which had been received from Mr. John Page, of Southend:—

Foley Arms Hotel, Great Malvern.

MY DEAR SIR,—I am sorry that I shall not be able to attend your meeting at Rochford, as I shall not be in the county. With regard to licensing, though a strong conservative, I think, perhaps I am a worse radical than you are upon that. I am for free-trade in beer. I hope to see the Crowns, Anchors, and Queen's Heads fade away, and that abomination a taproom forgotten or despised. I recognise no relationship between sociability and drunkenness, nor do I know why, when men meet to talk, they needs must drink. The repeal of the malt-tax is merely political capital. The only effect would be to put its amount into the pockets of the brewers, while the poor would be supplied with worse beer if possible than at present, because a worthless malt would be created from worthless barley.—Believe me very truly,

May 29th.

JOHN PAGE.

The resolutions were then submitted and carried.

Mr. JOHNSTON had also prepared resolutions upon the subject of Local Taxation.

Sir MASSEY LOPES entirely approved of them, with the exception that he was a little doubtful about the arrangements for the election of parochial chairmen. They were as follows:

"That the Local Taxation and Local Government Bills lately withdrawn may be approved as suggestions for future legislation—

1st. In so far as they provide for a consolidated rate, an explicit demand note, improved collection and audit, the better organisation of parochial and county government.

2nd. In so far as they discontinue the exemption or partial exemption from rating of mines, timber, sporting rights, mansion houses, and government property; and

3rd. In so far as they sanction the principle of the transfer of the produce of an imperial tax locally raised to local purposes.

That the proposed transfer of the house-tax alone would not be any relief to land, and that therefore the application of a fixed portion of the produce of schedule A of the property-tax raised in each local area to the relief of local taxation within such area is a proposal worthy of consideration."

These resolutions were also adopted, and the thanks of the meeting passed to the chairman.

FARMERS' HOMES.

The following paper was read at the annual meeting of the New York State Agricultural Society by Mr. F. D. CURTIS, of Saratoga County:

It is very often the practice with farmers to think more of the farm than of the farmhouse. It is a time-honoured adage that "charity begins at home;" hence, we think that a few suggestions correlative to this sentiment may be profitable. There is a feeling of dissatisfaction with agricultural life among the sons of farmers, leading them to hate the occupation and surroundings of their fathers, and to seek a society and business which their fancy paints to be more congenial and less laborious. Farming is hard work at the best, and when it amounts to abject drudgery, with no sunshine indoors, and the grateful cheer of looks, intelligent conversation, and encouragement to the promptings of latent ambition, not to omit good food and a pleasant home upon

which the eye delights to rest, it is no wonder farmers' sons and farmers' daughters become restless, and long for the time to come when they can throw off the shackles of an unsatisfying servitude, and go to the factory, the store, or an overcrowded profession, where they can enjoy some of the privileges which they do not have at home. The remedy for this is to make home pleasant and enjoyable. Do not enrich the field and impoverish the household. Apply every exertion in culture and drainage outside the home; but do not neglect to sweeten the inner atmosphere, and strengthen the ties within, so that from the intelligent happiness of the home circle there may always radiate a cheerful and intelligent, and therefore effective energy. Children must be made to love their homes, else the attractions of cities and villages will surely lure them away from the peaceful and monotonous labours of rural life. Let them plant trees, cultivate them, and have the profits accruing

from the sale of fruits they bear. Let them have fowls, animals, bees of their own, be taught how to rear and care for them, and enjoy the results of their attention and work in toys or books, or investments in the savings-bank. The sense of proprietorship will give to a boy not fond of work great interest in a small potato patch, or a score of sage plants, or a rod square of Lima beans. And in our country girls a love for out-of-door work should be sedulously cultivated. Let them have a garden spot, with room for flowers, herbs, and vegetables, and time to take care of it. Better raise flowers and shrubs and fowls and hony, than delve in the kitchen for evermore, and then have nothing for it. Ample provision must be made for sport during the short winter days and the long cold evenings. Checker-boards, candy puddings, games of various sorts, music, amusing books, these are indispensable. Let the boys have traps and catch minks and muskrats, rabbits and skunks, the more the better. Let the boys and girls have sleds and skates with wrappings and furs of their own trapping, and enjoy the glare of frozen ice, the slippery side hill, the glowing starlight, the jingling bells, the bracing frosty air, and all the delights that make winter on the farm a season of festivity and sport. Then do not keep all the preserves and canned fruit, the various goodies laid up in store, only for company; but bring them out on proper occasions, just to let the boys and girls have a good time eating them, and they will be more ready in hot days next summer to renew the wasted store, and lay up future enjoyments for the coming snows and frosts. Then remember that any right-minded boy or girl always likes to know the reason of things. Explain to your son when you are sowing clover for manure, how and why it benefits the soil—why some soils require lime, and others the acids of decomposition, to render them mellow and fertile. If the children are contented and happy, the young folks will be. Let the boys earn money, and give them the benefit of your advice, not commands, how to expend it. Make the boy a man and the girl a woman as far as you can, not a drudge or a fool, by being yourself the mouth to speak for them, the eyes to see for them, the ears to hear for them, and the brains to think and act for them. Let them act for themselves under your care and supervision. Try to know more than they do; spend your own surplus time in informing yourself, laying up a store of knowledge to impart to them, instead of gossiping with some talkative neighbour, or telling over for the hundredth time some big story or affair which never had any pith or point, and which your son hears, wondering how you can be interested in such nonsense, when the wide world is before him, and nature, whose laws and phenomena are to him an enigma, is all around him, and you should be, and he expects you to be, capable to explain many of these things to him. Live, if possible, in the front side of the house, where something can be seen. Do not have all the grand and comfortable things in the parlour, which is opened quarterly, when the minister comes around, and the rest of the time is sacred, unless there is a funeral or a wedding, which the girls would not postpone a great while in such a home; but have some of the cheery and nice furniture in the sitting or family room. Be sure and have such a room, if you have to do without the parlour; and have a place for books, and have some books there. In addition to what we should always expect to find—a bible and an almanac and histories—let there be agricultural papers and books. Much can be learned from them how to prevent disease among the animals, how to cure disease, and hints and facts about the crops, which will more than repay the cost, besides furnishing food for the hungry minds of the boys and girls. The surroundings of the farmers' homes can be made more comfortable. Instead of the little building situated several rods from the house, which must be visited in the storms and cold, and exposed to the public gaze, and which is very often a nuisance, let a lean-to be made against the rear of the dwelling or the woodhouse, with an entrance under cover, where tubs can be placed, and by an addition of a little earth or plaster or muck every few days, nothing dis-

agreeable will ever be experienced. The compost heap or the manure pile will receive the contents, and at least 10 dollars annually of additional value will be realised for each adult. Have a cistern. Gather the materials at odd times; and if you have room in the cellar, and do not want to afford time to dig a hole, wall up one corner and let the water in. Put a pump in the kitchen in the handiest place, and with a lead pipe you may draw the water to a sink within a step from the stove. Keep a stock of wood ahead. Any wife has a just reason for divorce from a husband who is so mean and so shiftless that he furnishes her stove-wood from day to day, and any farmer who does it with the idea of economy is a dunce, for the time spent in hunting up the axe—and such a farmer always has to hunt up his axe or anything else he wants—and the time spent in going to and from his other work to cut wood, and the delays waiting for meals because the wood is green and wet, would go a long way towards working up a good stock of wood, which, being seasoned and handy, the hard-working housekeeper could use so as to save herself many a scolding; and a man who has no wood-pile must be a scold, and unreasonable enough to find fault with his wife, when he alone should be blamed. Pork is the most expensive food, besides its tendency to make people gross and vulgar. A big pork-eater and a man of delicate sensibilities and feelings are opposites. A pound of chicken can be produced on a farm as cheaply as a pound of pork. The same is true of mutton. Both are healthier than hog-flesh. Then why not raise chickens and lambs, and eat poultry and mutton? An ice-house is indispensable to a well regulated farm-house. The best way to build one is to construct an addition on the north side of the kitchen or wood-house and connect with it a dark room to be used for a store-room. This room having the ice on one side, with only a partition between and no window or ventilation except at the top, would always be cool and free from flies. Here the fresh meats and the cream and other things can be kept cool and sweet. To be handy, the ice could be taken out from the ice-house through a door opening into this room, and be closed on the outside all the year except when it was necessary to open in order to put the ice in. The first cost of this addition would be but a trifle, and the expense of getting the ice nothing at all, for the farmer could do all that himself. A nice house, with the road side in front of it the favourite place of deposit for all the broken dilapidated crockery, tin ware, and debris of the farm, is a common sight, and presents a contrast which demonstrates that the lady who presides within has no proper appreciation of the "fitness of things." Everybody likes the sweets of neatness, and the home is pleasanter if neat. Banish the swill-barrel from the kitchen door, and in its stead have two large pails; and a rule, which every man and boy must obey, to empty them when full into the swill-barrel, which shall constitute part of the furniture of the pig-house. A clean cellar, airy and free from odours, is health. A horse on a hill, with no trees around it, looks cheerless and unhomelike. Have grounds around the dwelling. Tear away the fences, they cost money and are useless—I mean the fences shutting the house up as if there was danger of its running away. Let there be not less than an acre of door yard, ten will be better. Make a rich lawn of this and cut the grass. It can be no waste, but it will be a thing of beauty, and "a thing of beauty is a joy for ever." There need not be any loss to be tasteful; nature and beauty are synonymous; good taste and economy can therefore be made handmaids to each other. Set out fruit trees in this enclosure and dig around them with a spade each year, and topdress the whole, and the trees will grow finely, and the grass will grow luxuriantly, and the house will grow beautiful, the children will grow contented, the fathers and mothers as they grow old will grow happy, the neighbours will grow to emulate and to excel, the township will grow attractive, and the young men and the young women will grow up to think and to feel, that there is no place after all like home, "Sweet Home."

THE ECONOMICAL MANAGEMENT OF FARMYARD MANURE.

At a general meeting of the Goole and Marshland Chamber of Agriculture, Mr. J. Wells in the chair, a paper was read by Mr. Conder, of Pontefract, on The Economical Management of Farmyard Manure in the Fold and in the Field.

Mr. CONDER said: The subject of this paper is of greater importance to the farmer than is generally supposed, for owing to defective arrangements of farm buildings, and the generally careless modes adopted in the preparation and application of this kind of manure, there is, without doubt, a serious loss and waste, the money value of which loss cannot easily be computed, but which, in the aggregate, in England alone forms a considerable percentage of the value of the artificial manures now so largely used in this country. This subject has an additional interest at present, when the question "How to prevent the pollution of our rivers by sewage from our large cities and towns" has become one of the great problems of the day. Every English farmer must deplore the waste occasioned by the present system of water carriage of sewage—that so much of the excreta from our large populations is carried down the rivers out into the ocean, instead of being available for the fertilisation of the soil. It therefore must be a matter of some interest to us to discuss how best to conserve and how most judiciously to use the ordinary manure made on the farm. The question, how can this be managed in the fold and in the field so as to increase its productive power, is one which will repay the agriculturist for all the attention and consideration he may bring to bear upon it. Starting with the obvious fact that the manurial value will always increase or decrease in proportion to the roots, corn, and oilcake consumed along with straw by the live stock on the farm premises, still there is no doubt the system most generally pursued may be greatly improved upon—in the fold first, by more carefully mixing the different constituents together, so as to secure greater uniformity in quality; then, by the prevention of waste occasioned by filtration or evaporation, by employing the means which chemistry has made known to fix that valuable but highly volatile substance, ammonia. To secure this end, foldyards entirely covered over are preferable to open yards; but when, on account of the money outlay necessarily involved, these cannot be had, the next best thing is to prevent the rain-water off the roofs of surrounding buildings from washing the most valuable portions of the manure out of the yard. Buildings should be carefully spouted, and the water conducted away in channels or drains under the surface. Another essential point is the application of gypsum, or some other chemical compound, in the stables, cow-bins, piggeries, &c., which will not only prevent any unpleasant smell, but will also fix the ammonia that is otherwise constantly escaping. By using gypsum or sulphate of lime (calcined, of course), this may be effected; also, by laying hold of the liquid portion of the deposits it will materially increase the value of the manure. Gypsum should therefore be liberally applied, not only inside the stables, &c., but occasionally over the whole foldyard. Where this calcined gypsum is difficult to procure, the principle of Moule's earth closet may be adopted, and dry clay, finely pulverised, ashes, or charcoal of any kind may be used with a good result. Thus the health of animals kept indoors will be improved by purifying the air they breathe, and a much larger percentage of fertilising matter will be secured in the manure. Some writers on the subject recommend that foldyards should be carefully paved with bricks, and so formed that the liquid portions may be drained off into a large tank, to be afterwards pumped out and carted on the grass sward or other green crops. In some special cases perhaps this plan may be profitable, such, for instance, as where a large number of cows are kept for dairy purposes, or in any other establishment where large numbers of horses or other live stock are kept, and the most rigid economy in the use of straw has to be practised. But it may be questioned whether on farms where all the straw produced has to be consumed on the premises if liquid manure tanks are of any real value, and if the plan already described of absorbing the urinary deposits is not much preferable. The

same principle should be carefully carried out when the manure is taken away from the farmstead. The system so common in some districts should be avoided. There is still sometimes to be seen in this county a process something like the following: Manure is being carted out from the farmstead. You observe that it has the appearance of half-rotten straw; little oilcake, corn, or roots have been consumed on the steading, and the most valuable portion has been allowed to run off down the surface drains from the fold. Thus made it is carted out into some bye-lane, perhaps alongside an open ditch, then lightly thrown out with forks to encourage fermentation. Thus the ammonia evaporates from the top as the steaming vapour arises, and at the bottom the liquid portion is being drained away as the heavy rains penetrate completely through the heap, and literally wash out its most valuable constituents, its very life-blood. No wonder this treatment, when applied to the soil, fails to give the result the farmer looks for. This part of the subject has often been matter of discussion among practical agriculturists, and among a variety of modes considered, the following has been most generally approved: Instead of the manure being thrown out of the carts as lightly as possible, the cart is driven on the top of the heap, then overturned and emptied. If near the homestead, a man is usually employed with a kind of drag to pull the lumps about, keeping the surface of the heap level, building three sides quite perpendicular, and allowing a slope at one end for the cart to ascend and return. This prevents the heap from such rapid fermentation and consequent loss of strength, and preserves its most valuable properties for the cereal crops usually following the root crops to which such manure is applied. The heap should then be covered with some soil, ditch bottom or road-scrappings being generally available, if with a coat of gypsum, so much the better. The more preferable plan is to cart the dung direct from the steading, and apply it to the land previous to the winter ploughing. This plan, however, can only be adopted to a limited extent, as it necessitates the keeping of one year's stock of dung ready for the next autumn, when the state of the weather and the press of farm work might prevent it being applied. When it is considered necessary that the dung should be reduced to a shorter and more pulverised condition, this end can be attained by simply turning over the heap formed as before described two or three weeks before it is intended for use. A quantity of gypsum should again be applied to the top after being turned. It is of comparatively little importance whether the dung thus prepared is applied to the soil spread evenly over the surface, or, as it is most commonly applied, in drills or ridges, the great end having been secured, namely, the conservation of its most valuable constituents, and a large increase in the percentage of those valuable gases that cause rapid and luxuriant vegetation. Some attention should be bestowed on the place where the dungheap is formed. If not carted into a field, the bottom should be so formed that the liquid portion cannot be drained from the heap—this, on most soils, can easily be effected. This certainly is but a little or trivial thing. But the farmer has, in the preparation of manure, as well as in all his plans, to remember the old adage, as to the importance of little things. And though we may be inclined to agree with the wise man, "There is nothing new under the sun," still it must be admitted that old things are sometimes capable of more advantageous combinations. In further reference to the application of manure in the field, the opinion has already been advanced that this is of little comparative importance to its proper manufacture. Yet we must not regard it as of no importance whatever. There are several principles upon which it is absolutely necessary to act. The soil must be in proper condition; not in a soft wet state, so as to be compressed by the feet of the horse or the wheels of the dung-cart. On the lightest and most friable of soils, some injury would be done; but on heavy clays and loams it would be an act of great folly to cart manure while the soil remained in a wet condition. Again—The principles already insisted on in the manufacture

must be carried out in the application, so that there may be the maximum of waste either by evaporation or in any other way. The question, whether or not manure loses value by being allowed to remain on the surface after being spread, and whether it suffers by being applied when the earth is bound up with frost and covered with snow, or during intense heat and drought, by being exposed to the wind and sun—these topics have been discussed both by practical and scientific men, and have elicited opinions diametrically opposed to each other. Perhaps here, as on some other questions, both sides are right and both are wrong. One is of opinion that if manure is only spread on the surface, the deodorizing power of the soil is so great, it will absorb all the ammonia, nitrogen, &c., that it contains, and that nothing more is necessary. In this case, the mechanical action of the manure in preventing compression, in opening and pulverising, to use a common phrase, in mellowing the soil in which it mixes, is overlooked. Another tells us confidently that frost has no effect at all detrimental to the value of manure spread on the surface—that it lays hold only on the moisture contained in it, and extracts nothing but water. There are always men to be found who push scientific theories containing a large amount of truth to extremes. With the most profound respect for those gentlemen who make agricultural chemistry their study, and recognising the advantages which chemistry has conferred, and will no doubt continue to confer on agriculture, still unless science and practice, the theory and the result, are found agreeing together, there must be something wrong in the deductions of that branch of science. And practice has shown that manure applied while in a state of fermentation and rapid decomposition, during either of the extremes of weather mentioned, does suffer in some degree—does lose some portion of its value; a great deal depends on the state in which it is applied, and of the agencies of evaporation at work when so exposed. The point to be aimed at in all applications of manure is to bring it into immediate contact with the soil as soon as possible. It is the custom in many districts to cart out manure and lay it in small heaps over the fields, and in this way it is sometimes left for weeks previous to being spread over the surface. There can be no objection to this mode of laying it on the land, called by the workmen *setting on*, which is a very convenient one; but the practice of allowing it to remain unwise, as in this case a very large proportion of surface is exposed, which, not coming into contact with the soil, as a matter of course is allowed to “waste its sweetness on the desert air.” In deciding between the relative advantages of manure being applied on the surface or under the surface of the soil, it must not be forgotten that farm-yard manure, while in a state of decomposition, is constantly giving off a certain amount of heat, whether in the soil or not; it follows, therefore, as a natural consequence that, unless it is in immediate contact with the earth, or some other deodoriser, it must lose value in some degree. Granting the correctness of these pre-

mises, the deductions are, that if manure is obliged to be left on the surface as in the case of grass sward, it should not be applied until the fermentation is over, and it is thoroughly decomposed—also, that it is preferable to cover manure in any other stage of decomposition over with soil as soon as possible after it is exposed. But while strongly advocating the principle of immediate contact with the soil, it is not to be inferred that putting manure down to the subsoil is to be recommended; on the contrary, if put on the soil and slightly covered over, so as to protect from the extremes of weather, without doubt the most judicious method is adopted. In the best farmed districts of Scotland it is the practice to manure as much as possible previous to the winter ploughing, and in that climate, and in the months of November and December, when evaporation is at its lowest point, of course the danger of waste pointed out in this paper is greatly diminished. In adopting these views and endeavouring to act on these principles, without entering into detail, it may be affirmed that the farmer will secure not merely a better article as manure, but the very best possible for him to make, and applied so as to produce the best possible effect on his crops.

Mr. DUDING asked whether the manure lost its strength by being exposed to the sun. In Lincolnshire it was the custom to manure the seed in summer time.

Mr. ROCKETT asked whether it was merely a liquid of no value, or whether it was the ammonia that escaped.

The CHAIRMAN said he would give them some of his ideas suggested by the paper of Mr. Conder. The best way of making manure was to have boxes for the feeding of cattle. He had tested the principle during the thirty years he had been a farmer, and he had found it worse for the stock, but he got good manure. The next thing is to mix the manure. He had carried this out for some time, at Booth Ferry. It was considered the best to have covered farmsteads; but he would ask them what would be the condition of their cattle brought up in a covered farmstead? It might answer if their stock was intended for the butchers; otherwise it was important for the stock to come into contact with the atmosphere. At Sancton, Booth Ferry, and the Pastures, through sprinkling with gypsum, he had not had a single case of disease, although several of his neighbours suffered from it. He approved of a manure tank; but it should be cleaned out regularly. He used liquid manure on eighteen acres of grass land with the best results. By saving the drainings it would save the very essence of the manure. He would conclude by hoping the time would come when they would have good farm buildings with half their fold yard covered in, and able to pay five per cent. to their landlords for the outlay.

Mr. CONDER said that on perusing his paper they would find that he did not exactly condemn the use of liquid manure tanks.

The CHAIRMAN proposed a vote of thanks to Mr. Conder for his paper, and the meeting came to a close.

THE USES OF SALT.

At the Ballymahon Farmers' Club meeting the following paper was read by Mr. W. Benjamin DIGBY:—

“Salt is good,” Mark ix. 50. We have thus the highest authority possible for estimating its importance and utility. I will endeavour in this paper to illustrate this in its application to agriculture in particular, and mankind in general. 1. First, then, its chemical composition. Its symbols are Na. Cl., expressed as chloride of sodium, *i. e.*, nearly two parts of chloride to one of sodium, or as 44.2 to 291 exactly. These two simple elements separately are very peculiar in every respect. Sodium is a metal of a delicate pink colour, about the consistence of bees' wax. When dropped into cold water it rolls about, and hisses like hot iron cooling, and when dropped into hot water, or merely moistened, it takes fire and burns, with a bright yellow flame. This arises from its great affinity for oxygen, of which water contains 88 per cent. The other element, chlorine, is a gas. The name is derived from “chloros,” the Greek for green, because this gas is a greenish colour. It is very heavy compared with air, and would suffocate if inhaled. It is a very valuable article in commerce, being the greatest

bleaching agent, and is used in many trades, chiefly by paper-makers to whiten and purify the dirty rags from which paper is made. Chlorine is also a powerful disinfectant: you are all familiar with it in the form of chloride of lime. How strange it is that common salt, so simple and harmless, should be composed of two extraordinary ingredients. One of the products of salt is soda, which is so very generally useful. We have seen the strong affinity which sodium has for oxygen; accordingly, when sulphuric acid or oil of vitriol, is poured upon common salt, there are formed two new compounds—hydrochloric acid, called spirit of salts and of sulphate soda, called glauber salts commercially. This sulphate of soda is then ground, mixed with ground chalk and culm: all three are burned together in a close furnace for an hour. The last part of the process is to mix a quantity of sawdust with the compound; all are burned again. By this means the sulphur is consumed and driven off, while there remains the carbonate of soda ready for use. 2. We will next proceed to examine the various uses of salt to animals and vegetables. When salt is eaten it is decomposed in the stomach, assisted by sulphur, which vari-

articles of food supply, in a manner similar to the artificial process we have just described. The chloride goes to form hydrochloric acid or muriatic acid; this, with pepsine, constitutes our gastric juice, the active agent by which digestion is carried on. The other ingredient of the salt, the alkaline or soda part, is taken up by the blood, of which it forms a very large proportion, and without which it could not be healthy. In proof of this: one of the severest punishments inflicted on criminals in Holland was depriving them of salt with their food, by which some horrible diseases were caused—so bad that the treatment was discontinued. All the juices of animals contain salt, and must be supplied with it to keep them and us in health. It also destroys worms and animalcules, which are spontaneously developed in any animal. To the beasts of our farms it is invaluable. Horses and sheep should always have some of it to lick; they are found to thrive much better. Cattle should always have it in their hay, and salt bran mashes increase the yield of milk immensely. It is absolutely necessary to pigs, and is an almost certain preventive of distemper in them. In fact, it has been stated and proved by learned and medical men of all ages that healthy action of the organs of animal life cannot be maintained without a supply of salt into the system. In countries distant from the sea, where no sea air or spray is ever blown, as it is in Britain, and where salt is scarce and difficult to be procured, the inhabitants and animals feel the want greatly, and experience a craving desire for anything saline. In the centres of Africa and South America the people seek salt, and eat it plain, with the same zest that many people in this country relish sugar, and a man's wealth is estimated by his being able to have salt with his meals. Herds of wild animals in these continents are known to travel hundreds of miles to salt springs and lakes called salinas and salt licks. The consumption of salt in Europe alone is immense. It is computed to be about two millions and a-half tons annually. Next, its use to vegetables and land. This is scarcely so well known or resorted to as it deserves. There are some vegetables, as mangolds, potatoes, turnips, carrots, and beet, which contain a large proportion of it, as is proved by the ashes of those when burnt yielding from 40 to 50 per cent. of salt, showing that they require salt as part of their manure; this knowledge is made use of by many farmers in England, and ought to be made public in this country. It is thought by many that salt destroys vegetation; but so does any other strong manure, if applied too close to, or touching the plant or the seed in its pure state. The best way to apply salt to crops is to scatter it over the ground a little before the crop goes in. It will then be dissolved and assimilated by the soil. The average quantities for the Irish acre for root crops are from 4 cwt. to 4½ cwt. for light land, and from 2½ cwt. to 3 cwt. for heavy soils. Potatoes and mangolds take most; next are turnips, carrots, and beet. Besides acting as a manure to the crop, salt is most useful in destroying insects, slugs, worms, and their eggs, and that pest of farmers, the wireworm is effectually destroyed by it; but it should be applied before the crop goes in. Another benefit is that salt keeps the ground moist, preventing it being parched in summer, or frozen hard in winter; for sea-water does not freeze so readily as fresh-water. Another effect of salt is that it hastens the decay of dead vegetable matter, so that when mixed with or thrown upon heaps of weeds, roots, leaves, &c., the mass soon decays and makes excellent manure. The best kind to use is the pickling or fishery salt, after it has been used. It then contains a deal of blood and animal refuse, by which its value as manure is greatly increased. The price of this in Dublin is about 16s. per ton. 3. There are various sources of salt, namely, the sea-salt mines, salt lakes, salt springs, and caverns and crevices in the rocks on the shores of Spain and the Mediterranean. The greatest yield is from salt-mines. They exist in Cheshire, in America, but the largest in the world are at Saltzburgh and in Galicia, one of the provinces of Austria. The bed of salt is 460 miles long, 20 miles broad, by 1,200 feet thick. The mining there employs thousands of hands. The salt there is in the state of rock. It contains some earthy impurities which are freed from it by dissolving it—washing and then evaporating; and another method, instead of quarrying or working in the mines, is to sink a small shaft a few inches wide

into the bed of salt, pour water down. After some time it is pumped up and evaporated. Another great source of salt is the sea; but as sea-water contains numerous other ingredients, the production of salt is a troublesome one. By analysis of sea-water on the coast of Britain, it is found to contain the following: Potassium, magnesium, bromium, sulphate of magnesia (or common salts), carbonate of lime, and iodine. The proportion of these in sea-water is 3½ per cent.; some are exceedingly small; while of chloride of sodium (common salt) there is of this 3½ per cent., about 2½ (exactly 2.70) per cent. In plain language, if you take 100 lbs. weight of sea-water round Britain, you will obtain 2½ lbs. 11 ounces of common salt. The evaporation is carried on either by boiling, as is done in many parts of our coasts, or by evaporation in wide pans. Hence the origin of Preston-pans, where the battle was fought. Evaporation is not carried on to dryness; but as soon as the salt crystals are formed on the bottom, the mother liquor, as it is called, which is by this time very dense, is drawn off. The salt is then dried, and either cast into blocks or sent loose for sale. From the residue—the “mother” liquor—are obtained Epsom salts, magnesia, &c. The difference in the various sizes of salt grains is caused by the rate of evaporation; when fine is required, evaporation is done rapidly in a few hours; but when very coarse salt is required, evaporation occupies several days. The primary crystal of salt is a cube, but it appears often in a pyramidal form; this is caused by several cubes united when crystallizing. The specific gravity is 2.55, consequently sea water, or water containing salt, will be denser than fresh water: by this means its buoyancy is increased. Having shown its uses on land, we must not omit its great use to the sea. Not only do the salts in sea-water aid in keeping it pure, but as the sea is the great receptacle for the sewage from land, these impurities, of which there are thousands of tons annually poured into the sea, would pollute its shores were it not that the salts, with their various strong affinities, combine with them, and prevent in a great measure their poisonous gases from rising. The sea-shore would otherwise be an unhealthy place and to be avoided, instead of being, as it is, the most healthy and invigorating, and a source of attraction and enjoyment. Hoping that this information may be found useful and interesting, I will conclude by an advice which is appropriate and of the highest authority, “Let your conversation be always with grace, seasoned with salt.”

HOW TO BREED HAMPSHIRE DOWNS.—At his letting, Mr. Saunders said he had done the best he could, though he did not mean to assert he had done better than anyone else. His endeavour had been to improve the breed of sheep, and to produce such stock as would suit his friends, and pay them perhaps better than they had paid himself, though he had no fault to find in that particular. The stock would speak for itself; he had done the best he could without cake or corn. He liked cake and corn when he wanted fat; but he could not agree with it for a lot of breeding rams, as he did not like to see them with cotton jackets, but with a woolly coat. He had generally succeeded pretty well. He had showed 32 times in the last three years, and gained 23 prizes, having obtained five medals within the same period. If they would breed with his sheep, he would engage they would beat him in stock if they lived to his age, and improved the breed of sheep as he had done for the last 45 years. He had kept a pedigree-book for nearly 40 years which told him the state of his stock. The course he had adopted with regard to feeding the sheep to be submitted to competition was to give them some cake when the snow set in; but they had not had a mouthful of corn nor cake since Lady-day. They had no swedes all the winter; and he was obliged to do this—not that he liked the system, but he was compelled to resort to it, as he had nothing else to give them. A gentleman who had some of his ewes last year said some of them were 16 or 17 stone. Mr. Chapman Saunders said he saw a fleece cut from one of their ewes the other day, weighing 11lbs.

SUFFOLK AGRICULTURAL ASSOCIATION.

MEETING AT BECCLES.

The chief difficulty with the Suffolk Show has now come to be its late appearance in the East Anglian field. After the Essex, Norfolk, and Cambridgeshire Societies have had their innings, it becomes extremely hard for Suffolk to produce any striking novelty. It has been proposed that the eastern counties should combine their forces and hold one general show. The idea has not yet been actually realized, but it may be said after all to have been practically carried out, since after the fashion of the High Court of Parliament an Eastern Counties Show is virtually held by "divers prorogations and adjournments" at certain points in each of the four counties every summer. Each county certainly contributes a distinct contingent of exhibitors, but still at each county gathering there are old stock names always turning up—your Overmans, your Barlows, your Stearns, your Sextons, your Duckerings, and your Giblins: and it is to these stock names that most of the principal prizes are somehow or other attached.

But whatever may have been the "padding" of the Suffolk show, it always has its speciality in the agricultural horse stock, of which Suffolk is justly proud. The style of the Suffolk cart-horse appears to be now considered less "punchy" (fancy a Frenchman trying to translate this expression); he has become a larger, a leggier, and a roomier animal, and seems to be aiming at the dignity of drawing a dray rather than marching a furrow. The honours of the Beccles meeting, so far as the agricultural stallions were concerned, went to Mr. Garrett's Cupbearer, sire Conqueror, a famous horse of the late Mr. Crisp—the Tom Crisp, once well known in the tented but still peaceful fields devoted to agricultural exhibitions, but now numbered with the countless host of the dead. Cupbearer comes, then, of a good sound stock, and the district is now well furnished with his stock. He brought his owner at the Beccles meeting, in cups and specie, no less than £56 5s., so that he may be said to have done a very good two days' work. In the three-year-old colts, Bismarek was again a winner, with some of the same judges. Lord Stradbroke sent four handsome cart mares. Some prizes for the best cart foal went to one of Cupbearer's progeny. The three-year-old fillies were a plain class; the prize winner was, however, a nice compact animal. The Despised, which figured in the front among the two-year-old fillies, was not altogether fancied, and some thought that Blossom, Mr. Rist's chesnut, might yet turn out the most valuable mare. The locally well-known chesnut mare Matchet, which is another of Conqueror's descendants, won a Beccles special prize as the best cart mare in the yard. Before leaving the agricultural horse stock we should note that Cupbearer, although he carried all before him, did not show in first-rate form, in sporting phraseology, having lately been suffering from a severe attack of inflammation of the bowels, when he injured his hoofs by striking against the walls and floor of his box. The three-year-old colts were a good class, and Mr. Rist also showed a smart yearling.

In the thorough-bred stallions fortune for once deserted the Hasketon stables, but she made amends in Major Barlow in the other hunting classes. In the hunting mares Sir A. S. Adair had three nice animals, and one, a neat bay, took the prize. The hackney mares were a fair class; when they were being judged, a black

gelding belonging to Mr. Pollard, of Raveningham, jumped at the rails of the ring in a side-ways fashion, and fell with a broken neck on the other side; his death being only a matter of a second or two. Mr. Mumford showed a neat mare, with nice shoulders. Among the four-year-olds, Major Barlow had matters nearly all his own way, and in hunters generally the Major was very strong with his Islington and Guildford team. Among the harness horses the Duke of Hamilton showed a pair of capital roans; but Mr. Gilbey's grey and bay, placed first at Islington, had the prize in the class. A grey Russian mare, shown by Sir Stephen Lakeman, displayed fine action—a quality which is claimed for Russian horse-flesh: Sir S. Lakeman's mare was bred by Count Orloff, and he is about eight years old. It may be remarked that Sir Stephen Lakeman also showed a pair of Hungarian chesnuts, Cupid and Psyche, bred by Count Batthyany. The experiment made this year by the Society in giving horses to be shown in harness appears to have been successful. As extra stock Sir A. S. Adair showed five coaching brood mares with foals. Some of the ponies entered showed capital action.

The cattle and sheep classes were not the strong features of the show; for it seems to be horses, horses, and always horses with Suffolk. Hogarth Second was again placed first among the aged Shorthorns. Mr. Upson's Prince Lincoln, a chief winner at Dereham, was not even commended at Beccles; so much for Shorthorn judging! A cup, given by Mr. Ogilvie, for the best Shorthorn heifer, was awarded to Mr. Chaplin's Maid of Honour, but some dispute seems to have arisen as to the class in which she should have been entered. The Shorthorn heifers were generally a promising lot, albeit that Lady Pigot did not show. Mr. J. Overman does not exhibit Devons in Norfolk now that the Norfolk Society has ceased to make a special class of them, for the reason that the Devon is something of an exotic in Norfolk, and a large class of them cannot be made up. At Beccles Mr. Overman turned up, however, with his twelve-year-old Devon cow, Violet; but his bull Wellington, was vanquished in the miscellaneous bull class by a mulberry pure Alderney. The miscellaneous cattle also comprised a choice white Ayrshire bull shown by Lord Rendlesham, and Brittany heifer. A great feature of the cattle classes was, of course, the Suffolk breed, pure and simple, termed in Norfolk the Norfolk and Suffolk red polled. Most of the prize animals shown at Beccles figured at East Dereham, at the Norfolk meeting, and as they have not changed since, there is really nothing fresh to say about them. The two counties are, of course, to be commended for endeavouring to develop a good serviceable breed of their own.

The few Southdowns shown comprised some nice level animals. The shearing Suffolk prize tup was voted, however, as usual, rather plain. A discussion ensued upon the point whether Oxford Downs could be treated as short-woolled sheep; the decision appears to have been in the affirmative. Mr. Giblin had some Cotswolds of good shape; but his prize ram was not very well covered about the loins.

In pigs Suffolk may be said to be at home, but the Duckerings ran the Suffolk breeders hard in some of the

classes; Lord Rendlesham, it may be noted, has taken to pig breeding, and seems to have made a good beginning. Two of the judges of sheep and pigs were local men. This seems a mistake, but perhaps it was Hobson's choice, as no other Curtii were found willing to jump into the gulf.

The receipts in gate money at the Show were £710, against £569 at Sudbury last year, and £676 at Ipswich in 1869. The meeting was thus a financial triumph.

Among the implement exhibitors were Messrs. C. Burrell, Thetford; W. Elliott, Beccles; Garrett and Sons, Leiston; W. Harper, Beccles; Holmes and Son, Norwich; Marshall, Sons, and Co., Gainsborough; R. Maynard, Whittlesford; Murt and Turner, Kenninghall; Page and Girling, Melton; T. and H. Randell, North Walsham; Richmond and Son, Bungay; Ransomes, Sims, and Head, Ipswich; James Smyth and Sons, Peasenhall; Joshua Smyth, Swetting, Saxmundham; R. Tripp, Toft Monks; E. R. and F. Turner, Ipswich; Vulean Iron Works Company, Ipswich; J. Warren, Maldon; Nathan Warren, Wetherden; W. E. Wigg, Beccles; Woods, Cocksedge, and Warner, Stowmarket. The following firms also exhibited miscellaneous articles: Anderson and Co., Ipswich (stack cloths, &c.); Baly, Sutton, and Co., Norwich (artificial manures, &c.); T. Bradford, London (washing machines); H. Bridges, Stowmarket and Bury (carriages, &c.); G. P. Dodge, London (india-rubber machine bolts, hose, &c.); E. Hills, Sudbury, Suffolk (adamantine cement); T. P. Hitchcock, Bury and Lavenham (machine bands, &c.); J. K. King, Coggeshall, Essex (roots, seeds, &c.); C. J. Meadows, Ipswich (garden implements, &c.); A. W. Pashley, Haddiscoe (manures); Rands and Jekell, Ipswich (stack cloths, &c.); S. Smith, Halesworth (carriages). The show of implements was somewhat reduced by the near approach of the Wolverhampton meeting.

PRIZE LIST.

JUDGES.—*Horses for Agricultural Purposes*: J. Manning, Oringbury, Wellingborough; — Woolhouse, Wellingore, Grantham; S. C. Goodwyn, Covehithe. *Riding and Coaching Horses*: J. E. Bennett, Bosworth Grange, Rugby; S. C. Roper, Rougham. *Cattle*: G. D. Badham, Bulmer; N. G. Barthropp; S. Gardiner, Wheatacre. *Sheep*: G. M. Sexton, Wherstead; C. Sturgeon, South Ockenden Hall, Essex. *Pigs*: M. Biddell, Playford; — Hindson, Liverpool. VETERINARY INSPECTOR.—Professor Varnell.

HORSES.

FOR AGRICULTURAL PURPOSES.

The best stallion.—First prize £20 and extra prizes of £26 5s. and £10 10s., R. Garrett, Saxmundham (Cup Bearer); second, £5, C. Boby, Stutton (Prince Royal).

Three-year-old colts.—First prize, £15, W. Wilson, Baylham (Bismarck); second, £5, N. Catchpole, Ipswich (Emperor). Highly commended, Executors of T. Capon, Dennington (Chieftain).

Two-year-old entire colts.—First prize, £15, Lieut.-Colonel Wilson, Stowlangtoft (Heir Apparent); second, £5, G. D. Badham, Bulmer (Emperor). Commended, M. Biddell, Playford (Duke).

One-year-old entire colts.—Prize, £10 10s., J. Rist, Tattingstone (Young Emperor).

Mare with foal at foot.—First prize, £15, and extra prize £10 10s., Executors T. Capon (Matchet); second, £5, J. Read, Mendham, Harleston (Scot).

Foal, foaled in 1871.—First prize, £8 and extra prize £10 10s., Charles Lee, jun., Walpole, Halesworth; second, £4, W. L. Pollard, Ravensingham.

Gast mare.—First prize, £10, W. Freeman, Ringsfield (Moggy); second, £5, H. Walton, Newbourne (Diamond).

Three years old filly.—First prize, £10, T. Easterson, Bawdsey (Bessy); second, £5, Lieutenant-Colonel Wilson (Oxford Moggy).

Two years old filly.—First prize, £10, W. Thompson, jun.,

Thorpe Essex (The Despised); second, £5, J. Rist (Blossom).

One-year-old cart filly.—Prize, £5 5s., H. Frost, Shadingfield.

Pair of plough horses.—Prize, £10 10s., W. Thompson, junior.

Team of four cart horses, in harness.—Prize, £21, the Earl of Stradbroke, Henham Hall (Gip, Brag, Sprite, Smart).

RIDING AND COACHING HORSES.

Thorough-bred stallion for hunting purposes.—First prize, £20 and extra prize £10, the Duke of Hamilton and Brandon (The Beadle); second, £10, Major Barlow, Hasketon (Brennus).

Stallion for coaching purposes.—Prize, £10, J. Groat, Woodbridge (Harkaway). Commended: Sir A. S. Adair (Donald Caird).

Roadster stallion.—First prize, £10, H. Bultitoff, Ely (Clear the Way); second, £5, W. Flanders, Mildenhall (Quicksilver). Commended: J. Groat (Young Fire King).

Match pair of geldings or mares for carriage purposes.—Prize, £10 10s., W. Gilbey, Hargrave Park, Stanstead, Essex (Lily and Lilac).

Hunting mare with foal at foot.—Prize, £10, Sir A. S. Adair (Melon).

Hackney mare with foal at foot.—Prize, £10, the Duke of Hamilton and Brandon (Jewel).

Hunting foal.—Prize, £5, M. Biddell, Playford.

Roadster foal.—Prize, £5, the Duke of Hamilton and Brandon.

The best foal by Dalesman or Deerfoot.—Extra prize, £10 10s., F. Barne, Sotterley Park.

Weight-carrying hunting mare or gelding, five years old.—Prize, £10, M. Munford, Creeting (Queen of Clubs). Commended: Lieutenant-Colonel Wilson (Fenian).

Weight-carrying hunting mare or gelding, four years old.—Prize, £10, and extra prize, £10, Major Barlow (Beckford). Commended: M. Munford (Queen of Hearts).

Weight-carrying hunting mare or gelding, three years old.—Prize, £7, E. Greene, M.P., Bury St. Edmunds.

Weight-carrying hunting mare or gelding, two years old.—Prize, £5, Major Barlow (Black Locks).

Light-weight hunting mare or gelding.—Prize, £10 10s., Major Barlow (Tregothman). Commended: J. Groat (Tam o' Shanter).

Riding mare or gelding, not under 15 hands high.—First prize, £10, W. Gilbey (Lily); second, £5, Jacob Waiker, Loudham Hall.

Hackney mare or gelding, not under 14 and not exceeding 15 hands high.—First prize, £10, Rev. W. F. Thursby, Bergh Apton Rectory (Prince); second, £5, Major Barlow (Trusty).

Three years old hackney mare or gelding.—Prize, £5, E. Greene, M.P. Commended, J. Groat (Beauty).

Two years old hackney mare or gelding.—Prize, £5, J. F. Vincent, Wrentham.

Hackney mare or gelding.—Prize, £10 10s., Major-General Sir S. Lakeman, Stoke Park, Ipswich (Muskaloika). Highly commended, W. Gilbey (Lily); commended, the Duke of Hamilton and Brandon (Marquis).

Pony, not under 13 and not exceeding 14 hands high.—Prize, £5, T. L. Taylor, Starston (Lord Tom Noddy). Commended, the Duke of Hamilton and Brandon (Punch).

Pony, not under 12 and not exceeding 13 hands high.—Prize, £5, W. Hartenp, Upland Hall, Bungay (Silver Star). Highly commended, G. M. Sexton, Wherstead Hall (Matchless); commended, J. Groat (Nobby).

Pony, not exceeding 12 hands high.—Prize, £5, F. G. Freeman, Henham (Charlie). Commended, G. Gosderham Monevden (Little Wonder).

CATTLE.

Suffolk bull, not under two years old.—First prize, £10, and extra prize £10, B. Brown, Thursford (Norfolk Duke); second, £5, J. J. Colman, M.P., Norwich (Cherry Duke).

Suffolk bull, under two years old.—First prize, £10, J. J. Colman, M.P. (Easton Duke); second, £5, J. Hammond, Bale (The Baron).

Suffolk ewe.—First prize, £10, and extra prize £10, J. Hammond (Buttercup); second, £5, B. Brown (Mrs. Davey). Commended the whole class.

Suffolk heifer, under three years old.—First prize, £10,

B. Brown (Countess); second, £5, J. Hammond (Mrs. Davey Fourth).

Suffolk heifer, under two years old.—Prize, £10, Sir E. C. Kerrison, Broome Hall.

Shorthorn bull, under two years old.—Prize, £10, T. Rose, Melton Magna, Norfolk (Hogarth Second).

Shorthorn bull, not under two years old.—Prize, £10, and extra prize £10 10s., N. Catchpole, Ipswich (Oxford Prize).

Shorthorn cow.—First prize, £10, N. Catchpole (Dairy); second, £5, C. Barnard, Harlowbury (Echo).

Shorthorn heifer, under three years old.—Special prize, £10 10s., J. R. Chaplin, Ridgewell, Halstead (Maid of Honour).

Shorthorn heifer, under two years old.—Prize, £10, C. Barnard (Golden Butterfly).

Bull of any pure breed, not Suffolk or Shorthorn.—Prize, £10, R. M. Jary, Westley. Highly commended: A. W. Crisp, Chilsoford (Black Prince). Commended: Major Barlow (Master John).

Bull of any pure breed, not Suffolk or Shorthorn, under two years old.—Prize, £10, Lord Rendlesham.

Cow of any pure breed, not Suffolk or Shorthorn.—First prize, £10, J. Overman, Barham Sutton (Violet); second £5 and extra prize of £5, Lord Rendlesham (Jessie).

Heifer of any pure breed, not Suffolk or Shorthorn, under two years old.—Prize £10, A. W. Crisp (Tiny).

Fat steer or heifer.—Prize £5 5s., J. J. Colman, M.P. (Briton); highly commended, N. Catchpole (Lady Lubbock).

SHEEP.

Southdown tup of any age.—Prize £10, C. Boby, Alton Hall, Statton.

Shearing Southdown tup.—Prize £10, C. Boby.

Five shearing Southdown ewes.—Prize £10 and extra prize of £5 5s., G. Overman.

Suffolk tup of any age.—Prize £10, J. M. Green, Stradishall.

Shearing Suffolk tup of any age.—Prize £10, J. M. Green.

Short-wooled tup of any pure breed.—Prize £5 5s., J. Giblin, Bardfield, Essex.

Shearing Suffolk ewes.—Prize £10, W. Harvey, Timworth, Bury St. Edmunds.

Long-wooled tup of any age.—Prize £10 and extra prize of £5 5s., J. Giblin.

Shearing long-wooled tup of any age.—Prize £10, J. Giblin.

Five long-wooled shearing ewes.—Prize £10, J. Giblin.

Ten short-wooled lambs.—Prize £6, J. J. Colman, M.P.

Ten cross-bred lambs.—Prize £6, A. F. Nicholson, Ipswich.

SWINE.

Boar (black).—First prize, £8 and extra prize £5 5s., G. M. Sexton, Wherstead Hall (Favonius); second, £4, G. M. Sexton (Albert Victor). Commended, S. G. Stearn, Brandeston (King William).

Sow and pigs (black).—Prize, £8, S. G. Stearn (Evening Star).

Breeding sow (black).—First prize, £8, G. M. Sexton (Lannah); second, £4, G. M. Sexton (The Pearl). Highly commended, S. G. Stearn (Gipsy).

Three young sows (black).—First prize, £5, G. M. Sexton; second, £3, S. G. Stearn.

Boar (white).—First and second prizes, £8, £1, and extra prize £5 5s., R. E. Duckering and Sons, Northorpe, Lincolnshire. Highly commended, J. Sawyer, Tunstall (Ace of Trumps).

Sow and pigs (white).—First prize, £8, J. Pettit, Aldborough; second, £4, Lord Rendlesham.

Breeding sow (white).—First and second prizes, £8 and £4, R. E. Duckering and Sons.

Three young sows (white).—Prize, £5, R. E. Duckering and Sons.

Pair of white boar pigs.—Prize, £5, R. E. Duckering and Sons.

Pair of black boar pigs.—Prize, £5, G. M. Sexton. Highly commended, Lord Rendlesham.

At the dinner the Chairman, Sir R. A. SHATTOE ADAIR, said the business of the evening meeting after dinner was to

take stock, so to speak, as to how far agriculture had advanced—how much higher the tide of improvement had risen since the last meeting. It seemed to him that on many points great improvement had been made. He did not profess to be one of that enlightened class of agriculturists who knew how to compensate for the rigours of the season by the drainage which drew the unwholesome moisture from the land, and consequently the wholesome moisture from the clouds, nor did he understand the alternation of crops; but so far as that branch of engineering which formed the framework of agriculture, or the moving powers, whether physical or produced by the intellect of man in regard to steam, was concerned, he held himself competent to form an opinion. As to the subject of drainage, they had year after year developed the system which was said to neutralise the rigour of the cold soil and cold climate. This had been said to have been done scientifically and thoroughly in their fields—in fact, it might almost be said to have reached the furthest point to which this country was susceptible of its adaptation. But when the water was drawn from the fields, it must not be detained in the rivers. When there was thorough drainage in the country, there must be arterial drainage of the district. In the upper waters of the Waveney, the ordinary system of drainage by widening and cleansing the ditches had accelerated the relief of that part of the district; but they were likely to hear from their friends in Beccles, that they were likely to bring the floods upon them. So it was with all practical improvements—one improvement beget another. If they improved the upper drainage of the Waveney, the lower drainage must be improved also; and to set their marshes free, they must follow the example of the Corporation of Beccles, in dismissing the intruding water in a swifter current towards the ocean. Coming next to the question of motive power, there had recently been a little feeling excited in consequence of an apprehended disparagement on a point on which Suffolk men were particularly sensitive; and with reference to which he thought he should do best by expressing his individual opinion, or by taking upon himself the responsibility on the part of the Association which he had had the honour of representing, of dismissing the whole matter as a good-humoured jest. It had been said that the Suffolk horses were only fit for gentlemen's parks, and unsuitable for farm work. He did not know that they needed to find fault with that in one sense. When a county was proud of its stock, it was bound to maintain the pre-eminence of that stock. It was upon that ground that he devoted a President's eulogy, because he believed that pure horses of the pure Suffolk breed were horses capable of doing any work that pluck and endurance required of that spirited and animated machine. It was an old saying that a Suffolk horse would go upon his knees and drag a tree out of the ground, and he thought he might say that this was not the only position in which a Suffolk horse and a Suffolk man could ever be seen. As to the question of the Suffolk horses only being fit for parks, he thought they might treat it as a jest born of a light heart. But there was one park for which the Suffolk horses were particularly fitted, and that was the park of artillery which swept through the Peninsula, France, Belgium, from Lisbon to Waterloo. There was a troop known in military history as the famous chestnut troop, which was composed of Suffolk horses, ridden by Suffolk men, and which manoeuvred for the first time in the neighbourhood of Woodbridge in the great war. Then, what a noble race of Polled cattle there were! and they were good milkers, and he confessed he had a great desire to see that breed perpetuated, though he was aware that the Polled and the Longhorn cattle were put aside for the more productive Shorthorn. But still there was a merit in a particular cattle as suited to a district, and therefore he had given a prize for the best Suffolk bull, which he had had the pleasure of seeing that day. He thought, however, if the bull was good as a bull, the cow was better as a cow. He next came to the sheep, and it would be supposed that Suffolk had so little unoccupied land that sheep were not likely to be plentiful. Strange, however, to say, if the statistical returns of the United Kingdom were referred to, it would be found that in proportion to the acreage Suffolk stood very high as compared with the many great grazing districts. He thought they should not shut their eyes to profitable investments in agriculture. The present system of farming had been well and accurately defined. The four-course system had been laid down, and there were a number of other regulations which were very excellent on the

whole; but it was their province and business in all matters to see where an exception might be made in a rule which was true in nine cases out of ten. From his intimate connexion with the North of Ireland he might say that there were inquiries for an enormous quantity of flax from which a large profit might be made if the farmers could once get access to those markets. There were factories in the neighbourhood of Eye where the business was carried on. A gentleman from Harleston applied to him the other day and asked him if he could give him any introduction into the North of Ireland. He (the President) might say that the manufacturers could purchase the produce of 500,000 or 600,000 acres, and Ireland had never produced more than 250,000; so it would be seen that there was a good opening for English industry in that direction. A firm he knew had issued a form in which they offered £72 per ton for flax at three months, or a cheque at discount. He (Sir Shafto) threw out these hints in order that gentlemen present might see how profitable this branch of industry might become. There was one point he should like to refer to; though it was not in their province as an Association, it had nevertheless a close connexion with it. They were not allowed to talk politics at these meetings, but still they might refer to measures of policy. He referred to the question of Local Taxation which was involved with the subject of the establishment of County Boards. What he wanted to say was, that he was sure that the more the taxpayers and those who were to administer the tax were brought into connexion as to the necessity of imposing taxes and the way in which taxes were to be laid out, the better it would be for the whole community. He could not help thinking but what the roads might be improved a little. The farmers of the county knew how difficult it was to send heavy loads to market over a bad road. In reference to the subscription kindly promised by Sir G. Brooke Middleton for another description of horse, he (the President) thought it an excellent idea. Though there was a prize for cart-horses, there was no prize for coaching stock. He exhibited several at the show to-day, and he was glad to find that they would not come to Decies another time without having the chance of taking something back with them. He thought this Association should do what it could to improve other breeds besides those intended for agricultural purposes.

Mr. G. D. BADHAM, one of the judges for cattle, said he had some years ago paid considerable attention to the native breed of animals such as had been shown to-day, and the exhibition included some of the best animals he ever saw; but he regretted very much to say that though the animals were good they were few and far between. He would throw out one suggestion. Would it not be better to have a best milking class, or a class best suited for dairy purposes? He would not say one word against the quality of the animals, for as a gentleman once said to him when he had inspected an animal which had taken a first prize, "I have seen your animal, and there is a great deal of the 11d. per lb., a very little of the 7d." That was so with the animals that had been shown to-day—they were literally all meat. But the suggestion he was going to throw out was whether it would not be advisable to have a class for dairy cattle. The prize animal which took the President's cup was a beautiful animal, but was she so for dairy purposes? He (Mr. Badham) much questioned it. She was said to be in milk. He should say that the quantity of milk that she would give would be very small, and she appeared not to be in calf. He had therefore thought it would be well for the committee to take into consideration whether it would not be as well to have a distinct class for dairy cattle. There was one observation he should like to make in regard to the horses. The Royal Society's show came so near to the Suffolk that he had sent only one horse. He had shown several times and had taken first prizes, but he had only carried off the second ribbon this time, and he (Mr. Badham) was perfectly satisfied. But he wished to make allusion to the remarks which had been made in the adjoining county, and he must confess that the gentleman who made that remark had not had much experience with Suffolk horses. He (Mr. Badham) could refer to gentlemen who had had a great deal of experience with them, and they prized them most highly. The late Sir Thomas Gooch once told him that there was no breed of animal that could do the same amount of work with the same amount of cost. He (Mr. Badham) had had some experience with Suffolk horses, and he had him-

self always found that to be the case. The late Lord Howe—and a better nobleman never lived—had shown his appreciation of the Suffolk horses by requesting that he might be drawn to the grave by four of them. Coming a little nearer home, the case of a miller living at the bottom of an immense hill might be mentioned, and he used to say that he had tried horses of every breed, and he could never find any to do the work so well as the Suffolk horses. What had Mr. Brown said? Why that they would go as fast again and do as much work again as any other breed.

A VOICE: At what cost?

Mr. BRADHAM: Upon less food.

Mr. M. BIDDLEL, one of the judges of the pigs, said, with regard to the animals he had been called upon to overlook, he might say he never saw a better lot. There were few in number, and the fact was that the chief exhibitor was so strong that others did not care to compete with him; for, few people cared to exhibit when they were almost certain of being beaten. He could not attribute the smallness of that class to any other cause than that certain names kept other exhibitors out, and they were names that were known all over the kingdom. What they missed, however, in quantity, they more than made up in quality, there being hardly an inferior animal amongst them. As to the observations that had been made in another county in reference to the Suffolk horses he only wished that that gentleman had been at the Show to-day, and looked at the animals there, and searched the history of the people who owned them, and he would have found that they were persons who got their living by farming, and not in park showing. Or if the gentleman would give his attendance at a great sale of horses that was to take place in the autumn, and would take the trouble to walk over the land there, he would see that that was kept in anything but the park-like or ornamental manner he had described. It was to be hoped that the gentleman who had said such things about the Suffolk horse, had not had much experience with that animal. Let him try the Suffolk against the Shire-bred. A gentleman once told him (Mr. Biddell) that he once bought a commended Shire-bred horse at one of the Royal Agricultural Society meetings, and he assured him—perhaps it might not be literally correct, but it was as well to refer to it as illustrating his experience with the Shire-bred horse—that it cost him as much for salves, ointments, balls, &c., as it did to keep each of his other horses. He did not wish to have anything of that kind again. They might suit the fens of Lincolnshire, but in Suffolk you could not keep their feet right, and as to their legs, you could hardly bear to go into the field where they were. The Ven. Archdeacon Groome had very properly alluded to the decrease in the agricultural population. No thinking man could view that fact without feelings of concern. But there was no doubt that one great reason for that was the low price of wheat, viz., £1 per coomb. It would be found that comparatively little labour would be employed when wheat was that price. It was not the employers that drove the labourers out. Of course, unless they could produce a certain amount of money, they could not lay it out, but if the price of wheat continued good, he had no doubt but that a greater number of labourers would be employed. He (Mr. Biddell), was an employer of labourers, but he did not plead guilty to sending militiamen home after having done his period of training. On the contrary, he encouraged his men to go in, always promising to give them work on their return, whether their services were wanted or not. He could not help thinking, however, that if the commanders of regiments would make enquiries, they would find that a great many of their men were not in regular employment, but persons whom business people took and discharged at a minute's notice, and agriculturists ought not to be blamed for not employing them. He certainly thought the regularly employed labourer had not lost much time by belonging to the militia. If it was so, all he (Mr. Biddell) could say was, that it was a very stupid thing for farmers to do.

Mr. N. G. BARTHOPE, one of the judges of the cattle, thought that it was important that gentlemen acting as judges should preserve as much as possible the old type of Suffolk cart horse. Prizes had been given to-day to horses that had gained prizes elsewhere, and it was of course hard to upset such awards. At the same time one or two prizes had been given to animals that did not possess what he considered to be the real type of the old-fashioned cart horse. The late Mr.

Catlin's Duke was supposed to be the best cart horse in Suffolk, and he gained prizes for many years, beginning as a two-year-old, and he (Mr. Barthropp) did not think that the animal ever was beaten. As to the animals to which prizes had been given to-day, he thought the old type of the Duke was better than that type shown not only to-day, but at various shows in Suffolk and Norfolk this year and last. He could not help thinking that we were losing sight of the original character of the cart horse. We did not want long animals; but the Suffolk cart horse should be a deep-bodied short-legged animal, and this was the kind of animal they wanted to preserve.

The PRESIDENT proposed "The Corporation of Beccles," referring to the arrangements that had been made for the reception of the Association. He knew of his own knowledge how assiduously the Corporation and others of the town had laboured to make the arrangements of the day complete, every suggestion made at Ipswich being deliberated upon and carried out, and he thought it would be admitted that the result had been most successful. The ground had proved to be an admirable place, no sooner had the showers subsided than the wet was absorbed by the soil, rendering it at once fit not only for the animals shown, but for the delicate slippers of the ladies, so many of whom had visited the grounds. Besides the Agricultural Show, arrangements had been made for a beautiful display of horticulture, which had given an additional charm to the day's meeting. Then there was a show of that feathery class, the profits of which were generally supposed to be given to the good wives of the farmers. The Poultry Show, the Horticultural Show, and the Agricultural Show had given a triple glory to this meeting, but all would have fallen flat enough indeed if there had not been on the ground those to make them welcome with their tributes and their offerings.

The MAYOR of BECCLES acknowledged the toast, and in doing so, he remarked that when they gave the Association an invitation to the town of Beccles, the Corporation intended to do all they could to give it a hearty reception. They felt that their strength was not very great; but they determined to exert that strength to the utmost. He was exceedingly glad that so many had attended, and in the name, not only of the Corporation, but of the town itself, he gave them a hearty welcome. He felt that the town had had great honour conferred upon it by such a large and distinguished attendance. He was not in a disposition to refer to that which might be complained of. Let bygones be bygones; but it was almost a pity that Beccles should have been passed by so long by the Association. They might, as a town, over-estimate themselves; but they thought themselves of some importance, and they felt that it had been a mistake that the Association had not gone to Beccles before, and he trusted they had done something to-day to make the members feel that it had been a mistake. They were, however, exceedingly glad to see them now, and when the turn of Beccles came round again, he trusted that something better might be done to entertain the Association. As to that day's Show, he had heard it spoken of in the highest terms. He was himself no judge of cattle. He did not know a shorthorn from a longhorn. But he had heard of men who were anything but connoisseurs of pictures, knowing well when they stood in the presence of a great picture. He himself had no knowledge of cattle or of horses; but he was certain that in going round the show-yard to-day, he had seen some magnificent pictures. He stood looking at a thoroughbred for something like twenty minutes; in fact he could scarcely take his eyes from it, and it seemed to him the perfection of the symmetry to be seen in a thoroughbred; but he might say as a proof of his want of judgment, that he was not a little surprised to find that horse did not carry off the prize—that was his mistake. In conclusion, the Mayor, referring to what had been done in the town to welcome the Association, observed that there were two gentlemen he must mention as having shown themselves more conspicuously active and useful in this matter—Mr. Garnham and Mr. Fenn.

The PRESIDENT said he would now call upon the company to do honour to success, not simply because it had been successful, but because it was the result of long and laborious toil and care. He had much pleasure in proposing "The successful exhibitors," and he would couple with the toast the name of Mr. Richard Garrett, of Leiston.

Mr. RICHARD GARRETT thought if their friends in Norfolk had been present to-day, they would have seen something calculated to induce them to alter their verdict with regard to the Suffolk horse. He had himself some experience in the employment of horses on the road before he had any experience on the farm. For the heavy weights machinery and other work he employed the Suffolk horse, and although they had now and then tried the Shire-bred they could never stand the work like the Suffolks. As to the question of keep, the Shire-bred could never live at the same expense. He had on his right a friend who had for the last 13 years tried the Suffolk horses on the London stones, dragging stores from a brewery. He commenced to import these animals 13 years ago, and they were at work for him still. As to this day's show, he (Mr. Garrett) should have been glad to have seen a better show in the old stallion class; there was a fair entry, but they did not all show up. He thought the three-year-olds were a promising lot, and that Suffolk was likely to hold her own.

Mr. GEORGE GAYFORD, with regard to the labourers, urged the necessity of giving them a better education, and the opportunity of bettering themselves elsewhere if they could not do so at home. It must be remembered that the population increased rapidly, and, as with bees in a hive, there must be a swarming sooner or later. The labourer, he submitted, merited greater attention, and he remarked that frequent reference was made to the conveniences for stock on the farm, but nothing was said about the labourer, many of whom had to walk a long distance to their work. The providing of a fair quantity of good cottages in a good situation was a matter of considerable importance.

Mr. CLARE SEWELL READ, M.P., alluded to the great loss which the farmers of the Eastern Counties had sustained in the death of two such good men as Mr. Samuel Jonas, and Mr. John Clayden. They were both men of sterling worth, and great ability. They solved the difficult problem of the present day, not how to spend money on a farm—for any fool with cash could do that—but how to apply capital to the improvement, and the cultivation of the soil, with considerable advantage. With regard to the show, it was not very many years ago when Norfolk people looked upon the Suffolk competitors with a certain degree of jealous alarm. They came to Norfolk and took away many of the prizes, and they did so now to a great extent, and their Norfolk friends were glad to see them; but he would say this, that from what he saw of the prize-list, the Norfolk people had had the pleasure of returning the compliment, and that that county had taken its fair share of prizes. Of this he was quite sure, that the Suffolk gentlemen had no objection to seeing the Norfolk competing with them. He had heard it said that the stock exhibited to-day was much better than it had been on previous occasions, and that being so, and Norfolk people being able to win prizes it must be clear that their stock had improved. There seemed to be an idea abroad that they should do what they could to make these local shows great international exhibitions. If that could be done, well and good; but he would say let them first take care of their own district. By all means let them ask for good friendly competition, but let them not forget their own native breeds. They had in Suffolk, it had been urged, the best breed of cart horses in the world. But in Norfolk they only said this, that until they made a class of their own, they could never win a prize in it. Those classes made for Norfolk were being considerably improved, and the agriculturists of that county were able to come to Suffolk and win prizes. They had encouraged the local breed of horses, and that breed was in a much greater state of perfection than in the last few years.

RIPON AND CLARO AGRICULTURAL SOCIETY.

The annual exhibition was held at Bishopton, near Ripon. The number of entries exceeded those of last year, the entries being in 1870, 664; 1871, 766. The entries in the most important class—namely, the cattle—were, however, below those of last year, which is accounted for in consequence of the prevalence of the foot-and-mouth disease. The specimens exhibited in the various classes were good. Extra prizes for horses brought a large number of valuable animals into competition. The only thing which appeared to be wanting to make the show a complete success was a fine day. The weather, which has been so fatal to most of the out-door gatherings lately, had the effect of keeping a very large number of persons from being present.

The following is a list of the prizes :

SHORTHORNS.

Bull, two years old and upwards (open to All England).—Special prize, T. Stamper, Oswaldkirk; second, W. Linton, Sheriff Hutton.

Bull, above one and under two years.—First prize, J. Cattley, Stearsby; second, Miss E. Barroby, Dishforth.

Bull calf, under twelve months old.—Prize, W. Linton.

Cow or heifer, in-calf or milk, three years old and upwards.—First prize, J. Outhwaite, Bainesse, Catterick; second, J. Cattley.

Heifer, in-calf or milk, under three years old.—First prize, T. H. Hutchinson, Catterick; second, T. Stamper.

Heifer, one year old and under two.—First prize, Major Stapylton, Helderby; second, G. Yeates, Studley Roger.

Heifer calf, under twelve months.—First prize, T. H. Hutchinson; second, Major Stapylton.

CATTLE OF ANY BREED OR A CROSS.

Pair of dairy cows, in-calf or milk (open to All England).—Special prize, G. H. Harland, Sowber Hill, Northallerton; second, T. H. Hutchinson.

Cow for dairy purposes.—First prize, Lord Grantley, Ripon; second, C. Mason, Dishforth.

Alderney or Guernsey cow or heifer of any age, in-calf or milk.—First and third prizes, W. Well, Ripon; second, G. Yeates.

Cow for dairy purposes, the property of a cottager.—First prize, J. Cummins, Westwick; second, G. Hutley, Nunwick; third, T. Blakeborough, Rainton.

HORSES.

FOR THE FIELD.

Brood mare with foal at foot.—Special prize, Viscountess Downe, Thirsk; second, J. B. Booth, Catterick.

Three-year-old gelding.—First prize, M. Kilding, Snape; second, T. Kendall, Ripon.

Three-year-old filly.—Prize, S. L. Lane, Thirsk.

Two-year-old gelding.—First prize, J. Mason, Dishforth; second, Viscountess Downe.

Two-year-old filly.—First prize, W. Clarke, Asenby; second, Viscountess Downe.

Yearling gelding.—Prize, Viscountess Downe.

Yearling filly.—First prize, W. Clarke; second, R. M. Bowman, Ripon.

FOR HARNESS.

Brood mare with foal at foot.—First prize, L. Mansfield, Thirsk; second, M. Robinson, Richmond.

Gelding or filly four years old and upwards.—First prize, H. Fawcett, Otley; second, I. Scarth, Northallerton.

Three-year-old gelding or filly.—First prize, J. W. Appleyard, Easingwold; second, J. Wells, Ripon.

Two-year-old gelding or filly.—First prize, J. W. Appleyard; second, J. Wells.

Yearling gelding or filly.—First prize, J. Greaves, Clothierholme; second, W. Harland, Ripon.

Single-harness horse, gelding, or mare.—Prize, T. Scott, Boroughbridge.

FOR THE ROAD.

Brood mare with foal at foot.—First prize, R. Williamson, Ripon; second, W. Ingham, Bishop Thornton.

Three-year-old gelding or filly.—First prize, H. Judson, Baldersby; second, T. Carter, Ripon.

Two-year-old gelding or filly.—First prize, Major Stapylton, Helderby; second, W. Snow, Easingwold.

Yearling gelding or filly.—First prize, C. Barroby, Baldersby; second, G. Askwith, Hutton Sessay.

FOR THE FARM.

Brood mare with foal at foot.—First prize, J. Smith, Boroughbridge; second, W. Dixon.

Three-year-old gelding or filly.—First prize, Mrs. A. Heddon, Baldersby; second, J. Knowles, Wetherby.

Two-year-old gelding or filly.—First prize, Mrs. A. Heddon; second, C. Barroby.

Yearling gelding or filly.—Prize, J. Pinkney, Thirsk.

Pair of farm horses.—First prize, Mrs. A. Heddon; second, Major Greenwood, Swarcliffe Hall.

HUNTERS AND ROADSTERS.

Hunting gelding or mare.—Special prize, J. S. Darrell, West Ayton.

Jumper.—First prize, B. Nicholson, Garforth; second, H. D. Baily, Ollerton.

Four-year-old gelding or filly.—Special prize, T. H. Hutchinson, Catterick; second, and jumper, S. L. Lane.

Young gentleman's hunter.—First prize, R. Wells, Thirsk; second, S. L. Lane.

Roadster, nag or mare.—Special prize, T. Dale, Wetherby; second, T. son, Leeds.

Pony, not exceeding 14 hands.—First prize, W. Wells, Ripon; second, Hough, Bedale.

Pony, not exceeding 13 hands.—First prize, J. T. A. er, Ripon; second, J. Cooper, Copt Hawick.

Donkey of any age.—First prize, Davy, Bishop Monkton; second, J. Blakey, Ripon.

SHEEP.

LEICESTERS OR LONGWOOLS.

Ram of any age.—Special prize, first and second, T. H. Hutchinson, Catterick.

Shearling ram.—First prize, T. H. Hutchinson; second, E. Riley, Beverley.

Pen of three ewes.—Special prize, T. H. Hutchinson; second, E. Riley.

Pen of three shearling gimmers.—C. and W. Dovenor, Ripon; second, E. Riley.

Pen of five shearling wethers.—First and second prize, J. Gothorp, Bedale.

Pen of five he lambs.—Prize, J. Greaves, Clothierholme.

Pen of five gimmer lambs.—First and second prize, J. Greaves.

ANY OTHER BREED OR A CROSS.

Scotch ram of any age.—Prize, J. Walker, Grewelthorpe.

Pen of five Scotch ewes.—Prize, T. Scott, Boroughbridge.

Pen of five first-cross Scotch ewes.—First prize, H. Walton and Son, Richmond; second, J. Walker.

Pen of first-cross Scotch shearlings.—First prize, H. Walton and Son; second, T. Scott.

PIGS.

Boar of any age of the large breed.—First prize, W. Lister, Armley; second, G. Mangles, Givendale.

Sow of any age of the large breed.—Prize, G. Mangles.

Boar of any age of the middle breed.—First prize, J. Umpleby, Guiseley; second, S. Appleby, Armley.

Sow of any age of the middle breed.—First prize, C. R. N. Beswick Roys, Littleborough; second, J. C. Taylor, Leeds.

Boar of any age of the small breed.—First prize, W. Lister; second, J. Smith, Leeds.

Sow of any age of the small breed.—First prize, C. R. N., Beswicke Roys; second, W. Lister.

IMPLEMENTS.

Double-furrow plough.—Nicholson, Pegler, and Co., Ripon.
 Portable corn-grinding mill for steam power.—J. Baxter Killinghall.
 Portable sheep rack.—W. Granger, Killinghall.
 Combined machine, 4ft. 6in., and horse rake with steel teeth.—H. and G. Kearsley, Ripon.
 Balance draft grass mower, and double-furrow plough.—H. Bushell, York.
 Horse reaping machine, and stand for fixing reaper knives in while sharpening.—J. Barker, Dunnington.
 Water tank.—J. Ingram, Ripon.
 Two-row turnip drill.—W. Jaques, Thirsk.
 Reaping machine.—F. and J. Scurrah, Well.
 Twenty-eight row clover and rye-grass drill.—J. Teasdale, Burneston.
 One-horse reaping machine, with extra knife.—E. Sherwood, Bedale.
 Self-feeding sheep rack.—W. Smith, Hull.
 Grass-mower.—H. Stephenson, Grewelthorpe.
 Assortment.—R. H. Webster, Ripon.
 Two-ridge turnip seed drill.—J. Matthouse, Ripon.
 Midfeather churn.—T. Bradford and Co., London and Manchester.
 Knife-cleaning machine.—J. Orton, Ripon.
 Assortment.—J. Spence, Ripon.
 Barrel churn.—W. Hopperton, Malton.
 Assortment.—Messrs. Pearson and Bailey, Hull.
 Assortment.—H. Richardson and Co., York.
 Assortment.—A. and E. Lickley, Ripon.
 Assortment.—R. James, Ripon.
 Selection of horse-shoes.—E. Hunter, Marton-le-Moor.
 Assortment.—W. Parkinson, Ripon.
 Parisian phaeton, Prince of Wales' Whitechapel, Grantley Whitechapel cart, and for the general excellency of the articles exhibited.—S. Croft, Ripon.
 Parisian phaeton, Prince of Wales' dogcart, and Whitechapel dogcart.—T. R. Mountain, Ripon.
 Mattinson's one-horse reaper.—T. Robinson, Hay-a-Park.

LANDLORDS' IMPROVEMENTS.

The following circular has been addressed to the tenants on the Stoneleigh estate:

Estate Office, Stoneleigh Abbey, Kenilworth,
 20th June, 1871.

DEAR SIR,—I am directed by Lord Leigh to inform you that, having gone over nearly the whole of his estates with draining, buildings, and other permanent improvements, effected at a large outlay, his lordship is of opinion (and is confirmed in that opinion by the advice of persons of experience) that a more satisfactory system for the management of his estates—both for his tenants and himself—can be arranged, the main features of which are:

1st. That all permanent improvements shall be effected by and at the sole cost of his lordship, a settled rate of interest on the outlay being charged.

2nd. That all repairs shall be done by Lord Leigh.

These very important changes, you will see, necessitate a revaluation of your farm, and this his lordship has no doubt will be effected in such a manner as to give you satisfaction, and increase that confidence which has always existed between you, his lordship, and the late Lord Leigh.

This change will relieve you from finding and locking up in improvements that capital which will enable you more profitably to cultivate your farm, and give you more freedom to ad-

vantage yourself, by removing your capital and energies to a more beneficial occupation, without the possibility of leaving any of your money on his land.

The subject of leases has engaged his lordship's attention, and he is not indisposed to consider any application for one. There are tenants to whom he would not grant one, and also farms so situated that he would decline to lease them; but these tenants have his engagements to value and pay for their unexhausted improvements on quitting.

Your very obedient servant,

GEORGE JONES.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

DR. VOELCKER'S ANALYSES OF MANURES.

We have received three or four letters from manure makers or their agents in reference to the recently published analyses. As these, however, were given under the authority of the Council of the Royal Agricultural Society, it seems to us that any corrections or explanations should in the first instance be addressed to the Society, and then, if thought fit, embodied in the report of proceedings of Council, at which such communications were read. In fact, as will be seen from the proceedings on Wednesday, this is the course about to be adopted. It would be quite impossible to give in full the letters or series of letters we have received, but we subjoin the more material points of each. Thus, in addition to a number of testimonials and other analyses in favour of H. Marshall and Co.'s Fish and Bone Manure, Professor Voelcker sends another analysis, accompanied with this note:

Analytical Laboratory,
 11, Salisbury Square, Fleet Street, E.C.
 London, June 17th, 1871.

Dear Sir,—I have the pleasure of enclosing a copy of an analysis of the sample you sent me, and which you inform me was a sample of Fish and Bone Manure prepared by Messrs. H. Marshall and Co. I notice Messrs. Marshall charge £5 5s. for their Fish and Bone Manure, which is a fair price for the manure.

W. Barker, Esq.

Yours faithfully,

AUGUSTUS VOELCKER.

With regard to the bone-dust sold by Messrs. Oliver and Snowden to Mr. Straker, the Monkton Manure Company say that "as the bone-dust was purchased from us we wish to clear these gentlemen from all blame in the matter. The bones were part of a cargo of Spanish bones ex 'Tasmania,' delivered to us; they were only a few days in our works, and we are prepared to prove that they were ground and sent out as they were received from import ship; if they contained sand it must have been in the bones themselves, as the discharging into lighter, and after that into our works, would have shaken out any dust or sand." Oliver and Snowden state further that "no analysis of the bone-dust was given; it was simply guaranteed 'pure and unadulterated,' and as such purchased by us at £8 per ton, and recharged to Mr. Straker at £8 7s. 6d., less than 5 per cent. profit."

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

MONTHLY COUNCIL: Wednesday, July 5.—Present: Lord Vernon, President, in the chair; the Duke of Devonshire, K.G.; the Earl of Powis, Vicount Bridport, Lord Chesham, Lord Kesteven, Lord Tredegar, the Hon. H. G. Liddell, M.P.; Mr. Acland, M.P.; Mr. Bowly, Mr. Cantrell, Colonel Challoner, Mr. Clive, Mr. Dent, M.P.; Mr. Holland, Colonel Kingscote, M.P.; Mr. Leeds, Mr. Masfen, Mr. Ridley, M.P.; Mr. Shuttleworth, Mr. Thompson, Mr. Torr, Mr. Wells, M.P.; and Professor Simonds.

The following new members were elected:—

Asterley, William Lloyd, The Pentief, Llanynynech, Oswestry.
Bagnall, George, Draveot, Cheadle, Staffordshire.
Baily, John, Python Hill, Mansfield, Nottingham.
Baldwin, Wm. J. A., Dalton-in-Furness, Lancaster.
Barber, Richard, Hariescott, Shrewsbury.
Bate, John Wm., Astol, Shifnal, Salop.
Billington, J. S., Netherest Hey, Madeley, Staffordshire.
Briggs, Thos., The Homestead, Richmond, Surrey.
Brown, Charles, Park Hall, Leigh, Cheadle, Staffordshire.
Brown, Richard, Rayton Eleven Towns, Salop.
Bulkeley, T. F., Clewer Lodge, Windsor, Berks.
Cannon, H. R., Nagpore, India.
Carr, Wm., Dene Park, Tonbridge, Kent.
Cottle, George, West Felton, Shrewsbury, Salop.
Cope, T. Berwick, Tettenhall, Wolverhampton.
Corbett, W. A., Dumbleton, Evesham, Gloucester.
Davys, W. H. Campbell, Nenadd-fawr, Llandoverly, Carmarthen.
Elwell, Paul, Evelith Manor, Shifnal, Salop.
Ford, John, Portland Lawn, Leamington.
Ford, W. H., Merridale, Wolverhampton.
Gibbon, Hy. J., Homescales, Milnthorpe, Westmoreland.
Gosling, J. W., Little Bradley Place, Newmarket, Suffolk.
Griffin, Thos. J., Preston Vale Farm, Penkridge, Staffordshire.
Griffiths, R. C., Park Farm, Broughton, Chester.
Hollis, Edward, Steam Mills, West Felton, Salop.
Hope, Wm., Parsloes, Barking, Essex.
Ironmonger, T., Wolverhampton, Staffordshire.
Jones, G. Stow, Downham Market, Norfolk.
Kempster, Wm., New Cuckett, Ellesmere, Salop.
Kelsall, Thos., Bethisfield, Whitechurch, Salop.
Langford, Wm., Cherbury Hall, Salop.
Lloyd, David, The Hayes, Oswestry, Salop.
Lyne, R. S., Compton, Winchester, Haunts.
Mackenzie, J. H., Northwood, West Hoathley, Sussex.
Menzies, G., Trentham, Stoke-on-Trent, Staffordshire.
Miller, J. N., Pathingham, Wolverhampton.
Mytton, D. H., Garth, Welshpool, Montgomery.
Neame, Edwin, Harefield, Selling, Faversham, Kent.
Nutt, John, Fillongby, Coventry.
Pearson, J. C., Newbridge, Wolverhampton.
Pooler, Hy., Calvington, Newport, Salop.
Price, Andrew, Bazley, Ellesmere, Salop.
Rigg, Joseph, Fellonzeley, Coventry.
Robinson, John T., Leekby Palace, Asenby, Yorkshire.
Saunders, G. J., Oswestry, Salop.
Smith, Henry, Harnage, Shrewsbury, Salop.
Smith, Henry Wm., Evesham.
Stanley, H., Yieldfields Hall, Bloxwich, Walsall, Stafford.
Stewart, M. J., Ardwell House, Stranraer, N. B.
Strongtharm, G., Rushall, Walsall, Staffordshire.
Taylor, Wm., Barnhurst, Taftenhall, Staffordshire.
Tennant, James, Newstead, Nottingham.
Thomas, Edward, The Cross, Oswestry, Salop.
Thomas, Richard, The Buildings, Barchurch, Salop.
Thomas, Thos., Treprenal, Oswestry, Salop.
Thompson, Wm., Walton, Stone, Staffordshire.
Turner, E., M.P., Pantou Hall, Wragby, Lincoln.
Wall, Wm. H., Penbury, Tunbridge Wells, Kent.
Wallis, Robert, Stocksfield, Northumberland.

Walters, Stanley, Blythbury, Rugeley, Staffordshire.
Wardle, Joseph, Old Feus Hall, Whitechurh, Salop.
Walker, John, Oil Mills, Leamington.
Whitfield, Edward, Oswestry, Salop.
Williams, M. Dryton, Wroxeter, Shrewsbury, Salop.
Williams, W. G., Bodulwyddan, St. Asaph.
Willis, H. R. D'A., Budgetfield House, Halewood, Liverpool.
Wise, J. P., Rostellon Castle, Clovne, Ireland.
Woodward, F. Spooner, Blake House, Great Saling, Braintree, Essex.
Wright, Lyons, 24, Worcester Street, Wolverhampton.
Yates, F. G., Iron Bridge, Salop.
Yates, James, Atchley, Shifnal, Salop.

FINANCES.—Major-General Viscount Bridport (chairman) presented the report, from which it appeared that the secretary's receipts during the past month had been duly examined by the committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and found correct. The balance in the hands of the bankers on June 30 was £2,528 17s. 11d., and £2,000 remains on deposit. The quarterly statement of subscriptions and arrears to June 3, and the quarterly cash accounts, were laid on the table.—This report was adopted.

JOURNAL.—Mr. Thompson (chairman) reported that it was in contemplation to obtain an article for the February Journal, containing suggestions for the improvement of Irish agriculture, with a view to increasing the production of live stock.—This report was adopted.

CONSULTING BOTANIST.—Mr. Thompson (chairman) reported that in pursuance of the power delegated to this committee by the Council at its last meeting they had appointed Mr. W. Carruthers, F.R.S., and chief of the Botanical Department of the British Museum, to be Consulting Botanist to the Society. A list of the members' privileges, with a scale of fees, will be published in the next Journal.—This report was adopted.

HOUSE.—Major-General Viscount Bridport (chairman) reported that several ceilings require whitewashing, and that a new carpet and rug is required for one of the Society's rooms, and a clock for the library.—This report was adopted.

SELECTION.—Mr. Thompson (chairman) reported that the committee recommended the election of Mr. Brandreth Gibbs as a Vice-President in the room of the late Mr. Samuel Jonas. This report having been adopted, Mr. Brandreth Gibbs was, on the motion of Mr. Thompson, seconded by Lord Bridport, unanimously elected a Vice-President of the Society.

CHEMICAL.—Mr. Wells, chairman. The committee reported that Mr. Wells and Mr. Dent, on behalf of the Chemical Committee, together with the President and Mr. Thompson, had a consultation with the counsel engaged in the case of Bradburn v. Royal Agricultural Society, and the result of their interview is fully explained in the report of what took place in the Court of Exchequer before Baron Bramwell. The committee regret that they did not attach sufficient weight to the explanation placed before them by Mr. Bradburn as to his connection with the sale of the manure, and recommend that the report of the proceedings in court be published in the Journal. Professor Voelcker had reported that several cases of death have occurred amongst cattle fed on a patent cake, and a communication had been received from the Marquis of Exeter on the same subject—a yearling bull and Shorthorn cow, together with three pigs, having died

suddenly at Burghley, with all the symptoms of blood poisoning in their system after being fed on this cake. A heifer had also died at the Royal Veterinary College, after being fed on the same cake for 17 days. The condition of the cake appears sufficient to cause injury, but the committee having received another sample of it from the Marquis of Exeter, had requested Professor Voeleker to make a more detailed examination, and a full report of this sample, and also to procure a sample of fresh cake for the purpose of comparison. The committee wish to call the special attention of the Council to the opinion of Professor Voeleker on the subject of stale and mouldy cake, as given at pp. 142, 143, vol. i., 1863, and further to the caution which should be exercised in the purchase of cakes composed of several different ingredients, any one of which ingredients being in bad condition may have the effect of setting up decomposition in the other constituents of the cake, and thus produce injury to the stock using it. In reference to the case of a patent blood manure, sent by Mr. P. Minett, the committee have received an explanatory statement from the makers, Messrs. Griffin, Morris and Griffin, which they recommend shall be inserted as an appendix in the next issue of the Journal. This report having been adopted, it was moved by the Earl of Powis, seconded by Mr. Leeds, and carried unanimously, "That the Council approve of the course pursued as to the action with Mr. Bradburn by the President and gentlemen who attended the consultation with Sir John Karslake."

VETERINARY.—Major-General Viscount Bridport (chairman) reported that the committee had had an interview with the General Purposes Committee of the Royal Veterinary College, at which it was ascertained that there was considerable difference of opinion between the Veterinary Committee and the Committee of the Royal Veterinary College. A copy of the Council minute of June 3, 1861, which contains the latest arrangement in reference to veterinary privileges made between the Council of this Society and the Governors of the College, has therefore been forwarded to the Governors, with a request that they would communicate officially their views on the subject. As the August Council meeting is generally thinly attended, the committee suggested that they should defer making their report until the November Council. Professor Brown having been requested to visit Coldham Hall for the purpose of investigating a serious outbreak of splenic apoplexy amongst cattle, the committee presented his report, and recommended that it be published in the Journal and his expenses paid. The committee also recommended that Professor Simonds be allowed the travelling expenses of two veterinary assistants at the Wolverhampton meeting, and also that the remaining half for experimental purposes, viz., £25, be granted. This report having been adopted, Professor Simonds made a statement in reference to the patent cake, which had been referred to by the Chemical Committee: and Mr. Torr stated that, as a preventive of splenic apoplexy, he had successfully used weekly doses of half an ounce of saltpetre: or, in the case of very large and heavy animals, as much as an ounce.

EDUCATION.—Mr. Holland (chairman) reported that the present system of examination had been commenced in 1868, when £60 were distributed in prizes. In the following year (1869) two life memberships were gained, and £75 were given away in prizes. In 1870 no prizes were distributed. This year two life memberships have been gained, and £60 have been awarded in prizes. Thus, in the four years, four competitors have been made life members, and the sum of £195 has been awarded in prizes.

In the first year (1868) 18 candidates entered, and 12 attended the examinations, but as no one passed in book-keeping, which was a *sine qua non*, no prizes were awarded, although in other respects the results of the examinations were satisfactory.

In 1869 there were 21 entries, and 18 candidates attended; of these, two took a first-class, and eight were second-class men. In 1870 only two candidates entered; both attended, and both failed. This year there were nine entries, four attended: of the four two are first-class men, and have gained life memberships, and one has gained a second class.

The committee recommended that the usual fees be paid to the examiners for the present year, and stated their opinion that more time must elapse before the advantages arising from success at these examinations can be generally appreciated. They intended, therefore, at the August Council meeting to apply for a renewal of the grant on the same conditions, and on the same terms as those of last year.—This report was adopted.

The following noblemen and gentlemen were appointed a general Cardiff Committee: Lord Vernon (chairman), Earl of Lichfield, Earl of Powis, Viscount Bridport, Lord Chesham, Lord Kesteven, Lord Tredegar, Sir Massey Lopes, Bart., M.P.; Sir A. K. Macdonald, Bart.; Sir Watkin W. Wynn, Bart., M.P.; C. E. Amos, C. Barnett, T. C. Booth, Edward Bowly, Charles S. Cantrell, D. R. Davies, Joseph Druce, W. J. Edmonds, B. T. Brandreth Gibbs, Richard Hornsby, C. Wren Hoskyns, M.P.; Col. Kingscote, M.P.; Robert Leeds, R. H. Masten, Richard Milward, Charles Randell, R. C. Ransome, M. W. Ridley, M.P.; William Sanday, Joseph Shuttleworth, William Torr, James Webb, William Wells, M.P.; Charles Whitehead, Lieut.-Col. Wilson, Jacob Wilson, the Stewards.

Mr. THOMPSON having moved the following resolution: "That in future the list of questions to be answered by towns competing for the country meetings shall include one calling for a statement of the maximum cost of the and required for the trial of implements, the acreage wanted being furnished by the Society," it was seconded by Mr. Torr, and carried unanimously.

Mr. Torr then called attention to the relaxation of the restrictions on the foreign cattle trade recently made by the Privy Council, and to the injury which may have been thereby inflicted on English herds; he regretted especially that only 12 hours' quarantine was required to be passed by animals from foreign countries, and thought that it ought to be prolonged. He regarded the present scarcity of store stock as one of the results of the cattle plague, and he, therefore, viewed with alarm the result of allowing cattle to be imported from Hamburg, as had recently been the case, according to his information, into Great Britain, through the port of Grimsby.

Professor SIMONDS, as connected with the veterinary department of the Privy Council, wished to state that the reports which appeared in the newspapers from time to time were often either erroneous or greatly exaggerated, and he stated that the statement quoted by Mr. Torr in reference to importation of cattle from Hamburg was utterly untrue. No cattle are allowed to be imported into the British islands, unless slaughtered at the port of landing, except those from Holland, Spain, and Denmark; and these countries do not allow the importation of cattle by land or sea. Formerly the importation of cattle into Holland, and their transit through that country, were sources of considerable revenue to its Government; but both these branches of the cattle trade had been suppressed by Royal proclamation for the sake of preserving the export trade. The cattle were all carefully examined before being shipped, and after arriving in England

two separate inspections were made at intervals of not less than 12 hours, therefore the risk was reduced to a minimum. If, however, any case of disease were discovered, the whole cargo was immediately slaughtered, and the ship cleansed and disinfected; and the owner of each vessel engaged in conveying cattle from Holland, Denmark, and Spain, were required to give a bond to the amount of £1,000 that it had not been employed for the conveyance of cattle from the scheduled countries. In answer to a question by Mr. Dent, he added that pleuropneumonia was not prevalent in Holland, except in a very limited district.

Mr. DENT-DENT, M.P., considered that Mr. Torr had raised a very important question, and that Professor Simonds' explanation of the regulations of the Privy Council was very satisfactory. If the Council of the Society were of opinion that the importation of store stock should be prohibited, then they ought to make that representation to the Privy Council; but if they were not prepared to recommend so serious a prohibition, he did not see that they could recommend that any additional precautions should be taken.

Mr. THOMPSON concurred in this view, and thought

that the alarm of people on this question often arose from ignorance of the precautions that were adopted, and he also considered that any considerable extension of the period of quarantine would put a stop to the trade in foreign cattle.

Mr. DYKE ACLAND, M.P., also expressed his satisfaction at hearing the explanation given by Professor Simonds, and he felt that the agricultural public ought to have the statements that had been made placed before them in an official form; he therefore moved:

"That the Council having heard a statement from Professor Simonds, as to the present regulations of the Veterinary Department of the Privy Council, and as to the precautions adopted with regard to the importation of foreign stock, are of opinion that it would be desirable to obtain such a statement in an official form, and consequently that the Privy Council be requested to allow Professor Simonds to communicate to the Council of the Royal Agricultural Society for publication the exact regulations and restrictions under which the importation of foreign cattle is now carried on."

This resolution, having been seconded by Mr. Thompson, was carried unanimously.

THE STEAM PLOUGH TRIALS AT WOLVERHAMPTON AND STAFFORD.

MONDAY, June 26.

As anticipated, the work on Monday was confined to quite preliminary business, such as drawing lots for the various plots in Class 1, weighing out coals, gauging water-barrels, and measuring oil, by the engineers' assistants; a few only of the exhibitors making use of the trial-pieces allotted them in the field which forms the depot and starting point for all the engines. An unfortunate accident happened to the traction gear of one of Messrs. Howard's new engines entered in Class 1, a few cogs having been broken, which prevented their competing—a great disappointment to many visitors, who looked forward to the performance of the safety tubular-boilers of the Bedford firm with particular interest. It would have been to the advantage of several firms had they availed themselves of the opportunity afforded this day to test the length of their ropes, the capability of their anchors to stand the strain upon them in the light soil, and the number and distance apart the shares in the cultivators would work without choking. As will be seen in the report of the trials, in many instances did the anchors repeatedly give way, cultivators clogged, and ropes were run out before the end of the fields was reached—a series of misadventures which ordinary precautions would have obviated.

TUESDAY, June 27.

CLASS 1.—Precisely at five minutes to ten Messrs. Fowler and Co.'s representatives received orders to proceed with their first set of tackle to the trial-field. Accordingly their two twenty-horse power single cylinder engines steamed up the road about four hundred yards, dragging after them a thirteen-tine cultivator, which was speedily set to work on the direct-action principle, a little delay only being caused in placing the spuds on the wheels at the entrance to the field, and in fixing Richards' indicator on the engine, a portion of which latter time, of course, was allowed. The thirteen-tines covered a breadth of 11 feet, and were furnished with shares from five to eight inches wide, but owing to the accumulation of couch-grass, and dock roots, the land having been left down two or three years, in the first bout the soil reeved up, and a stoppage was the result, as again in the second bout. The removal of the two outside shares, however,

soon remedied this, and the remainder of the work was completed in capital style, the pace of the cultivator being about six miles per hour, completely smashing up the surface to a depth apparently of ten to eleven, but in reality of only eight inches, despite of all obstacles, as even elm roots from two to three inches in diameter in the bout nearest the fence were torn up in lengths of 3 to 4 feet! The time occupied to finish the plot, which measured nearly three acres, was thirty-five minutes, or nearly fifty acres per day of ten hours, four men being employed, viz., one on each engine, one on the cultivator, and one other attendant only, the inch rope used running without porters. This was the first time the single cylinder engines had appeared in public trial, and the total cost of this set of tackle is, without cultivator, £1,850.

A lighter set belonging to the same firm was next tried, consisting of two 12-horse power single cylinder engines, a 9-furrow cultivator, with 4½ inch points, covering a width of 7 feet 6 inches, and working from 6 to 7 inches deep; but in this, as in every other case, the rule indicated from 25 to 33 per cent. greater depth than the weight of the soil as tested by Mr. Anderson proved to have been stirred. This and the three following implements named were tried in a different field to the first, the surface being much cleaner, and the soil working rather freer, but with the subsoil heavier than in the former one, as the following figures will show:

Weight of a square yard of natural soil before being cultivated.

	Field No. 1.			Field No. 2.		
	Cwts.	Qrs.	Lbs.	Cwts.	Qrs.	Lbs.
First, 6 inches deep...	4	1	19	4	2	25
Second, 6 inches deep	4	2	13	5	0	1
Third, 6 inches deep...	4	1	24	5	0	11

The cultivation of this plot occupied about forty-five minutes, or about 40 acres per day of ten hours, and nothing could exceed the manner in which the work was left, all being completely stirred and smashed up. Cost of engine and appliances, with cultivator £1,360.

The next was a twelve-horse power single set of cultivating machinery, comprising single-cylinder engine, with clip drum, six-disc anchor, and six rope porters with steel

wire rope, to which was attached a seven-tine balance cultivator, with slack gear, and using eight-inch shares, taking a breadth of six feet, which also make excellent work, two slight stoppages occurring, one owing to the engine driver not understanding the Llangennech coal, which requires thick firing, and the other, to the cultivator running off slightly into the worked ground. This engine weighs 9 tons 18 cwt. 2 qrs., and, with the cultivator, is priced at £799; the time occupied in doing the plot being about ninety minutes, or twenty acres per day of ten hours. The speed at which the first engine was driven rendered the registration of the power employed a difficult and unsatisfactory operation, and it was abandoned in the case of the others, with the exception of Messrs. Barrows and Stewart's engine; the coal and water consumed being accurately noted, and the taking of the diagrams by means of the indicator, being postponed until the trials of the selected engines are run off at Stafford.

The last entry of Messrs. Fowler in Class 1 was the eight-horse power double-drum set with single-cylinder engine, disc-anchor and six porters, and the patent seven-tine turning cultivator, which also did some capital work at a depth of seven to eight inches, and in fair time, considering the delay caused by not having rope enough out by fifty yards. About forty minutes were occupied in getting into action, and one hundred in cultivating the piece, being at the rate of eighteen acres per day; this set costing £698, and is the one selected to compete for Lord Vernon's prize.

The remaining plot in the second field fell to the lot of the Ravensthorpe Engineering Company, who work the tackle known as Fiskin's patent, which was exhibited as far back as the Royal Agricultural Society's Show at Carlisle, in 1855, consisting of a ten-horse power traction engine, manufactured by Messrs. Clayton and Shuttleworth; two patent windlasses, and a seven-tine double-action cultivator, by Messrs. Howard. This apparatus occupied forty-six minutes in travelling from the depot to the trial field and in getting ready to work, the fixing of the standards, which carry the light Manila rope, being speedily accomplished. The engine is stationary when at work, and the hemp rope is driven from the fly-wheel, running in a groove, cut for the purpose, the pace being something like forty miles an hour, but with so little strain on the corner anchors as to require no attendance on these after being once fixed. The hemp-rope passes round the pulleys attached to two travelling disc anchors, imparting a speed of about 1-12th its own to the wire rope which draws the implement. Economy in cost of wire rope, together with dispensing with the use of heavy dead anchors, and less wear-and-tear of engine, owing to its being always driven the same way, and not requiring to be stopped or reversed at the ends, are the chief advantages of this system, against which must be set the time of fixing, cost, and wear of the hemp rope and loss of power in the indirect method of transmitting motion to the wire rope, on which points the official reports will be of value. By an ingenious arrangement on the travelling anchors, the reversing of the cultivator at the ends is more rapidly performed than in any other system yet tried. This work was not so deep as most of that previously done, as the cultivator had a tendency to clog at the commencement of the trial, and was therefore set shallower, not more than about 5 inches being stirred, the time occupied being 79 minutes or about 22½ acres per day; cost complete £690.

WEDNESDAY, June 28.

The proceedings this morning opened with the trial of Messrs. Barrows and Stewart's implements, which consist of an ordinary portable 12 horse-power engine with sepa-

rate four-wheel windlass driven direct from the fly-wheel shaft, working a five-tine cultivator on the Woolston principle. This firm were the most unfortunate in the ballot for plots, as the anchors gave way repeatedly, and several large stones were met with which impeded progress; much time was also lost in turning, so that three hours were occupied in doing the three acres, and the slow pace at which the implement went caused the land to be merely sliced the one way instead of being well broken up. This set is the lowest in price, the whole being put at £500, and this completed the competition in Class 1.

Major Grantham joined the judges, to whom were committed the steam cultivating classes, and meanwhile Messrs. Hicken and Kimber were inspecting the ploughs at work on another part of the estate, where Messrs. Howard first started a three-furrow then a four-furrow plough, these working about 8 inches deep; then came the two-furrow deep plough, which fetched up the subsoil to a depth of nearly 18 inches, and for which the occupier did anything but thank them, the soil brought to light being an admixture of sand, gravel, and clay, whereas the surface was a good sandy loam. Messrs. Fowler came next with their three-furrow deep plough, following with a four-furrow, which did the work in such a manner as to call forth the highest encomiums from the Midland Counties farmers, whilst the north-country men approved more of the next plot, also done by a four-furrow plough, but laid rather flatter than the preceding piece. A Keutish plough was next tried, as also a five and six-furrow from Messrs. Fowler's, in most of which trials Campain's patent anchor, exhibited by Messrs. Amies and Barford, was used.

About midday on Wednesday the lots were drawn for the competition in Class 2, and for Lord Vernon's prize, the only difference in the competition being that in the former class the weight of the engine must not exceed ten tons, and in the latter it must be self-propelling. These two competition classes include seven sets, which are drawn in the following order:

1. Howard's double drum engine.
2. E. Hayes.
3. The Ravensthorpe Engineering Co.
4. Amies and Barford.
5. Fowler and Co., with 8 horse-power double drum engine.
6. Howard's roundabout.
7. Barrows and Stewart.

Messrs. Howard started, in Class 2, one of their double-cylinder engines with transverse boiler, fitted with two winding drums for either double or single system, and which had been at work for twelve months on the Britannia Farms, their patent double-action cultivator being attached. There was considerable delay in starting this set, owing to a misunderstanding as to the fixing of the indicator and by the giving way of an anchor at first; as also in the removal of the fingers or pulverisers, which did not act to advantage, owing to the mass of couch in the land. When a fair start had been effected, the work was done in reasonable time, and a good level bottom left below the pulverised soil. Mr. Hayes met with a chapter of accidents, from his anchors failing to stand; and the appearance of this set is certainly not in its favour, as a large drum is fitted on the crank-shaft of the engine, and from the distance it extends beyond the bearings must cause considerable wear and tear on these: from this, by means of a belt, a windlass with three pulleys was driven, which is also fitted with an hydraulic apparatus for throwing it in and out of gear, and either from want of proper working or defective arrangement, the result was not very satisfactory; but the judges consented to allow a further trial on Friday or Saturday. The Ravensthorpe

Company improved about eight minutes on their time in getting to work, doing this in 37 or 38 minutes, but owing to the breaking of a bush in one of their windlasses, only half their plot was finished with the cultivator, the remainder being left until a new bush was procured from Mirfield, on Friday morning, when some excellent work was done with a four-furrow balance plough, with digging-breasts, of Messrs. Fowler's manufacture. We regret to say that this firm appears likely to be thrown out on technical grounds, owing to carelessness in preparing the prize-list, there being an apparent contradiction of terms between the wording of the offer of the prize in Class 2 and the conditions for competition, as, in the former case, it states that the weight of the steam engine must not exceed ten tons, and in the conditions, which were evidently framed with special reference to clip and double-drum engines, information is conveyed that the ten tons does not include the weight of the coal, water, or rope, but will take that of the drum or windlass. Now, the engine employed by this Company has been specially constructed within the weight by Messrs. Clayton and Shuttleworth, and we have the highest authority for stating that it never was intended by the implement committee to include in this weight any of the other detached portions of the machinery which might be used, and we thus feel that there are not sufficient grounds for disqualifying the Fiske tackle by adding the weight of the windlass in this instance.

THURSDAY, June 29.

Messrs Amies and Barford ploughed half their plot, and cultivated the other half to a depth of six or seven inches; but this cultivator as well as several others would be improved by lengthening the tines and giving more room for the worked land to pass between the wheels and the tines. The plough fell into some bad ground, where an old fence or quarry had existed, and the judges, therefore, stopped the finishing of the piece. Messrs. Fowler had two entries in this section, the first being the twelve-horse power single-cylinder engine, with clip drum, moveable disc anchor, and balance cultivator, which undoubtedly did the best work, and completed the three acres in two hours, including a stoppage of twenty minutes, in changing the anchor, which was accidentally broken by a lad dropping a wedge into a cog wheel. Messrs. Howard's plot was next, and was worked by a Clayton and Shuttleworth engine, with their seven-tine cultivator, the windlass being driven from the crank-shaft of engine. The anchors again gave way, and delay was caused by the tackle of Messrs. Barrows and Stewart, whose piece adjoined, somewhat interfering with that of the Bedford firm; when once got fairly underweigh the work was well done. The tackle used by Messrs. Barrows and Stewart is that of the well-known Woolston system, and although the work now done showed an improvement on that in Class 1, there is still room for more, and the number of horses required to move this set, viz., five for the engine, and five more for the windlass, snatch-blocks, porters, and anchors, render it less in favour with many farmers than the sets which include a traction-engine. The depth here stirred was fully nine inches, the width covered 4 feet 3 inches, the five-tine cultivator being used, and on a portion of the land two of the shares worked 12 inches deep, having inadvertently slipped. The plot was of equal extent with the others, viz., almost three acres, the time occupied being 2 hours 10 minutes; coal used 456lbs., water 320 gallons.

SATURDAY, July 1.

The condition as to including the weight of the drum or windlass will have the effect of narrowing the competition in Class 2 down to very few competitors—Messrs. Fowler, Howard, and Barrows and Stewart, but the judges will probably report on the others, and leave the Council to

determine as to the interpretation of its own rules; but before settling anything finally it has been decided to weigh all the engines and windlasses on Monday. The cost of Messrs. Fowler's set being as before stated £799, rendered it necessary for them to put in another set for Lord Vernon's prize, for which they competed on Friday with the 8-horse power double drum engine, moveable disc anchor, 1,200 yards steel rope, and 16 rope porters, price £618; a four-furrow plough, a four-furrow digger, or a nine-tine cultivator, each priced at £80, being offered to the purchasers, bringing the total cost to £698. The judges tested the two first-named implements, and again very superior work was made at a depth of 7 to 8½ inches, this plot not being free from large stones (some weighing 2 cwt.) which crop up here and there on the estate. On the same day a 12-horse power double cylinder was hired by the Society to test the machinery entered in Class 3, which must be driven by any ordinary farm engine. Messrs. Howard first set down their windlass and cultivator, in less than 30 minutes, followed by the plough and digger; but the engineers had provided a bran new strap to drive with, and, as is well known, these leather bands are always troublesome by stretching when first used, the present one proving no exception. This delay being in no way to be attributed to the competitors, of course due allowance of time will be made by the judges, as in all other respects this trial was eminently satisfactory. The trials of cultivators, scarifiers, skims, and diggers were proceeded with on another portion of the farm, being most carefully noted by Messrs. Hicken and Kimber, these implements, as a rule, being all driven at a slow pace, the object being to ascertain the best implement on various descriptions of soil without reference to the motive-power, a distinction not duly appreciated by the majority of the sight-seers, who prefer that all should be done at racing pace, and have no idea of adopting steam implements that do not move faster than "our old 'osses." Messrs. Barrows and Stewart followed in Class 3, but owing to the driving-wheel of their windlass not being proportionate to the fly-wheel of the engine, not more than three or four horse-power was applied to the cultivator, so the judges consented to allow another trial on Monday, when the wheel will be exchanged for a larger one.

On Saturday, Messrs. Amies and Barford were the first competitors in Class 3, when they made some very good work in excellent time, notwithstanding the rain, and the second growth of rye and vetches on their plot; this firm's tackle being also tested with cultivator, plough, and digger, the operation of the Campaign's patent anchors showing to great advantage on the triangular piece. The last to be tried in this class were Messrs. Fowler's implements, which on this occasion were somewhat neglected by the visitors, as it was announced that the traction engines would be run for time, or in plain words, that the races would commence at 3 o'clock, by which hour most of the competitors had steamed up from the show-yard, having there being severely tested on the break.

The exhibitors were drawn in the following order:

1. Aveling and Porter, 10 horse-power ordinary farm locomotive.
2. C. Burrell, 8 horse-power do.
3. Aveling and Porter, 6 horse-power do., with Adam's patent elastic tyres.
4. Ransomes, Sims, and Head, 8 horse-power do., with Thomson's patent india-rubber tyres.
5. C. Burrell, 8 horse-power do., with do. do.
6. Aveling and Porter, 6 horse-power ordinary farm locomotive.
7. Howard, 10 horse-power do., with tubular boiler.
8. Amies and Barford, 10 horse-power engine, manufactured by Tuxford and Sons,

One or two of these did not put in an appearance, being detained in the showyard to be tested, and Messrs. Howard, after having satisfactorily passed through this ordeal, withdrew their engine owing to a breakage of the flywheel. No. 1 was well driven, and occupied 29 minutes in completing the course (nearly two miles), No. 2 taking half a minute less, whilst No. 4, from which great things were expected, ran the journey in 24 minutes. No. 5 started at a great pace, which was not maintained, the entire round occupying 28 minutes, and it was left to the last tried to-day, viz., No. 6, to make the best time, viz., 22 minutes, a result in a great measure to be attributed to the excellent driving of the well-known "Little Tom," whose gyrations in many previous showyards with Messrs. Aveling and Porter's engines will not easily be forgotten. The trials of the smaller implements were almost neglected to-day, but will be vigorously resumed on Monday, when the hop machinery and appliances are to be judged in the showyard. The attendance has been very good throughout the week, and the shilling payment has brought the Local Committee in about £250, by no means a despicable instalment towards the £1,200 still deficient. The General Committee are called together for Monday to consider their situation with reference to finance and other matters, as owing to rather precipitate movements and too lavish promises in the first instance, considerably more funds are required than in previous years. The Society has at length issued a programme of proceedings for next week, and we can only add that they would have earned the thanks of everyone who attended the trials had a complete programme appeared a week back.

To sum up the result of the trials, public opinion appears decidedly in favour of the chances of Messrs. Fowlers' implements in Classes 1, 2, and also for Lord Vernon's prize, in which opinion we cannot but concur, as on the heavy land their strong tackle is certain to appear to advantage; at the same time it must be borne in mind that there are no data at present published as to comparative power employed, or cost of coal, &c., per acre. No doubt there are many excellent points in several of the other systems, particularly we may note Campaign's patent anchor, manufactured and used by Messrs. Amies and Barford; the various points commended in the Fiske system, many of which are equally applicable to Messrs. Howards' and Barrows and Stewart's tackle.

A great-field-day is expected on Monday, when the traction engines will be run, drawing trains of loaded waggons after them, and we understand that their ability to surmount inclines and facility of turning will weigh more in guiding the decision than in the mere speed of the engine by itself, four miles per hour being considered fast enough for agricultural operations, at least for the present.

Amongst the visitors have been the Russian attaché and lady, the managing director of the Imperial Estates of Austria, Lieutenant Crompton, from the East India Government office, the Mayor of Birmingham, and others.

The following is the programme of the proceedings at Stafford:

On this day, Monday, July 3rd, the engines and windlasses in Class 2 weighed on the public weigh-bridge, at the Shropshire Union Railway and Canal Store, near the High Level Railway Station, after which they proceed to Stafford.

The competitors in Class 3 and for Lord Vernon's Cup proceed to Stafford, and take up their positions in the plots allotted to them.

On Tuesday, the tackle in Class 1 not already been tested by the engineers, tried, beginning at 10 o'clock a.m.

On Wednesday and Thursday, the tackle in all Classes tested for quality of work on the heavy land, and on Thursday afternoon all the tackle run as an exhibition for the members of the Society and the public.

On the Thursday all the traction engines run from Wolverhampton to the trial ground at Stafford, to be there by 12.30, and to return to Wolverhampton the same evening.

The trials at Stafford were on the New Buildings Farm, in the occupation of Mr. Darlington. The road passes through Stafford, through the Market Square by the Gaol, taking the Sand or right hand road at the Four Crosses public-house (the telegraph runs along part of this road), and so to the farms about two miles from Stafford. The time of getting into place and setting down will not be registered, so that the competitors may put down their tackle immediately on arrival.

MONDAY, July 3.

The morning of this day was occupied by the traction engines proceeding to the extensive works of Mr. Charles Matthews, Iron Hurdle Manufacturer, in the Cleveland-road, who lent about 20 tons of pig iron, which was used to regulate the loads to be drawn round the course. The amount of load was left to the choice of the competitors, the first to start, about 2.30, being Messrs. Aveling and Porter's 6-horse power ordinary locomotive engine weighing 5 tons, drawing an additional 5 tons 10 cwt. in the truck attached. Various stoppages were made to put on and take off the spuds, according to the nature of the road, which was very wet and slippery in places, owing to the recent rains. On reaching the hollow, in which the gradients on entering and leaving are 1 in 18 and 1 in 12 respectively, the truck was detached, the engine proceeding through alone; then about 30 yards' length of chain was attached and the load pulled through, and the remainder of the journey ran at a steady pace, the total length of 145 chains being accomplished in 51½ minutes. At 5 minutes past 3 the Sutherland 8-horse power, weighing 8 tons, with vertical boiler and fitted with Thomson's patent elastic tyres, made a start with a 5-ton load, but the chain and screw-jack had speedily to be got in operation; no serious difficulties, however, occurred until the hollow before mentioned was reached, into which the engine descended at a good pace, the speed only causing the wheels to plough deeper into the mud at the bottom, the time up to this point being 43 minutes for 106 chains. About an hour was spent in extricating the engine and endeavouring to remove the waggon, the former being accomplished by placing planks for the wheels to go on, but a heavy thunderstorm coming on the truck of pig iron was left behind, and after various stoppages in the next field the winning-post was reached by the engine in about 3¼ hours. Granted, as Lord Dunmore remarked, that no farmer would attempt to draw a load of corn through such a pit as that in the course, yet in our uncertain climate, where in harvest heavy storms frequently come on suddenly, unless engines with wheels of the Sutherland type can be fitted with spuds or spikes, they had better confine their operations to travelling on roads, or where intended to be used for farm purposes roads must be constructed for them; and we cannot but express our opinion that they are specially adapted for road purposes in preference to travelling across the fields. Mr. Burrell's ordinary 8-horse power single-cylinder engine, weighing 6 tons 10 cwt., with 7 tons of load, ran its course steadily in 62 minutes, the same time being taken by Messrs. Aveling and Porter's ordinary 10-horse engine drawing 9 tons' load in two trucks, making the performance of these last two and the first named a very close matter. Mr. Burrell wisely withdrew his engine with

elastic tyres, as also did Messrs. Amies and Barford, whose engine was required at once to proceed to Stafford.

TUESDAY, July 4th.

Owing to the kind offices of some one who met the engines on their arrival from Wolverhampton in the vicinity of the trial-fields at Hopton, the drivers were directed a shorter, at the same time an almost impassable route across one or two ditches and gateways where only a few thorns had been laid. This led to delay in arrival, and it was half-past eleven before Messrs. Fowler's pair of 20-horse engines got into position with their 11-tine cultivator, and nearly half-past twelve before a start in the presence of the judges was effected. The soil being on this plot a retentive clay, which had been down in turf 7 or 8 years, it was found necessary to take 2 tines off the implement, leaving a width of 7 ft. 6 in., which was smashed up to a depth of 8 inches, this being on a steep incline, where 5 horses do not plough much more than their $\frac{1}{4}$ acre a day 5 inches deep. Next came the 6-furrow digger, doing 9 to 10 inches deep and nearly 6 feet wide, the powerful engines making easy work even with this severe test. The following table will render the fields and order of proceedings more intelligible to the reader :

Field.	Plot.	Competitors.	Tackle.	Classes.	Lord Vernon's Drive.
1	1	J. Fowler and Co.	Two 20-horse engines, direct tackle	1	1
2	2	Ditto	Two 12-horse ditto	1	1
3	3	J. and F. Howard	Roundabout tackle	1	1
4	4	Barrows and Stewart ...	{ 12-horse power double-cylinder } portable engine, roundabout tackle	1	1
5	5	J. Fowler and Co.	{ Fishken's tackle, with portable } roundabout tackle	1	1
7	7	Ravensthorpe Company	{ Roundabout tackle, traction en- } gine, and Campain's anchors	1	1
8	8	Amies, Barford and Co.	{ Traction engine, with transverse } boiler	1	1
9	9	J. and F. Howard	{ 8-horse double-drum engine and } traveling disc anchor	1	1
10	10	J. Fowler and Co.	{ Engine, with clip drum and } traveling anchor	1	1
12	12	Ditto	{ Traction engine	1	1
14	14	Ravensthorpe Company	{ Traction engine	1	1

After about an hour's trial of No. 1 the judges adjourned to luncheon, and nothing further was done in the shape of trials this day, except to the tempers of those who waited for some two or three hours during a pelting storm, until the announcement that business was postponed until the morrow! All the competitors arrived at Hopton with their implements, except Mr. Hayes, whose set of tackle was detained at Barnhurst, where it was used in drawing the competing cultivators, &c., diagrams being taken to test the draught of the various implements.

WEDNESDAY, July 5.

The judges went to work in earnest this morning, dividing into two sets, Major Grantham, Messrs. Kimber and Hicken taking Class 2 and Lord Vernon's prize,

whilst Mr. Hemsley and Mr. Sherborne went on with class 1, Mr. Menclaus, C.E., joining either party as occasion required. The registration of power employed was carefully taken by means of diagrams by Mr. Anderson and assistants. Messrs. Fowler's 12-horse power double set, with 5-furrow balance digger was first put in operation in the same field as the 20-horse set, but had a shorter length to travel, the distance being only about 150 yards. The implement took a breadth of 5 feet and a depth of 9 inches, and when propelled at a speed of five or six miles per hour made the best work in the way of smashing up of any seen during the meeting, the furrow slices when cut by the shares being literally lifted up something like 2 feet, thoroughly shaken and broken, and cast from 3 to 4 feet, leaving room for the soil from the next bout to take its place, the results being equal to a deep ploughing followed by a cross cultivator, the operation being suitable either for a summer fallow or as an autumn breaking up of stubble. The soil here was strong, but rather more of a red marl than clay, and worked much freer than that tried on the previous day. The 7-tine turning cultivator, taking 6 feet, was also tested here, and went well, but public opinion was unanimously in favour of the digger, though all agreed that the next operation must also be performed by steam, as horses would be unable to move in the depth of broken soil amid the large steam-cut clods. About 10.30 a rather novel feature was added to the proceedings, and one somehow omitted in the programme, in the shape of Mr. Darlington, the tenant, who, accompanied by a member of the police force, perambulated the trial fields and accosting every one asked for their ticket! and if members, exhibitors, or servants, well and good; if not, a shilling was demanded, and in default of payment summary ejection took place.

Some surprise was expressed at Barnhurst at the council allowing the local committee to farm the receipts there, but still more so at the Hopton mode of doing business, as it was clearly understood that the compensation to be given to Mr. Darlington was to cover all damages, and this was probably an afterthought, as no such demand was made on Tuesday. We believe the matter will not be allowed to blow over, but will be heard of at the general meeting on Tuesday. Messrs. Howard having withdrawn in Class 1., owing to inability to work their double set of tackle, there remained the Ravensthorpe Engineering Co., and Messrs. Barrows and Stewart to compete, the former firm getting perhaps the strongest working piece of land in the whole farm, but taking Messrs. Fowler's three-furrow digger, the soil to a depth of nine inches, which had not seen the light for ages was brought up and laid well for the frosts to penetrate it. The working of the cultivator was not quite so satisfactory, as the sticky clay land repeatedly clogged the implement, which was Fowler's five-tine turning cultivator, taking 4 ft. 2in. wide; however, these stoppages only tended to show the ease with which the machinery is worked; and the power required to perform the heavy work accomplished by the digger on this land, seems to indicate that there cannot be the loss of power attributed by many to the use of the hemp rope round the field. Messrs. Barrows and Stewart, in competition in Class 1 with their twelve horse-power double cylinder portable engine and three-tine cultivator, did deep work; but, whether from unequal setting of the shares or the toughness of the subsoil, the bottom was left very uneven, varying from five to ten inches, the tines occasionally penetrating a foot deep, which in a drier soil would no doubt have effectually stirred the whole. This firm it will also be seen competed in Classes 2 and 3. Messrs. Fowler also ran their eight-horse power double-drum engine with a four-furrow plough, a four-furrow digger,

and seven-tine cultivator, on plot No. 10, which had the advantage of being free from clay, and of a slightly gravelly nature, so that there had here been just enough rain to make excellent work at seven to eight inches deep; and so rapidly and evenly was it performed that the set became rapidly in favour, not only for Lord Vernon's prize, but also for a high position in Class 1; whilst their single engine with clip-drum set, in Class 2, falling into heavier ground, progressed favourably as long as the four-tine digger was used, and the depth confined to seven inches, but no sooner had this been changed for the seven-tine balance cultivator than the moveable disc anchor showed symptoms of displacement when the strain came on it, and having been allowed by the attendant to proceed a little too far was completely pulled round, and had to await the arrival of the engine from the opposite headland before it could be replaced. A somewhat similar accident occurred to their set of roundabout tackle, where a dead anchor was pulled from its moorings, this competition having no chance in Class 1, but being undertaken to comply with the conditions in Class 3, viz., a combination of machinery to be worked by any ordinary farm engine. The four-furrow digger and seven-tine cultivator were both used, the engine being a 12-horse single-cylinder traction one, driving a detached windlass from the crank shaft.

Messrs. Howard's engine was of similar power, but had double-cylinder, and alternately worked the three-furrow balance plough seven inches deep, the four-furrow digger eight inches deep, and the three-tine double-action cultivator, with thirteen-inch shares, six to seven inches deep. The whole was completed under two hours, leaving very little ground for exhibition purposes on the morrow; the plough might have closed the furrows rather more, but there was no better digging for the size of the implement and power employed, and the wide shares used with the cultivator left a good even bottom.

Lastly, in these classes, we come to Messrs. Amies and Barford, who drive with a 10-horse traction engine, using an improved detached windlass with frictional breaks, Campain's patent anchor, a new light three-furrow plough, convertible into a digger, and a seven-tine cultivator; the various items enumerated making up the set of tackle are separately worthy of especial notice, and we fancy that the judges will not be able to get away from either the anchor or windlass in the classes in which these compete; but there is room for several improvements in order to bring the tackle to work harmoniously together, which time and experience will no doubt suggest, and which we alluded to in the Barnhurst trials.

THURSDAY, July 6th.

Messrs. Howard competed in the class for Lord Vernon's prize on plot 9 with double-drum engine with transverse boiler, doing some good work with a four-furrow digger, which apparently performed its task with the expenditure of very moderate power.

The Ravensthorpe Engineering Company on plot 7 worked a four-furrow plough of Messrs. Fowler's, their engine, a ten-horse power traction one, being placed some 300 or 400 yards distant in an adjacent field through which a brook ran, and one of the particular advantages of the system was thereby manifested, as the engine pumped its own water. As the stopping, turning at the ends, and starting are entirely under the control of the men in charge of the windlasses, there is no necessity for the engineer to be in sight of the implement; it is thus evident that where a good fixed engine has been put down in a central position at a farm homestead, it is quite feasible under the Fisker system to make it available for cultivating a considerable extent of land. The favour with which many points in this system were regarded seemed to grow on the spectators, and also on the judges, as the work

went steadily on, and with an increased coiling space and the attachment of guide pulleys to the windlasses, giving additional weight, and the use of a rather heavier wire rope, there is no doubt this set of tackle will take its place amongst the first of its class, viz., the roundabout with stationary engine. These were the only plots inspected by the judges to-day, as in each case, with a view to save time, the same work was considered as competing in two classes.

Wolverhampton was early astir this morning, the traction engines being all ordered to be in position ready to start at 5 o'clock, and precisely at 5.30 the Sutherland eight-horse power from Messrs. Ransomes, Sims, and Head, and driven by Mr. Head, started for Stafford, taking as a gross load, including its own weight, 22 tons 10 cwt. The 16 mile run to Stafford station was completed by 9.55, the net time being 3 hours 35 minutes, the remaining 53 minutes being occupied by a stoppage for breakfast, water, &c. The coal consumed was 6 cwt. 1 qr., and water 580 gallons. The speed as fixed by the engineers was four miles per hour, but down hill there is no doubt this was much exceeded. After an interval of three or four minutes Messrs. Aveling and Porter's ten-horse power engine followed, loaded with 26 tons 4 cwt., and after a very steady journey reached Stafford at 11.8, being about 20 minutes longer on the way than the six-horse power engine of the same firm, which drawing 14 ton 4 cwt, only consumed 3½ cwt. of coal during the journey. Mr. Burrell's two engines, both of eight-horse power, were last started, one with vertical boiler, and fitted with Thomson's patent elastic tyres, bringing up the rear and running a favourable trial, the three-wheel engine getting still somewhat further behind. The advantage of the vertical boiler is mainly in avoiding the great alterations of the water level in ascending or descending hills, and this is also secured in Messrs. Howard's transverse boiler.

Shortly after midday, according to previous arrangement for a special train from London, the President, accompanied by the Duke of Devonshire, the Duke of Sutherland, Lord Hill, Mr. R. Milward, Mr. D. R. Davies, Mr. R. Leeds, Mr. Cantrell, Mr. Jacob Wilson, and other members of the Council arrived, some of the party being conveyed in one of the omnibuses purchased for the Government from Messrs. Ransome for use in India, and were conducted through the whole of the trial-fields by the Stewards, Mr. Jenkins being also in attendance. The operations performed by Messrs. Fowler and Co. were ploughing 8 and 11 inches deep, digging 10 inches deep, cultivating, ditching, and knifing, the above, with the exception of the last two, having been fully described in the report of the trials. The trench-plough or ditching machine is principally useful in the West Indies for irrigation purposes, or where the surface-water requires to be rapidly taken off the sugar plantations. It consists of a strong frame on 2 hind-wheels and 2 low front-wheels, the latter being provided with steering arrangement. The axle of the hind-wheels is cranked, and provided with a segment similar to the one used in turning cultivators. The front part of the implement carries a sheave, round which the pulling-rope is wound, its end being attached to the engine's hind-wheel. Underneath the frame, principally carried by 3 great cutlers, is the scoop, similar in shape to a large right and left-hand plough bolted together back to back. The common share and the two outside cutlers of the apparatus cut the sides and the bottom of the ditch. The whole mass of ground is then split in two by the central cutler, and rises slowly to the surface, being placed at some distance at the two sides of the ditch. Ditches tapering from 18 inches at top to 10 inches at bottom to the depth of 2 feet may be made by the implement at the rate of about

one mile per hour. The knifer consists of three deep-cultivating tines, attached to a balance plough frame, following each other in a similar manner to ploughshares, and is useful for loosening the subsoil on strong land, to improve the drainage, or as a substitute for draining in waterlogged clays, as it may be used on turf without materially interfering with the surface. Messrs. Howard put their extra-deep two-furrow plough into operation for the especial benefit of the party, and completed their two or three bouts in good style, going at least three times the depth the soil had ever been stirred before. Messrs. Barrows and Stewart worked their cultivator, Messrs. Amies and Barford their three-furrow plough, and the Ravensthorpe Company a four-furrow Fowler's plough, this set of tackle coming in for the lion's share of attention.

FRIDAY, July 7.

The trials of drills, harrows, and rolls were to be completed at Barnhurst to-day, but owing to the heavy rain in the night and early morning, it was past mid-day before these could be commenced. The rolls of Mr. Williams, Messrs. Cambridge and Parham, and Messrs. Amies and Barford were tested, leaving Messrs. Fowler's for Saturday. Mr. Williams' is a three-part cylinder roll, 8 feet wide and 3 feet in diameter, with steering wheel in front, and by locking the outside cylinder, it is made to turn on to fresh ground at the land's end. The turning was quickly performed, but the steering-wheel ploughed very deeply into the ground. This implement will also be tried on Saturday as part of a combination of steam machinery. Messrs. Cambridge and Parham showed their noted wheel-Cambridge roller and clodrusher, 8 feet wide and 30 feet in diameter, with steering wheel much too small to act effectively in land at all rough. Messrs. Amies and Barford's press-wheel roll is 7 feet 6 in. long and 3 feet in diameter, and weighs about two tons, the steering being accomplished in a satisfactory manner by two wheels, which would be improved by being a little wider. By simply moving round on his seat, which is placed on a pivot, the driver is ready to start the instant the end is reached, not a second being lost if the engine men are quick. The drills were few in number, consisting of one from Messrs. Howard, one from Mr. Hensman, and three from Messrs. Fowler and Co. Mr. Hensman's was first tried, and the steering arrangement of this is excellent, the turning at the end being accomplished by placing a loose turntable under the outside wheel, but during the operation the fore part of the implement exhibited a tendency to rise in the air, which would rather have imperilled the seed, had any been used. The two rows of coulters are also placed too close together to act freely in soil at all damp. Messrs. Howard's drill was tried both with and without the set of harrows following; twelve coulters 8 inches apart are employed, and this made in our opinion the best work during the trial. Messrs. Fowler worked three drills, the first being a twelve furrow, for seed and manure, with drag harrow in front and light seed harrows to follow, taking 8 feet wide; the second was a fourteen furrow drill 8 feet 6 inches in width with harrows as before; and the third a fourteen furrow drill only—all these being manufactured by Mr. J. Coultas of Grantham, and all requiring considerable time and space for turning, so that unless used in a very open district, where long lengths can be obtained, they cannot at present compete successfully with horse power in point of cost or efficiency, as a 40 foot headland is left for each of the two engines and for the steam drill to turn on, which has afterwards to be cultivated. In the class for harrows Messrs. Howard competed with three sets of their well-known zig-zag pattern, these being reversible, and not requiring to turn at the ends, fresh ground being entered on by means of a short shunt. These were of three sizes—for heavy, medium,

and light land, with 36, 45, and 72 tines respectively, and all made excellent work, the land being a little too wet for the lighter set to clean themselves well. Messrs. Amies and Barford entered a large new triangular drag harrow, covering a breadth of 15 feet, having 41 tines, and being composed of three smaller triangular harrows bolted together. The steering is managed by two wheels, which from their small size are rather apt to clog. Mr. Ashton of Horncastle was an exhibitor of a new harrow in this class, which showed too much inclination to leave the ground altogether when turning at the ends, otherwise working well. Messrs. Fowler's harrow partook more of the nature of a cultivator, being made extra strong, with 37 tines 15 feet wide.

SATURDAY, July 8.

This day Messrs. Fowler's press-wheel roll was tried, and a few other minor implements. This roller is 15 feet in width, consisting of two ordinary rollers jointed together, the preparation to start being a rather tedious performance, the change to fresh ground at the ends being done by a short shunt, as with Messrs. Howard's harrows, and had the implement travelled more steadily, so as to admit of more accurate steering, it would have had a better chance with Messrs. Amies and Barford's roll, which seemed the general favourite. The only combination of implements qualified to compete in Class 15 was the roll cultivator and harrows exhibited by Mr. J. A. Williams of Baydon, Wilts, at the first turning of which the harrows mounted straight up on end and bent their coupling rod considerably, and at the second turn the roll which was placed first showed no intention to move, consequently on Mr. Williams giving the order to Messrs. Fowler's engineers to put on more steam the lever snapped short off, and the trial was abandoned.

In miscellaneous implements to be worked by steam power Messrs. Fowler entered a three-furrow ridging plough with straight mould boards, and Messrs. Howard their two-furrow ridging plough, which has the advantage of being fitted to their ordinary four-furrow balance plough frames, the same principle being observed in the case of their combined ridger and subsoiler, which can be attached to their cultivator frame. A large stone broke off the subsoiler, but not before sufficient work had been seen to give a favourable impression to the judges as to the usefulness of the implement for ridging up land for winter combined with deep stirring between the ridges.

Messrs. Fowler's root or stone extractor was next tried, but no sufficient roots or stones were found to test its strength, which is ample for almost any power that can be applied, as the implement itself is a sort of monster plough anchor.

Last of all, a two-furrow American plough was sent out of the yard for trial, being similar to that worked by horse power at Stafford in a field near the trial grounds there, which by means of a rapidly revolving disc mould-board makes a fair seed-bed at one operation.

The conclusions we arrive at from the prolonged trials is that for heavy land and large enclosures the direct action system as performed by Messrs. Fowler's double sets for either ploughing or smashing up is the preferable plan, whilst for those already in possession of a single portable or fixed engine of sufficient power the Fiske system with the suggested improvements appears particularly suited. As regards the secondary operations, such as harrowing, rolling, ridging, drilling, &c., until horses are entirely banished from the British farmers' homesteads, we cannot believe that steam can be economically applied here, unless under exceptional circumstances, such as exist at Buscot Park, for instance; but still we consider them as of the greatest help in continental or colonial farming.

PRIZE LIST.

JUDGES FOR IMPLEMENTS.

FOR CLASSES 1, 2, AND 3, AND LORD VERNON'S PRIZE:

J. Hemsley, Shelton, Newark.
W. Menelaus, C.E., Newlais, Merthyr Tydvil.
F. Sherburn, Bedford.

CLASSES 4 TO 16:

Major Grantham, West Keal, Spilsby.
J. Hitchen, Dunchurch.
J. W. Kimber, Tubney, Abingdon.

CLASSES 17 AND 18:

F. J. Bramwell, C.E., Great George Street, London.

HOP MACHINERY AND MISCELLANEOUS:

H. B. Caldwell, Monkton Farleigh, Bradford-on-Avon.

C. Whitehead, Barming House, Maidstone.

CONSULTING ENGINEERS:

Messrs. Easton, Amos, and Anderson.

SECTION I.—STEAM CULTIVATION.

CLASS 1.—For the best combination of Machinery for the cultivation of the soil by Steam-power.

First prize of £100, J. Fowler and Co., Leeds (6451).
12-horse power double set, price £1250.

Second of £50, J. Fowler and Co. (6480), 20-horse power double set, price £1850.

CLASS 2.—For the best combination of Machinery for the cultivation of the soil by Steam-power, the weight of the Steam-engine not to exceed 10 tons.

First prize of £50, J. Fowler and Co. (6482), 12-horse power clip-drum engine, disc anchor, price £744.

Second of £25, Ravensthorpe Engineering Company (6023), 10-horse power traction, Mirfield, York, engine set price £690.

CLASS 3.—For the best combination of Machinery for the cultivation of the soil by an ordinary Agricultural Engine, whether self propelling or portable.

First prize of £50, J. Fowler and Co. (6486, 6493, 6509), stationary windlass set, with four-furrow plough, digger cultivator, price £280, or with drill and two sets harrows, £375.

Second of £25, J. and F. Howard, Bedford (1170, 1174, 1182, 1185), stationary windlass set, with five-tine cultivator, price £250; or with four-furrow plough and digger, one set of harrows, combined drill and harrow, price £416 10s.

CLASS 4.—For the best Windlass, detached.

Prize of £20, Tuxford and Sons, Boston (6914)

CLASS 5.—For the best Snatch-block, or substitute thereof.

Prize of £10, Amies and Barford, Peterborough (2675).

CLASS 6.—For the best Plough suitable for Steam cultivation.

Prize of £25, J. Fowler and Co. (6493).

CLASS 7.—For the best Subsoiler suitable for Steam cultivation.

Prize of £20, J. Fowler and Co. (6511).

CLASS 8.—For the best Digger suitable for Steam cultivation.

Prize of £25, J. Fowler and Co. (6494).

CLASS 9.—For the best Cultivator suitable for Steam cultivation.

Prize of £25, J. Fowler and Co. (6503).

CLASS 10.—For the best Skim Plough or Scarifier suitable for Steam cultivation.

Prize of £20, J. Fowler and Co. (6499).

CLASS 11.—For the best Roller suitable for Steam cultivation.

Prize of £10, Amies and Barford (2671).

CLASS 12.—For the best Harrow suitable for Steam cultivation.

Prize of £10, J. and F. Howard (1185).

CLASS 13.—For the best Drill suitable for Steam cultivation.

Prize of £10 each, J. and F. Howard (1182); and J. Coultas, Grantham (570).

CLASS 14.—For the best Root or Stone Extractor suitable for Steam cultivation.

Prize of £10, J. Fowler and Co. (6514).

CLASS 15.—For the best combination of any of the above Implements not qualified to compete in Classes 1, 2, or 3. Not sufficient merit.

CLASS 16.—For the best Implement, or part of Tackle, suitable for Steam cultivation, of any other description, not qualified to compete in the preceding Classes.

Prize of £10 each, J. and F. Howard (1181) Subsoiler; and J. Fowler and Co. (6505) Harrow Frame.

CLASS 17.—For the best Agricultural Locomotive Engine applicable to the ordinary requirements of farming.

Prize of £50, Aveling and Porter, Rochester (7001).

Highly Commended.—Aveling and Porter.

Commended.—C. Burrell.

CLASS 18.—For the best Waggon for Agricultural purposes to be drawn by an Agricultural Locomotive Engine.

Prize of £20, Aveling and Porter (7004).

Commended.—Hayes and Son, Stamford (4809).

A SILVER CUP, value £100, offered by the Right Hon.

Lord Vernon, President, for the best combination of Machinery for the cultivation of the soil by Steam-power, the cost of which shall not exceed £700. The Engine to be Locomotive, and adapted for Thrashing and other Farm purposes.—John Fowler and Co. (6484, 6493), 8-horse power double drum engine and disc anchor, set price £698.

Silver Medal to Ransomes, Sims, and Head for eight-horse power locomotive with India-rubber tyres.

Silver Medal to Aveling and Porter for locomotive with internal India-rubber tyres.

SECTION II.—HOP MACHINERY.

Class 1.—No award.

CLASS 2.—For the best machine for washing the Hop plant to remove the Aphis blight.

Prize of £10, Messrs. Coleman and Morton, Chelmsford (262).

CLASS 3.—For the best Hop Presser.

Prize of £10, W. Weeks and Son, Maidstone (3670).

CLASS 4.—For any other improved Implement or Implements used in the cultivation or management of Hops.

Prize of £10, W. Weeks and Son (Hop Sulphurator, 3671).

MISCELLANEOUS AWARDS to Agricultural Articles and essential improvements therein.

Silver Medal to Millard's Trent Foundry Company, Rugeley, for the adaptation of the principle of the rotating-disc mould-board, as shown on the Plough entered among the Hop-Cultivating Implements (3012).

Silver Medal, John Fowler and Co., Ditching Plough, (6515).

[In the classes for which one prize only were offered, the judges were empowered to divide it equally between two competing implements, if they considered them equal in merit.]

THE STOCK SHOW
AND SHOW WEEK.

Under favourable auspices Wolverhampton is not a terrestrial paradise. Associated with bad weather, an ill-accommodated crowd of visitors, and an unsavoury show-ground, the result was the most miserable meeting which the Royal Agricultural Society has ever held. Moreover, the townspeople did little to lighten the general gloom. There were none of those municipal civilities or hospitalities so common to these occasions, and strangers "entertained" each other in hostelries of limited capabilities. The Scylla of the course, ankle-deep in slush and breast-high with abominable odours, was only to be avoided by the Charybdis of the town, where, with the rain falling fast, great men were huddled together in small rooms, to drink brandy-and-water as a question of health and a corrective of sewage. There could be no more melancholy sight than to watch a hunting-horse gallop through this rotten refuse, unless it were when a locomotive sunk deeper and deeper into the slough of despond, a very satire on the progress of steam-cultivation. With some experience of the down-pour of Gloucester and the dullness of Lewes, we can remember nothing so utterly cheerless as the tone of the Wolverhampton demonstration.

Neither did the show itself altogether requite for the many minor evils incident to its accomplishment. It was good only in places, and moderate enough as tested by its general strength. Here and there, as with the Short-horn cattle and Shropshire sheep, the entries were numerous, but more commonly the classes were small, although with animals of remarkable merit only to be encountered at long intervals. There were plenty of ragged things scattered through the best filled sections, and by way of inducting a lesson as to what a breed should be, one might often have gone to the less-popular kinds of stock. Thus, after the very indifferent display offered at Guildford, it was really a surprise to see the force with which the Herefords have come again at Wolverhampton. Some of the classes were generally and deservedly commended, and as the representative of a race, the character was uniform and good. The worst entry was that of old bulls, where Mr. Warren Evans' Monaghty, second at Oxford and first at Guildford, again headed his rank-and-file. He was never more than a fair useful bull, now much disfigured by the dissipation and high feeding, more or less consequent on a public life. The second best, Bachelor, not so familiar a white face, is a long straight bull, of some quality, but short of coat; while the fact of the Dorset beast being placed third would seem to speak to the want of merit amongst the remainder, although we infinitely prefer the reserve to the third, as of a far finer type of Hereford, if not so well prepared for exhibition. The always moderate Sir John and a very plain bull from Warwickshire made up the field of all-aged sires. The two-year-olds were distinguished by the presence of two already famous animals: thus Ostorion was the best calf at Manchester, where he was sold by Mr. Tudge to Lord Southesk, who has started a Hereford herd in Forfarshire, although, so far as the proof here goes, not with much promise of success. Ostorion has great size, but he has not otherwise developed favourably, having lost much of his true Hereford character; and he was cleverly beaten by Mr. Williams' Royal Head, the best of the yearlings or off-yearlings at Hereford last autumn, when we said "the best bull was no doubt Mr. Williams' first prize, a deep,

thick wealthy animal, and altogether a fine specimen of the more modern Hereford." He then beat some Oxford winners, such as Count Fosco and President; and, having gone on well in the interim, Royal Head is now about the best Hereford bull out. Not, however, but that the Wolverhampton yearlings were on the whole a much stronger class than the two-year-olds, where beyond the three prizes there was really nothing to speak of; whereas, the judges pronounced the dozen of yearlings to be all good, with two more especial commendations attached to the actual award. The winner, Pearl Diver, was only third at Hereford, where, however, as we said at the time, the class was very indifferently appraised, "with probably half-a-dozen better than the second prize," although no doubt Mr. Hill's bull has been ever since on the improvement, and he showed here a very handsome, straight, and lengthy animal, of that *class* bright type one likes so to see in a Hereford. Mr. Child's second is another particularly nice promising young bull, while the third best has been winning about home, but, however useful, he wants the style of Mr. Harding's son of Battenhall. One or two decidedly plain things somewhat pulled down the class, and queried the force of such a compliment as a *general* commendation. The best bull-calf a man might judge with his eyes shut, so fine is his quality and so wealthy his touch, the very realisation of how a Hereford beast should prove to the hand. Alexander will also bear the scrutiny of the eye, having length and symmetry, with capital quarters, but standing rather siekle-hoeked. The Showle second is a calf of more growth, and all over a good one, while Mr. Edwards also claims the third place with a son of Sir Hungerford, but if more fashionably bred he can bear no comparison, as the two stand side by side with the winner. Over an entry of fifteen there were five appended commendations, but such things as the Duc d'Anmale, the first prize at Guildford (!) interfered with any more general notice of the class.

If the Hereford calves at Guildford were bad the cows were worse, and discreetly enough neither of them was sent on to Wolverhampton, where, of the six shown, nothing took less than a high commendation. Of these the certainly not *little* red Riding Hood, aptly enough by Colossus, out of a daughter of the Giant, fairly dwarfed the neat, round, and pretty Livia, the second heifer at Oxford, and now again second. Her lady superior here was a sweet, deep, dark-coloured cow, bred by Mr. Roberts, but exhibited by Mr. Peren, who is getting up a Hereford herd in Somersetshire. The third prize, on the contrary, was a large, light-coated, or almost yellow cow, and we must leave the prize list to testify to the excellence of the others in competition. All the heifers in calf were also highly commended, notwithstanding a somewhat larger entry, and the fact of the two best of their age having been sold for foreign parts at Oxford. So far as it could be, the Guildford award was reversed, Dahlia, very coarse in her character, shot forward, and of a bad colour, being now put before the stylish high-bred Duchess of Bedford, at almost all points but as mere beef the more seemly of the two, but then the Duchess is getting very near her "time." They were both, however, more clearly beaten by the Leen Rarity, who has only to grow a bit to ripen into a magnificent cow, as just now she looks a little too neat and small for her age. Of the others, all well up, the plain gaudy-quartered Chignon

scarcely merited any very particular mention, and was most probably merely thrown in. The first and second yearlings are both very stylish, but the Shropshire rather hard in her touch, while the third from Cowbridge has grown into a great, straight, and deep, but coarse heifer, with no elegance about her, and the Oxford awards where the class were calves is altogether upset. Thus, Lady Oxford, first at Oxford, now takes no prize whatever, but Mr. Evans has been short of keep, and none of his entries were in show trim; then Sunflower second at Oxford is here third to Lizzie Jefferys, the reserve at Oxford; though judging a calf must always be something of a lottery. The best of the babies here, another Duchess of Bedford, is of a very flashy colour, a red-and-white-quartered, but with a fine frame; Mr. Morris' second of some promise and great growth, and the third another big plain specimen from Glamorganshire. There was in this class also plenty of competition, and tried at most points, the Royal Herefords of 'seventy-one will hold their own with every credit to the breed and the breeders.

Of Devons the entry was small, something like a fourth less than at Oxford, but it was admirable almost throughout, with five out of the eight classes generally commended. The high character given of the Truro meeting, where the best of all the stock were again Devons, had led people to expect a strong show, and they were not disappointed. The best bull in Cornwall, however, Lord Falmouth's Narcissus, was only second best here, but although a very taking specimen of the breed he was rather off on the opening day, if in his bloom he could never hope to compete with Mr. Buller's more blood-like bull, so full of masculine and at the same time pure Devon character. Mr. Farthing's well-known Sir George lost his temper and was shown blindfold, so that Mr. Davey beat him again with another Duke of Flitton; the lop-sided fifth Duke, who is growing worse and worse in this way, being kept back for the younger class, where he beat Lord Falmouth's Jonquil, the first at Truro, but very harsh in his touch, and his old opponent Pennsylvania, and these three constituted the class. Amongst the yearlings the Somerset Master Harry, a very true framed young bull, again beat a narrow faded Flitton, as he had done at Guildford, but one of the Truro team at length got first, and a very stylish taking young bull Cinnaman already is, with every promise of growing into something remarkable hereafter. The once famous Mr. George Turner had an entry in this class which was almost everywhere about as bad as he could be. The best Devon bull-calf at Guildford, and but a moderate one at best, was not noticed at Wolverhampton, while the second in Surrey was not sent on, and so Mr. Farthing succeeded to first place with a good calf of a bad colour, but the class was not one of any particular merit. Her Majesty's reserve number is by Napier, a purchase from Mr. Farthing, and shown in the class of all-aged bulls, where, however, he took no more than his share in the general commendation.

"In a very taking show of Devon cows there was still nothing to compare for high quality and refined appearance with Mr. Davy's really Lovely Queen, with her sweet head, fine expression, light limbs, and good frame, saving only a tendency to gaudiness about her quarters. Mr. Taylor, again, contrives to keep his North Devons very fine and bloodlike in Sussex, and so he took a second prize with a very sweet cow, which was also second at Oxford to the Exeter Musk, here without a place. Mr. Smith's cow has great size, but she wants the style of those placed above her, and certainly at a show of breeding stock there can be no reason to quarrel with the award." It was thus that we wrote at Guildford; but the well-primed *Times*' reporter did quarrel with the award, and went boldly for Musk as the best of

the three, and as usual went wrong. At Wolverhampton Musk received no notice whatever beyond the general commendation given to the class, while the two just previously put above her now simply reversed their places, as no question Mr. Davey's cow has not done well in the interim, for she showed light and jaded. The two best at Guildford were, however, unmistakably beaten for first by another of Mr. Taylor's entries, a beautiful daughter of First Duke of Flitton, lengthy, symmetrical, and blood-like, and of as fine and majestic cow character as anything brought out, be it Devon, Hereford, or Durham. The first and second two-year-olds were placed precisely as at Guildford; but we still prefer the Oxford reading, while there was little against them beyond a very curious specimen of the Irish Devon, Mr. Peake showing a far better in the next class; but then the two-year-old was bred at Mullaghmore, and the yearling by the late Mr. Nixey at Slough. Of the other yearling heifers "the beautiful Gaylass" was first at Oxford and Guildford, and the more substantial First Fruit second at Guildford and the best of all the cows and heifers at Truro. But this must have been the weak place of the Cornwall show, as First Fruit was separated at Wolverhampton from Mr. Davy's heifer, by one of Mr. Buller's; so that, putting Shorthorns out of the question, the Devon cows and heifers could have been nothing so extraordinary in the far West. In fact, First Fruit was not within half-a-dozen of the best Devon cow or heifer at the Royal meeting, the three cows and the two yearlings being at any rate her superiors. Mr. Farthing was in no such luck with the calves, where his very neat, straight, growing heifer was put second to a weak, washy weed from Flitton, as highly-bred as Eclipse, but so far with little more to be said in her favour. However, the class was again commended, as with fewer entries the Devons, from their almost general excellence, took as much judging as many sections far better filled, nor did we hear much criticism on the way in which these duties were discharged. Saving the bit of blood to finish with the work was well done, and many a young Actress has improved on her first appearance.

So far as the actual number of entries can be taken as any proof the Shorthorns at Wolverhampton are equal to Oxford, that is to say, there were 158 nominations for one meeting, and 161 for the other. That really wonderful correspondent of *The Times*, however, announced on the Tuesday, after having had the whole of the previous day to carry out his calculations, that "there were 201 entries of Shorthorns, being 45 more than at Oxford, and 30 more than at Manchester," and so forth. This result, when compared with the catalogues, looks to be ludicrously incomprehensible, but probably, as with the unfortunate butler who got into trouble over his accounts, there has been "some mistake with the tens." However, for *The Times*, as only forty or fifty out in its reckoning, the error is pardonable enough. But if numerically the Shorthorn show of 'seventy-one were as good as that of the previous meeting, it was woefully inferior in merit. It is questionable whether in a fair average year there was a Shorthorn at Wolverhampton which could ever have taken a first prize. The Judges certainly were kind enough to *lightly* (?) commend two or three classes; but never, perhaps, was so wholesale a compliment so little deserved, for in almost every entry brought out there was more "lop and top," or more absolute refuse than was ever yet brought together. On the other hand, one looked in vain for any animal of extraordinary excellence, for a Bolivar, a Lady Fragrant, or a Knightley heifer. The judging was slow, and the method often enough apparently purposeless, mainly because there were so few superior and so many mediocre competitors. The decision, in fact,

over the old bulls struck the key-note to the performance, which was at best but second-rate business. Edgar, the winner, when in his prime was a double-second—at Manchester and Oxford—while here at nearly nine years old, and a mere wreck of himself, he was still clearly the best of his class. Standing still he looked really grand by comparison with the others, but he moved so feebly that as somebody said, “they should give him a pension instead of a prize.” Nevertheless, the second here and the Romford champion is a very clever and still improving young bull, although being some months the junior of anything noticed by the judges he showed small, especially when ranged side by side with his Cumberland Mentor. So far there was no difficulty, but many of the outsiders preferred the stylish and kindly, if somewhat delicate, Man’s Estate, a son of Edgar, and the third two-year-old at Oxford, as the third best again here; still the one put above him, Mr. Sneyd’s Ironmaster, is a grandish bull, with more constitution and masculine character, but had to face from his unsightly “housemaid’s knee.” The next placed was the Bath and West of England Morpeth, a good-looking bull enough, but with a rumoured objection as to his lacking the required four crosses of *Herd Book* blood. The only other noticed, from a terribly indifferent field, was the Irish Charlie, half-brother to Bolivar; but he has gone off so palpably that the commendation must have been more for old acquaintance sake than anything else.

As we said last year, when Lord Irwin was continually second and second to Bythis, we always liked Mr. Linton’s white, as that he promised to grow into the better of the two, and no question he has done. He came out, moreover, in far better bloom than at Guildford, and with length, depth, fashion, and action, fairly walked away from his class. Still, his old enemy Bythis was the best of all at Ely the other day; and as he does not look to have grown an inch or an ounce, and as he is altogether a mean, plain beast, of course he is a greater wonder than ever. The second—another white—was nowhere at Wakefield; and, although a bull with some good about him, he has certainly more luck than merit when placed so forward at a national meeting. The Scotch bull, Baron Laurie, is an active, wild, useful animal, with a mean head, and apparently a rough temper; while another red from Pantou, looking rather loose in his frame from not being fed up, has the makings of a very serviceable sire about him, and we prefer both these to the second-prize. The judges went no further, and there was certainly no occasion to do so, as, with an exception or so, such as Mr. Slye’s entry, there were some terribly common things in the class. They highly commended, however, all the yearlings, where the Towneley Hubback showed famously in the ring; and, by the aid of his long, lathy showman, was quickly “spotted” as the winner. He is very taking and true in his frame, being of almost perfect symmetry, and even better out than in, as he is not quite right in his touch, though at all points far away the best of his class, if not the best Shorthorn in the show, and he was at once bespoke for America at a long price—as some put it 500 gs. Of the second here, the best of the best lot of bulls at Guildford, we spoke at the time as a straight, showy, high-quality young bull, rather pulled down by his plain head, but quite in his place, and he, too, goes to America at 200 gs. The quality or touch of Ignoramus must have won him his prize, as he is a really bad, falsely-framed bull, and there is but little to like in the half-brother to Charlie, sleek and high, though a good second in Dublin, and a bad fourth at Wolverhampton. A deal more to our liking was the reserve or fifth place, Mr. George Garne’s Earl of Warwickshire, a bull with quite an admirable touch, true shape, and smart carriage, but

then he was not half as well made up as some of the others, and so of course the award went against him. Of Mr. Stratton’s Master Glanville, we reported at Guildford as “well furnished and useful, but never more than a second or third-rate bull in good company;” and though then second, he was now a long way behind Lord Sudeley’s entry. There were two or three more moderately good, and two or three as thoroughly indifferent, bulls in this class, and the judges only knew how they arrived at that high commendation. The best bull-calf is full of promise, lengthy, and square; the second has a capital coat, but a bad touch; and the third is as smart and showy a calf as either of the others, as they are likely enough to change about hereafter. But there was nothing here of extraordinary merit, and the judges for once held their hand when they had disposed of the prizes.

The Shorthorn cows were probably the worst lot ever got together under the auspices of the national Society, and great accordingly was the disturbance over the award. Had they held to line and rule, and put the best known, the short legged, straight, and deep Windsor’s Butterfly first, the pretty Warrior’s Plume, with her great bag and feminine cow-like character, second, and anything else third little might have been said, but as it was the consequence was an “everlasting row,” with more waste of breath than good porridge. The owner of the second prize cow, Mr. Beattie, is a fresh exhibitor in this way, having hitherto been famous for his polled Galloways, which he has recently thrown over for the Shorthorns, of which he has been a free buyer of Mr. Torr, and this cow comes from Aylesby. In the highly commended class of two-year-olds there were some really creditable things beyond the actual winners; the three first have nevertheless been beaten over and over again and are a long way behind the Oxford form of their year, where Vesper Queen was third, and Dame Swift beaten cleverly enough by Vesper Queen at Wakefield. At Guildford, however, the Dame had all the better of the Queen, as no doubt the white has improved the more in the interim, being now a nice comely little heifer, with an elegant lengthy frame and fine touch. The blood-red, or “Devon,” as they call her, lacks the style of the other, while for great growth and grandeur Mr. Foljambe’s Concert is the superior of either, but at the same time so hard or positively harsh in her touch that we were bold enough to pronounce her winning outright simply an impossibility when she came before any man who “judged with his eyes shut.” The Cornwall heifer, which has been on a visit at Stroxton since Guildford previous to her departure for America, has gone off, and never looked very formidable, although culled out at the head of a reserve lot; while Mr. Ladds showed a good broad heifer, Mr. Hewitt, a very neat one, Mr. Kenward also a good one, and Mr. Stratton his always clever Flower Girl. In fact, it was altogether a commendable class, but a high wholesale commendation implies something of extraordinary excellence, and there was nothing extraordinary amongst the Shorthorns at Wolverhampton. The first yearling Lady Brough, a long straight heifer, with a vulgar head, and a poor touch, was sold, as rumour went, to go to America, for almost as many hundreds as her breeder had received pounds for her; and if so, she must have been a bargain indeed, despite her short pedigree. Mr. Foljambe’s second, a true stylish heifer, far in calf, here changed places with Baron Oxford’s Duchess, who was first, and Fleur de Lis second, at Wakefield. But the Duchess, with all her quality and nice coating, is sadly set-off by her bad black horns; while Culshaw had two other daughters of Baron Oxford in the class, both very meritorious, and both booked for America. Indeed, we prefer the highly commended to the Colonel’s prize

heifer. This was another very creditable class, and the cow calves showed a deal better than the bull calves. Mr. Garfitt's first, a purchase from Mr. Cheney at 90 guineas, is deep, thick, and smart, but with a good and bad side, in profile; and Lady Pigot's second, otherwise full of promise, has a harsh wiry coat. But it was something to secure one of these two prizes, where the Duddings, Colonel Towneley, Mr. Stratton, and Mr. Brierley had to be content with commendations; while Mr. Foljambe, with a very young but very nice heifer, and Mr. Garne, received no notice whatever. Many would have it there were some better behind the winners, as judging calves is always a chance business; and, if they were not *as* good, there were many *very* good. In fact, liberal as they had been so far, the judges might reasonably enough have gone on and retired under cover of another general commendation.

In their "admirable report," as Mr. Davies termed it, the judges of Channel Island cattle at Oxford spoke to "the advisability of the council making a thorough distinction in the classes, inasmuch as the Jersey and Guernsey breeds are entirely distinct, and have not the slightest degree of affinity;" and this recommendation was acted on at Wolverhampton, although not so far with any very noticeable success, as there were actually more entries for the three mixed classes of 1870, than in the two divisions of '71. Of Jerseys, however, Mr. Gaudin was the only exhibitor from the Island, and Mr. Gilbey had once more all the honours of the week. Of Bandboy, bred closely from Mr. Dauncey's stock, we have often of late had occasion to speak as about the best Alderney bull ever shown in England, and almost as much might be said for the prize cow Duchess, from Mr. Le Feuvre's herd; but at Guildford the other day, Duchess was beaten for first place, by Mr. Fuller's Milkmaid, when, resolved to maintain his lead, Mr. Gilbey straightway purchases Milkmaid; and at Wolverhampton Duchess was first, and Milkmaid highly commended. No doubt the last reading is the correct one, as there was really no Alderney judge at Guildford; while at Romford the two famous fanciers who were in office testified to the great merit of Duchess, and at Wolverhampton Mr. Le Cornu, the chief authority of the Island, was again on the bench. There was a very good class of cows, and a few sweet, highly-bred heifers, but the Islanders are surely neglecting their own interests when they decline to avail themselves of so good an advertisement, or even of so brisk a market. The Guerneys never showed so well, there being few of those great gaunt animals, all bone and coarseness, we have so often seen about, but on the contrary, there were some really neat things in the classes. Mr. Rundle Watson, who was first, and first for bull and cow, the one being the dam of the other, has a tribe distinguished by their black tongues, as this appears to be regarded as no detriment. The old cow was somewhat pulled down, from having calved on the show ground; while, beyond these chief honours, all the other prizes went to the Pages, who were second, and second for bull and cow, and first, second, and third for heifers. The cow was very good, and the heifers as handsome as could be of their sort, though they lack the lady-like refinement of the sister-isle. It is said, the Guerneymen hold their stock to be quite as pure and sared as the Jerseys, but some odd, dark, cross-bred looking cattle had got into the classes; a great black and white beast for one, looking vastly like a Dutchman.

There were so few Norfolk and Suffolk Polls, under a dozen in all, for three classes, that but for the excellence of some of those sent it would be a question whether this breed, as a breed, should not be struck out of the prize list. Nothing tells worse in all sorts of ways than a

series of badly-filled classes. Mr. Brown, however, shows such a nice sample, so good and so uniform, as Mr. Colman is clearly cultivating his herd so carefully that we should be sorry to see the section drop through, although it would be certainly advisable to throw a little more spirit into the competition. As it was the conditions compelled the withdrawal of some of the prizes, though the three cows were generally commended, and the Dukes, Duchesses, and Countesses are worthy of all praise. But they take some judging, and to show how well the Short-horn men were up in this business at Dereham, it may be stated that their first prize two-year-old was sold on the very day after the meeting to the butcher. It would consequently be idle to look up any previous performances of these red polls.

Ayrshires, Longhorns, and Aberdeens contributed to a very sparse exhibition of other breeds, where the Duke of Buckingham again had a lead with his magnificent Longhorn, and Mr. Statter drew from his Noah's ark some capital black Polls and Ayrshires—the latter being more especially noticeable amongst the Dairy Cattle, where some half-a-dozen Shorthorns made no great mark. As we are all getting a leaning this way a strong show of dairy cattle would promise to be a great success; let us say 100 gs. for the best milking cow of any pure breed—Jersey, Ayrshire, Guernsey, Longhorn, common Yorkshire, or foreigner. We make a present of the suggestion to Sir Watkin, who might carry it out with a President's Cup. For a national Society there is no more becoming or imperative duty than throwing out fresh signals, and no question so far attention has centred on beef "at any price." Be it ever remembered that it was a well-timed offer of a hundred that made the Royal horse-show.

And at Wolverhampton the show of horses was good, both in the riding and agricultural classes; for what the "heavies" lacked in numbers, they made up in quality; while the admirable manner in which the ring was conducted proved that the Society has the right man in the right place in Mr. Jacob Wilson, who, beyond being the best and most obliging of ring-masters, was anxious to give the public as much information as laid in his power, and not afraid to give a straightforward answer—which at any rate is a novelty and a treat, after the trimming one so often hears round a horse-ring. Mr. Leeds, to whose kind deeds we have often borne witness, presided over the agricultural arena, mounted on one of the narrowest and most lofty of steeds, and, as his office was not one of the most arduous, still puffed he away at the fragrant weed. A rail now separated the rings instead of the rope of yore, against which we have so often railed when pointing out the danger to man and horse, and more especially to foals; and everything being straight, the judges commenced business with the thoroughbred stallions for getting hunters as the clock struck eight. The third and second at Oxford were among the ten, although there was nothing up to Knowsley's form; still, they were a useful lot, bar one—Protection, a three-year-old, who in his present form is not worthy of notice, though by Lifeboat, out of La Jaranda by Sir Tatton Sykes. The others were Blinkhoolie by Rataplan, out of Queen Mary by Gladiator; Suffolk by North Lincoln, out of Protection by Defence; Lord Hastings by Little Hastings, out of Corival by Longsight; Laughing Stock by Stockwell, out of Gaiety by Touchstone; Gin by Orlando, out of Iodine by Sir Hercules; Sincerity by Red Hart, out of Integrity by Van Tromp; Stampedo by Alarm, out of Repentance by Annandale; Squire by Lecompte, out of Alice Carneal by Imported Ampedon; and Tim Whittler by Van Galen, out of Sybil by The Ugly Buck. Blinkhoolie is a bay with black legs, seven years old, very neat and bloodlike, reminding one

more of the elegant Orlando than his heavy, thick-set staying sire, Rataplan. He is a deceiving horse, standing a trifle under 16 hands, and moving well; while he is hardy looking, with no lumber, has good shoulders, and is deep about the heart, with a grand quarter, and limbs well placed, as we saw nothing to find fault with in him, with the exception of a slight falling-off in the back ribs. He is all quality, without any dross, as a thorough-bred should be, and with action strong, light, and airy, for which reasons we prefer him to Sincerity, to whom he played second. Sincerity, third at Oxford, third at Islington this year, second at Wakefield last year, and a prize taker at other places, it is only just to say is by many, and *very many very much liked*; and nothing would give us greater pleasure than to sing his praises, as he belongs to the worthy owner of Motley, the winner of the Royal hundred at Plymouth. But we cannot, for we have tried him in our mind's eye on the racecourse, fine drawn with jockey up, though this is simply monstrous; we have put him at the covert side, with tail squared, and it won't do; then, as food for cannon, a charger; or next we take a trot to Sewell, or Wimbush and pick up a partner for him—two sets of plated harness and a gentleman as well stuffed as a Christmas turkey, with waistcoat and gills to match, for he is in a gorgeous suit, with wig and cocked hat; and as he mounts the box of an old rattle trap, covered with any amount of armorial bearings, we jump in and give the word for the Duke of Panama's. Off we go! and then, and only then, is Sincerity glorious; for as we dash along, he is the cynosure of all observers, and unanimously proclaimed the Czar of all the coach-horses. Suffolk, who was second at Islington to Cambuscan, with Sincerity third, is a very neat, compact horse, of form and quality, but falling off a little in his haunches, and also slightly below the hock and knee, as well as not moving his hind-legs in the most pleasing manner. Laughing Stock we have always thought a most untrue-made horse, with flashy action, from the time he was a Royal winner at Newcastle to his playing third at Wakefield to Stampede first and Sincerity second, where we gave sketches of them. Of Stampede we said, "if it were not for his hocks the white-faced brown, with his quality, must have won in a canter, what with his grand, lengthy, round, muscular frame, good short limbs, and really capital foreleg action, so different from Laughing Stock's fibbing pump-handle work, which is all very well when running up and down a market place." Lord Hastings is a light, leggy, lathy horse, and with Gin may prove useful where nothing better is within reach. Then come Empire and Tim Whittler. The American has thickened since we saw him at Birmingham a year or two back, where he was but a shadow of what he is now, but he never can be a hunter stallion with those who believe in the staying properties of back ribs. The other, Tim, is very high on the leg for a twelve-year-old, although a nice topped horse; but it sets those thinking who knew him when in training, whether his hunting stock would inherit the light ewe neck and lauky form of their sire as he was when Sam Rogers took him tight by the head and bullied him from end to end in the deciding heat for the Ascot cup. What a contrast there was in the form of the two horses, and what a hunting sire the giddy Buckstone would have made! The verdict is given, and Sincerity registered in the chronicles of the Society as the Royal thorough-bred stallion of 1871. But a thorough-bred to us it is something refined and free from dross, and when Sincerity and Blinkhoolie stood side by side there was no question as to which was better in form, as it was all in favour of the little one, though a grave query arose as to what we gain in bulk when erring and straying from the natural size of the horse if it be

accomplished by coarseness, or the addition of dross? There was as much difference in the quality of the two horses as there is in the gamecock and the Dorking, the mongrel and the fox-terrier, or Daniel Lambert and Tom Sayers. But perhaps the old simile is the best after all—the ground-ash and the elder, one as well known to horsemen as the other is to the lovers of home-made wine, stuff that we detest quite as much as we do coarse horses. There was a good class of Roadster or Hackney Stallions of twelve entries, where Fire King, the Islington prize horse, was an absentee. Among the other eleven were such well-known roadsters as Young Quicksilver from Wisbeach, Ambition from Downham Market, and Clear-the-Way from Ely; but the first prize went to Dick Turpin, a very bloodlike cobby four-year-old pony, of good form, got by a half-bred horse out of a pony, and never shown before. What his produce may be is quite a lottery. Then the second, Fireaway the Second, is a good moving three-year-old, and rather a taking horse in his forehead, who was much fancied by Captain Bastard and Co. at Islington this year, but he has a three-cornered look viewing him from behind, and many considered that Ambition ought to have filled his place. Clear-the-way is a clever nag, but we never quite liked Young Quicksilver with his dishing action and small second thighs and hocks. With only three entries for the three prizes in the stallion ponies the merry-going clever like cob, Sir George, had easier work in disposing of Mr. Growcock's nice pony, King Arthur, than he had of Mr. Alan Ransomes very handsome Perfection at Oxford.

The verdict over the hunting brood mares created a little sensation and exclamations of "What the de'il are they at now?" and the like, as the red rosette was handed to the attendant of Lady Emily, a bloodlike mare, not particularly hunting-like or grand in her hind-quarters, or in fact anywhere, as by the bench at Oxford not thought worthy of a place; but they certainly did there put an out-and-out coacher, Heliotrope, third. Then the second mare, Lady Byron, is very hunting-like, with rare withers; but the third, Jassy, though with plenty of blood, had a back that you could shave with, and was not hunting-like in her forehead; while Go-a-head, a model of a hunter, was nowhere, neither was the neat characteristic little mare Lord Chesterfield's Newmarket, while Fanny, Lady Lift, Lady Victoria, and Jessie caught our eye among the others. But let us hark back; for although it is not going ahead, it is pleasing at times to have a recollection of the past, and we will just look up what we have seen Go-a-head do, and judge her by the judges. In 'sixty-seven, in a large entry at Thirsk, we described her as the most hunting-like mare in the class, although she was unnoticed by the bench, who put a mare called Slippers first, and Lady Dalkeith second. In 'sixty-eight we again met her at Leicester, where she plays third to Maid of the Heath. On we go to Wetherby, where Go-a-head plays second to one-eyed Sally, a Royal winner at Newcastle, but the Leicester mare, Maid of the Heath, is now nowhere. At Manchester Go-ahead is only highly commended, old Sally being first, Pink second, and Silverlocks third. At Beverley she is first, and Lady Dalkeith, the second at Thirsk, nowhere; at Oxford she is first, and the Wolverhampton mare nowhere; at Wakefield she is first, and Lady Byron second; but Lady Byron beats her at Wolverhampton, and the conclusion we come to, after five years of it, is that judges differ, and that it is yet to be decided which is the best mare. We do not see how it is to be come at without we appoint ourselves *amici curie*, and decide that Go-ahead, although not free from splents, is better than any she met at Wolverhampton, but that she has been fairly thrashed by old Sally. Mr. Overman's Jenny Lind,

a really nice-made mare, going all round in grand style, was the first of the Hackney brood mares, followed by a very handsome grey, Judy. In the pony mares there were three or four nice things, Mr. Millward playing second with a four-year-old bay that will next year make one in the string on his cob Monday at Tattersall's. The very neat grey he was riding about the yard will also appear before the rostrum, as well as Hilton, a very clever nag, and another or two that were in the show-yard.

We now come to the hunters, and in a good show of three-year-olds the first, Banker, is a fine-grown horse, and the second of Sir W. Lawson's also good. In the hunting fillies Luna by Laughing Stock is a very nice filly; and there was also a neat yellow bay hack by him called Covet on the ground which took a first prize, and was afterwards purchased by Major Barlow. The second prize horse, a chesnut by Lifeboat, had not good fore-legs, and we preferred Mr. Booth's Duckling by the Drake, out of Becky Sharpe. In the four-year-olds Major Barlow carried off the first and second colours with Tregothman and Beckford, the Islington and Guildford prize horses, which were noticed in our reports of those meetings; as the Guildford "nags" were terribly derided by some of our knowing contemporaries. The third, a chesnut filly of Mr. Cook's, went very well, and as a stand-still horse, Blankney, with plenty of quality, looked well, but went very sticky and bad. Glendower goes in a very different style, but is rather high on the leg at present; nevertheless his top is good, and we believe, with twelve stone, he would leave many of them behind. We never recollect seeing Mr. Booth on anything better than Banner Bearer; and both man and horse looked like business. The nag is a real nice one, as we said of him at Sleaford, and he shows much better for having a lot of flesh off, as at Islington he was smothered in it. But the open suits him best, as it does any horse that can go; and Banner Bearer, with fifteen stone up, in the boots of the Master of Killerby, sails away through the muck of Wolverhampton course with as even and measured a stroke as a Kelley or a Chambers, while engines of we won't say how many horse power, a few yards off, are thundering about and grunting like pigs in a mud bath. He is followed by Borderer, who beat him at Wakefield, a very hunting-like horse, and with Mr. Simmonds, from Oxford—not the cold gentleman, but "Young Charley"—in the saddle, he is sent along as a hunter should go. They were both Killerby cracks, but now belong to Mr. Harvey Bayley, the Master of the Rufford, who goes in at a long price when he facies anything. Here they turn the tables on Loxley, the second horse to Iris at Islington, a good nag through dirt, but not of the style or fashion of the other two, but still a hunter. Mr. Gregory showed a fair-formed one or two by Empire, in this and the previous class; and Mr. Basset's Filbert by Hazlenut, was a hunter in form and action. In a poor gathering of nine or ten Loiterer, the great mistake of 1870, the hundred guinea prize hunter at Beverley in a class of 52, here in sticky ground makes a worse show than ever. He must be tied in his shoulders, for he cannot move in the least as a hunter should, and, if we are any judges, in a banking country it would be as difficult to keep him on his legs as it would to get Bird on the Wing down—the horse which beat him, and that, it will be remembered, Lord Coventry bought of Mr. Barker the year he was killed at Islington. After the decision, not before, Mr. Welbit objected to Lord Coventry's horse as to soundness, but it was decided against him. The horse had an enlarged tendon or something of that sort that any horse may, and the groom believes that he got this through getting his leg over the halter, and which Mr. Varnell decided was very likely to be the case, so that the horse was allowed to

remain in his box on the Tuesday. Then Mr. Welbit sets the Society at defiance, when he is ordered out, refusing to show Loiterer unless Bird-on-the-Wing is brought out; as the consequence was the class did not come out on the Tuesday, to no one's greater disappointment than our own, as we should have liked all the world to have seen the Wetherby prize hunter go or rather try to go. His owner was fined a sovereign; but this is childish play, for if an exhibitor will not comply with the Society's rules the prize should be withheld, and the sooner the horse be sent out of the yard the better. If Lord Coventry's horse had been lame of one leg, or all round, surely he is better than a wooden one. Bird-on-the-Wing has greatly thickened since we last saw him. He is not quite true in his frame, being slightly over in his forehead, but this is so beautifully balanced or corrected in the placing of his quarters and hind legs, together with his cat-like action, that he figures altogether as clever a little horse as one would wish to look on. He has taken many hunting prizes, as well as for hacks and jumping, for he is a perfect fenceur, and last year, when Lord Coventry bought him at Islington, he was second in a hunter class to a much worse horse, and third to a vulgar farmer's cob, that as a hack was not to be compared with him.

The pairs of carriage mares were not grand, and the brougham horses absentees. There was a good muster of hackneys and roadsters, with some very clever nags amongst them, but as the rain set in the company made off for shelter and more creature comforts.

The agricultural classes, as we have already said, were not great in numbers, but the cream of the country was among them; for instance, in the all-aged stallions, not qualified to compete as Clydesdale or Suffolk, though there were only nine in the class to twenty at Oxford, still the first and second were the same horses, Honest Tom making a double first all-aged Royal, and Young Champion a double second. Then Lion is a very handsome, well-made iron grey five-year-old, not a big one, but very active; while A 1, so well known by his peculiar head and neck, we have often described. Pride of England, the light active Le Bon, and a six-year-old England's Glory, are also very useful horses, the worst being Bonny Prince, from Cheltenham. Young Champion is very short forward, and tucked in in his quarters, as if the breeching had been dropped on him when he was a foal; while he is short in the arm, and long from the knee down; but, in fact, he is a lump of a horse, and nothing else will give you an idea of him, for symmetry is out of the question, as he has none. The Shropshire Friend is a thickset active horse, and his second, John Bull, a very nice one, but we were not taken up with the third prize, Captain. The Clydesdales were not grand, and only five in number, but two more than at Oxford; and Young Lofly was among them again, and again the hero he was at Oxford. Her Majesty, as at Oxford, was represented by Sandy, but he is a lanky Scot that will not do the stud much credit. The two-year-old Clydesdale colts, we must confess, we have seen better represented, as there was not a single entry; but the Suffolk all-aged stallions were much better than at Oxford, and the University hero, Harwich Emperor, not placed. He was distanced by Captain Garrett's grand horse, Cupbearer; but we think our flat-sided old friend from Harwich was on a par with the other two, though Hercules is a nicely-made one, and a horse that we spoke well of at Oxford; he does not go back to Suffolk, but to Canada, to cross with some Percheron mares. Bismark, the Romford champion, looked coarse in such company; but the first and second two-year-olds were very good, there being more of the Suffolk in the first prize, who was bought at Mr. Wolton's sale for £120. The cart mares with foals or in foal (not Suffolk or Clydesdale) were a

very good class, but none up to black Diamond, bred by Mr. Thompson, of Skipwith, Selby, and a taker of many prizes, though now the property of Mr. H. Overman, of Norfolk—a true lover of a good animal. Princess, the first two-year-old filly, is a very fine topped one by Honest Tom, though she falls off in her knees. But Norfolk was in force for the second, a smart short-legged, deep-made bay; and the third, 'old Beauty, the dam of Honest Tom, all came from that county. Princess, in the Clydesdales, is a compact built, strong-made mare, and Deborah a very useful one. The Suffolk brood mares, with five entries, three prizes, and two commendations, speak well for themselves; and when we mention such mares as Matchett, Diamond, and Bury Empress, we are not far out in saying the county of Suffolk was well represented at Wolverhampton. In the Clydesdale fillies, Her Majesty, on the Home Farm, with Kate and Charlotte, cut a better figure in a good class of four. The agricultural pairs, or rather dray-horse pairs, were really grand, where the prize was won with a good pair of well-known prize-takers, though we have seen them beaten in Yorkshire; while Mr. Statter's chesnuts were very taking, as good a match as strawberries and cream or port and filberts, from a back view reminding one of the Suffolk Matchett form; but the third prize, Sensation, a grey mare, is a pair within herself, a mare that it is almost impossible to match, and Farmer, a grey gelding, was in no way her equal, though not by any means a bad horse if he had been coupled with something less grand. Sensation is a mottled grey, very handsome, of beautiful symmetry, with great weight and power, though she steps as light as an opera dancer. In fact, though we have a liking for the thoroughbred almost to infatuation, if there had been a wreath of laurel for the best horse or mare in any class, we should have decorated the brows of Sensation. In the two-year-old pairs Mr. Statter's two had nothing to oppose them, nor had his yearling; and in the three-year-old mares or geldings he only had Mr. Brierley to contend with; but as that gentleman goes for the best, it was as great a victory as if there had been a large field. To Drummer, in the three-year-old geldings, there was no opposition; while there was a nice one in for first amongst the two-year-olds, backed up by two other moderate entries.

Of late years the sheep have formed alike the grandest and most useful section of the Royal Society's meetings; but at Wolverhampton the sheep show was, with one exception, about the tamest and flattest throughout that was ever got together at any of these anniversary exhibitions. The entries were generally small, and of many breeds there was not half a show, although occasionally with a goodly proportion of superior animals. This compliment would apply more especially to the Leicesters, where the hitherto invincible Barton flock was at length deposed from its pride of place, and reasonably enough too. Mr. Borton would appear to have been relying on the useful Yorkshire-Leicester until he has become a small-looking delicate sheep, not doing well of late, and at most points training off. However they are still in high favour for fashionable flocks, and of the rams passed over here two go to Sledmere, and one to Mr. Hutchinson. Mr. Turner, the younger, who is changing from Alexton to Thorpeclands, in Northamptonshire, was in great force, and his two-shear for style, symmetry, constitution, and breeding, has grown into one of the best Leicesters seen out for many a day. He was of course the best of his class at Guildford, but noticeably enough took nothing beyond a commendation at the Yorkshire show at Wakefield last summer, when, as we reported at the time, "the judges considered him to be a particularly good ram in a not particularly good class, but they gave Mr. Borton all the prizes!" The second prize

here, Mr. Sanday's three-year-old, the crack shearling at Manchester and the third of his class at Oxford, has matured into a really magnificent ram, with a great broad back, a clean blood-like head, and a general grandeur of appearance which of itself said much for the sheep put before him. The class was deservedly commended, including as it did Mr. Borton's first prize Oxford sheep and his first prize Sleaford sheep, but the one here put third was never out previous to this meeting; while Colonel Fuge and Mr. Hutchinson had also some highly-bred entries in the class. Mr. Turner's first shearling had also previously "proved" himself at Guildford, but here there was something like a race instead of a mere walk-over. The Thorpe Constantine second and third are both very clever sheep, with the third as it seemed to us altogether the gayer and better of the two, but his wool was said to have told against his getting higher. Mr. Sanday's highly commended ram is at best but a plain one, and despite half a dozen entries by Mr. Borton, and others by Mr. Hutchinson, the shearlings were not in the ruck a strong class. There were, moreover, only three moderate pens of shearling ewes, over which the three premiums were very scientifically distributed.

Should Mr. Brown, of Marham, give over exhibiting, it is a question whether the Cotswold classes should not, as well as the Dorsets, be forthwith struck out of the Royal Society's prize sheet, as nothing could be worse than the way in which this famous breed of sheep is at present represented. Even the Norfolk sheep were not up to their usual standard; for the first shearling, firm in his touch, stands very badly, the second prize is all wrong in his shoulders, and the third in his mutton; as, of course, the remainder of the class was miserably indifferent. The judges, in fact, had the lowest possible opinion of almost everything here brought out. The Kilkenny-old sheep was really a good one, and he was about the only one of any noticeable merit, while the premiums for ewes should never have been awarded. When we remember the beautiful grand pens of Cotswolds which have taken these honours, and then turn to the mean, miserable plain things sent from the Cirencester College, we must emphatically protest against such things being regarded as prize sheep. Even Mr. Spencer's lot, which beat the College pen at Guildford, were still preferable; and the only consolatory reflection is that the first and second prizes have been both sold to go to America:

True patriots these; for, be it understood,
They leave their country for their country's good.

The Lincolns were very unequal, with a bad class of shearlings, and a far better lot of old sheep. Mr. Marshall's first is a very moderate ram to look over, but of good quality, and in such company he was fairly placed at the head of it. The Panton three-shear is a grand shapely sheep of fine character, if not a little too fine; the second also very good, and Mr. Pears' third perhaps more after the original type of Lincoln, and of a great useful stamp. The best pen of ewes were more after the manner of Leicesters about their heads, but they are very smart and soty, if looking a little too highly bred for their purpose. There were some other very clever pens, of which the judges noticed five out of eight entries, as if not of extraordinary excellence there was altogether a very creditable show of Lincolns.

After the Oxforls at Oxford—the deluge, as there actually threatened to be at Wolverhampton, where, as of course was to have been expected, there was a very signal decline in the number of entries. The judges, however, went vigorously to work to correct the Oxford decisions, and over their chief opportunity effected a thorough revolution. Thus Mr. Longland's four-shear, the first prize here, was the reserve at Oxford, and Mr.

Wallis' three-shear, the first prize at Oxford, the reserve here. Mr. Druce's three-shear, the second here, was third at Oxford, where he beat Mr. Longland, and was beaten by Mr. Wallis while Mr. Wallis' best shearing of that great sixty-strong class at Oxford was now no nearer than third in a class of eight entries! It is only right to say that almost everybody went with the Wolverhampton decisions, as probably beyond Mr. Overman, the two fresh-catched judges at Oxford were scarcely equal to such a business as that they undertook. Mr. Longland's first, even at his age, is still quite a superb upstanding sheep of great size with quality, and of really handsome appearance; as he is probably as fine a specimen of the Oxford as ever was shown. It is right to say that he is by Mr. Charles Howard's Plymouth. Mr. Milton Druce's always good ram showed a little weary and jaded, although he had still fairly the best of the two Oxford firsts, and Mr. Wallis would appear to be losing his lead, as it will be remembered the Shifford flock was also all behind at Guildford. We then said that "the Winchendon shearing showed smaller, smarter, and darker in the face than Mr. Treadwell usually has them, but is a very taking sheep," as we always thought the best ever sent from the Aylesbury country, and he won readily enough here. His chief competitor, in fact, was another very clever sheep from Winchendon, who would probably have been second but for a black tuft of wool on his shoulder, as this was held to be fatal. Mr. Wallis' second prize was plain and leggy, and we fancied the third the most of the Shifford team, running to ten entries. The judges held well to their line, for their best shearing is a son of the best old sheep, although Mr. Charles Howard could do little on his own account. The rams threaten to grow away from any very pronounced Oxford-bire character, so far as this may be settled or agreed to, while the Biddenham ewes are always neat, but the entries here were confined to three pens.

Mr. Lynn had all the best of the eight entries of Rylands and other long-wools, with his nice Lincoln and Leicester cross. In a grand total of fifteen entries of Hampshires, some of which were not sent, Mr. Rawlence, despite the Russells and Mr. Morrison, again got to his once wonted place and took every first prize, his best shearing being of the good old orthodox soure-headed stamp—a sort of sheep which must be useful, for he can never be ornamental. But this again altogether upsets more recent decisions, as at Guildford Mr. Morrison and the Russells had all the best of the business: while neither of the judges here were Hampshire men, and the awards in the ram classes look like putting the clock back. There were but two entries of Dorsets in two classes, and only one exhibitor, so that this distinction as a breed should be disallowed forthwith. Mr. Robson, of Bymess, showed some good Cheviots, the ewes being a very sweet pen; and five of the six entries of Mountain sheep were disqualified by the shearing inspectors, the well-known Mr. Peel, of Knowlmore, being noticeably enough one of the offenders, and Mr. Roxburgh, from Denbighshire, the other. The official report, however, will go to say that never were the sheep generally more fairly shorn, so that this system of inspection, as we always argued it would, has been attended with the most wholesome effect.

Amongst the Southdowns there were occasional gaps in the catalogue, as from 861 to 865, and some blank pens on the ground, so that entry in all of fifty or so came to be materially reduced. In fact, it was a very short and not very interesting show. The judges would scarcely look at Messrs. Heasman's sheep, and their good shearing, the best of his class at Guildford, only just reached to a commendation, but it is right to say he was quite off his bloom at Wolverhampton. Sir William Throckmorton, who promises well to take Lord Walsingham's place

as a ram breeder, had all the chief honours in these two classes, it being a very near thing between his two shearings, where the second showed the most style forward, but was not so good in his back as the other. In both classes they put Mr. Rigden's sheep "about," taking Guildford commendations for prizes, or more directly putting unnoticed sheep above previous winners. Thus the second-prize old ram was nowhere at the West of England meeting, while the third here was then second, as many thought he might have been first. Judges and critics may of course be allowed to differ, and for style or true good Southdown character we infinitely prefer the Hove third to the second in the old class at Wolverhampton. It is somewhat remarkable that if they never can do much on a show ground with their rams the Goodwood ewes are always good, though never was there a more beautiful lot than this first prize pen, which was perhaps, at all points, *the* sight of the show. They were so well matched, with such sweet heads and bright looks, true frames, and firm mutton, that we scarcely cared to look at anything else. Nevertheless, there are people who say that the Elmham flock of ewes was always better to look right through than that at Merton, but they were now badly sorted, at any rate; while Colonel Kingscote's lot ran narrow and mean behind, and the Buckland ewes were only moderate, and not matched. In fact, it was the old story of Eclipse first, and the rest nowhere. The Prince of Wales and Mr. Colman had some entries, but it requires both time and money to establish a prize flock.

In their report to the stewards, the judges of Shropshire sheep at the Oxford show said their determination had been "to select such sheep only as represented the type of a true Shropshire," while they went on to suggest "to the breeders the extreme importance of endeavouring to establish more uniformity of character," of which they offered the following definition or scale of points: "A Shropshire sheep should possess great depth of firm flesh, indicated by a good muscular neck, straight and wide back, with ribs well sprung, and a heavy leg of mutton. The face and legs should be of a uniformly dark colour, and a well covered head; the fleece thick-set, and free from grey." There is something of a primitive simplicity in the opening sentence of this official description. As we take it any sheep of any breed "should possess good firm flesh," have "a good muscular neck and a straight and wide back;" while every animal in creation ought to have his "ribs well sprung," and every sheep as certainly "a heavy leg of mutton." So far then this would be a standard of uniformity not merely for the Shropshire but the Southdown, the Leicester, or the Lincoln. The concluding sentence is of course far more to the point, as the colour and fleece in any kind should tell directly to breed. The Council of the Royal Agricultural Society, however, adopted probably a far better plan for establishing uniformity amongst Shropshire sheep, as in these classes they put on precisely the same set of judges at Wolverhampton as had been in office at Oxford. As a principle this *ditto ditto* system would no doubt be objectionable. Almost every man has hisrotchets and pet fancies and prejudices, as nothing would threaten to work worse than that any such likes and dislikes should hold sovereign sway. But the case of the Shropshire sheep is almost altogether exceptional. Since the classes were established no other breed of stock has been shown in such infinite or in such perplexing a variety. At the same time the Shropshire breeders are very keen exhibitors, as none take more interest in the business of the ring or enter more readily into competition. It would so seem that the lesson must be taught, the standard raised, the model perfected by the hands of the judges—that is by the sound decisions they may give, rather than by the trite reports they may write.

The good effect of coming to such an understanding is, we are inclined to think, already observable. Never, probably, were so many sheep of any one section brought together on a show-ground as of the Shropshires at Wolverhampton; and if in a class of eighty yearlings there must be some odd lots, there was no need for the judges to diverge from their line, which they held to with the tenacity of bull-dogs. They seemed to have settled on the sort of sheep they wanted, and of this stamp they looked to have some thirty or so drawn as we walked along the line. And this was not the neat pretty Down, but of a bigger, and may-be rougher sample, going back to the old foundation, but improved by careful and judicious "selection." The prize sheep here have style, quality, and appearance, but at the same time you recognise the true Shropshire type of hardy thriving animal, a thing by no means so easy to do at the shows of a few years since. Moreover, there was a yet better index to the right road in the result of the doings on Monday last. The first prize shearling ram was by the reserve sheep in the older class, and this three-shear, although shown by Mr. Nock was bred by Mr. Mansell. The second prize shearling was the property of Mr. Mansell, as was the first prize old sheep, and the two best pens of lambs were by an Adcott ram. It will be so seen that many of the prize sheep go back to the same strains of blood, whilst nearly all were of the same character. Thus Mr. Stubbs' third prize shearling had the same good dark-coloured face as the second, if not quite so deep nor true in his frame, while the touch and quality of the winner just gave him the advantage, but it took a deal of judging to separate them. The reserve sheep would have made a good match in the team; and then the judges had to look about a little. They could merely commend the more stylish entries of Mrs. Beach, or Lord Chesham's smart shearlings; and there is a lesson to be got off by heart here. The old rams, although we did not see them out, were declared to be superior to the shearlings, and the Adcott first was at once accepted as an illustration of his order. He is really handsome to look on, has plenty of size, and is good in his mutton if not quite right about the colouring of his head. The weak point here is that at Oxford the same judges took no notice of this sheep, while they placed another of Mr. Mansell's second which is here only commended, and very properly placed behind his companion. Of course young rams may alter and improve or go back in the course of a year, but it is hard to understand any such "subsequent" difference in the two sheep here standing side by side. Lord Chesham, who would thus look to be going with the stream, took the Oxford prize last season, but we question if he were ever much fancied at Latimer; and even the judges themselves will allow that their second reading was far the preferable. Mr. Evans was second here with another good dark sheep, and Mr. Coxon, of Freeford, third with a ram of fine constitution; whilst there were numerous commendations, of which Lord Chesham again had a share. In fact, before the decisions were arrived at over the ewes we were enabled to tell his lordship's agent that had he sent five instead of ten he would have been first, whereas the two lots finished second and third; after all perhaps better evidence of the "uniform" excellence of a flock. Nothing, however, could be more of a sort than Mrs. Beach's entries, not merely of ewes, but as exhibited throughout the classes, and so far the Breeder's Cup went very deservedly to its fitting place. This was quite an extraordinary class of ewes, and with very little stretch might have been generally commended. The pens of ten ewes having had lambs were scarcely fit for the show ground, nor did they in any way prove so well as the other classes; but there were some

admirable lambs, Mr. Bradburne's ewes being especially good, and all, as it were, of a family. If we can carry a flock of Shropshire ewes so far, the difficulty of the day may be regarded as almost overcome.

Pig-fancying is becoming more and more of an amateur trade rather than any very strong feature in the business of the farm, and a majority of the prizes were taken at Wolverhampton by exhibitors who could not be regarded as agriculturists; nor is this, perhaps, to be altogether regretted, for the show was associated with some very discreditable proceedings. Pigs were disqualified as over the age at which they were entered; pigs were disqualified as of a larger breed than that at which they were entered; and sows were disqualified as having more pigs by their sides than really belonged to the litters. But the most extraordinary thing is that an attempt is made to keep the names of these offenders back. It is "understood," or the Professor will "report," and so on. But why so? The first inspector of shearing we encountered gave us the number of every entry he had disqualified without the slightest hesitation; as, in fact, disqualification notices were placed over the sheep themselves. On the other hand, there is a curious reticence observable amongst the veterinarians, as nothing could apparently be more painful to Professor Simonds' feelings than to give anybody any information. If the disqualified exhibitors of sheep were paraded then there is a monstrous injustice in withholding the names of the disqualified exhibitors of pigs; and the Stewards or the Council should be called on to supply this suppressed intelligence forthwith. How, indeed, is an evidently growing evil to be corrected without showing up the offenders? As it is the innocent will be continually confounded with the guilty, and if the Council be afraid to own its handiwork or to countenance the acts of its officials, the sooner the pig inspection be thrown up the better, and "the fancy" left to "rope" each other as they please.

The show of "swine," as they say in the North, was only good in places, notwithstanding that the Duckerings were continually beaten—occasionally with their own weapons. It is, indeed, very manifest, that the Messrs. Howard of all others have succeeded in improving on the great white Yorkshires, as they have got out of that terrible coarseness at no material sacrifice of size, and their pigs are becoming everywhere appreciated. Thus Mr. Eden's best boar in the old class was bred at Bedford, and a capital specimen he is, with length, coat, and quality. His superiority was more directly proved by the Northorpe second, which has been about at all the leading shows of the season from Glasgow to Guildford, and never beaten until he encountered Victor. This was a small, but good class, while the younger boars were indifferent and indifferently judged. The first, also first at Dereham, is a big limbed hog, and the second, a second at Guildford, as poor and plain a pig as ever won at a Royal meeting. Mr. Eden's entry looked to be a deal better pig than either, but he was said to be of another breed; and there was possibly some sufficient cause for overlooking Messrs. Duckering's prize pig, as neither was even commended. The large sows made up a capital class, with another of Duckering's hitherto invincibles no higher than second, being fairly beaten by "quite a beauty" from Manchester with a tremendous litter swarming about her. Messrs. Howard were highly commended for two entries, one of which, Duchess, was second at Guildford, when, as we said, "her quality seemed to be attained at an alarming sacrifice of coat; for beyond her ears she was absolutely bare." It is noticeable that pigs sent direct from the Britannia farms have generally less hair than when transplanted to other styes. Do they keep them too hot, or feed them too

high? Mr. Davis, of Wolverhampton, Mr. Walker, and the Wheelers were amongst the others here, also deservedly commended. The four pens of three breeding sows to each entry were all noticed, as, in fact, they were so uniform that the two prizes and the reserve pen might have been taken, or mistaken, for all of the same litter, especially in these times when prize sows throw such a number. The boars of the small white breed looked, at least some of them, to be of a larger breed; while the younger lot was far preferable to their elders, Mr. Matthew Walker winning with a level pig of fine quality from Mr. Eden's stock, and Mr. Fox ranking next, with another very good one; but with fortune still frowning on the Duckerings. In the small sow class, however, it was impossible to get away from their entry, as the competition was not very close, though good; and Topsy is at this writing, perhaps, the best pig out. Of course she has never been beaten.

The small blacks, not so long since amongst the very best sorts, now seem to be bred all sorts of ways; a cross here and a cross there, as we question whether there be any very distinct variety still maintained. It was a very moderate show of them, but they were selling fast, and Mr. Sexton, who with one of the same judges did so little at Guildford, will ship ten or twelve straight away for America. Mr. Ware's prize old boar comes from the Land's End, and his best young boar from Lord Portsmouth, while we found some of Mr. Stearn's pens in blank, as we regretted to see this enthusiastic cultivator of little pigs in very indifferent health at Romford. There was a small show of pigs of breeds "not eligible" for any class in particular, but big, little, or middle-size very much as people chose to call them. Mr. Eden's first prize sow had nine pigs in her litter, and Mr. Nicholson's un-noticed sow ten. The two prize pens of three each were both especially good; and the first prize boar was a great big hog who seemed to have got out of his right section.

There have been far better shows of Berkshires, the judges not being enabled to add on a single commendation in the class of young boars, and the Cirencester first and second both so unmistakably bad that it is a matter of some admiration whether there could not have been found a better in a tolerably numerous entry. The old Berkshire boars were far better, as amongst these were some famous pigs from Mr. Stewart, Mr. Humphrey, and the College. The Gloucester pig, first at Guildford, should have been first again, had his age at a year younger than the other been properly considered. The College was more clearly first in a capital lot of sows the best class of pigs on the ground, and of course commended throughout. The first, also first at Guildford, is a very handsome lengthy sow of rare quality, but not too fine for a Berkshire; and Lord Clermont's second, all the way from Ireland, is almost as good as the other. Mr. Humphrey with Sweet Seventeen, Mr. Stewart with Bobtail, and the College with another Sally, served to give an emphasis to the excellence of the class, as they have all been winners in good company; while Mr. Baily's beautiful pen of three must have gladdened the heart of Mr. Smith, as just of the high quality strain of Berkshire they fancy in Warwickshire. These pigs were also selling fast for America, and the College, it is said, has bought back a sow sent out from Oxford. This may be politic enough, but it is only to be hoped that the hearts of the professors may never yearn again for their prize Cotswolds.

There were other prizes for butter, cheese, wool, farms, and dairymaids, to whose comparative merits we must, at least for a week, leave the prize-list to testify.

PRIZE LIST.

HORSES.

(All ages calculated to July 1st, 1871.)

JUDGES—CART HORSES:

N. G. Barthropp, Hacheston, Wickham Market.
J. H. Wood, Humberstone, Grimsby.
D. Wright, Beal, Northumberland.

RIDING HORSES:

J. E. Bennett, Bosworth Grange, Rugby.
The Hon. G. Lascelles, Sion Hill, Thirk. A. L. Maynard, Skimmingrove, Saltburn-by-the-Sea.

Agricultural stallion, foaled before 1st January, 1869 (not qualified to compete as Clydesdale or Suffolk).—First prize, £25, W. Welcher, Mouse Hall, West Tofts, Brandon, Norfolk (Honest Tom); second, £15, J. Manning, Orlingbury, Wellingborough (Young Champion); third, £5, C. Sharpley, Kelston Hall, Louth, Lincoln (Le Bon). Reserve and Highly Commended: the Rev. J. Hitchcock, Chitterne All Saints, Heytesbury, Wiltshire (Lion).

Agricultural stallion, foaled in the year 1869 (not qualified to compete as Clydesdale or Suffolk).—First prize, £20, T. Corfield, Cardington, Church Streeton, Salop (The Shropshire Friend); second, £10, L. Ashcroft, Mawdesley, Ormskirk (John Bull); third, £5, G. Street, Mauldon, Amptill, Bedford (Captain). Reserve and Highly Commended: J. Perkin, Mansey Farm, Penkridge, Stafford (Young Prince). Commended: J. H. Bomford, Sheriff's Leach, Evesham, Worcester (Nelson).

Clydesdale stallion, foaled before the 1st of January, 1869.—First prize, £25, W. Tomlinson, Blithford, Ruceley, Stafford (Young Lefty); second, £15, Lieut.-Col. R. Loyd Lindsay, M.P., Lockinge Park, Wantage (Prince Albert); third, £5, M. Reed, Beamish Burn, Chester-le-Street, Durham, (Wellington).

Clydesdale stallion, foaled in the year 1869.—[No entry]. Suffolk stallion, foaled before the 1st of January, 1869.—First prize, £25, R. Garrett, Carleton Hall, Saxmundham (Cupbearer); second, £15, G. D. Badham, Bulmer, Sudbury (Hercules); third, £5, W. Wilson, Bayham Hall, Ipswich (Bismarck). Reserve and Highly Commended: The Stone-trough Colliery Company, Ramsdell Hall, Lawton, Cheshire, (Harwich Emperor). Commended: W. Byford, The Court, Glemsford, Sudbury (Volunteer).

Suffolk stallion, foaled in the year 1869.—First prize, £20, Lieut.-Colonel Fuller, Maitland Wilson, Stowlangtoft Hall, Bury St. Edmunds (Heir Apparent); second of £10, G. D. Badham (Emperor). Reserve and Highly Commended: J. A. Pigot, Beckingham Hall, Witham (Patriot).

Thorough-bred stallion, suitable for getting Hunters.—First prize, £50, J. Casson, Burch-by-Sands, Carlisle, Cumberland (Sincerity); second of £25, J. Watson, Waresley, Hartlebury, Kidderminster (Blinkhoolie); third of £10, W. T. Sharpe, Baumber Park, Horncastle (Suffolk). Reserve and Commended: C. and J. Moffat, Kirklington Park, Carlisle (Laughing Stock). Commended: The Earl of Coventry, Croomer Court, Severn Stoke, Worcester (Empire).

Stallion, above 14 hands but not exceeding 15 hands 2 inches, suitable for getting hackneys.—First prize, £20, J. Lockhart, Culmington, Bromfield, Salop (Dick Turpin); second of £10, B. Mitchell, sen., Crome Hall, Downham Market, Norfolk (Fireway the Second); third of £5, Henry Bultrift, Bedwellhay Grange, Ely (Clear the Way). Reserve and Commended: Charles Bearts, Stow Bardolph, Downham Market, Norfolk (Ambition).

Pony stallion, not exceeding 14 hands.—First prize, £15, H. Roundell, Otley, Yorkshire (Sir George); second of £10, C. Groucock, Stanfield Hall, Wymondham (King Arthur). Reserve and Commended: W. Dew, Wellfield House, Bangor, Carnarvon (Llewelyn).

Agricultural mare, in foal, or with foal at foot, not suitable to compete as Clydesdale or Suffolk.—First prize, £20, H. Overman, Weasenham, Brandon, Norfolk (Diamond); second of £10, E. Crowe, Denver, Downham Market, Norfolk (Smart); third of £5, W. Welcher, Mouse Hall, West Tofts, Brandon, Norfolk (Beauty). Reserve and Highly Commended: W. T. Lambe, Welbourne, Grantham, Lincoln (Beauty). Commended: C. Lister, Coleby Lodge, Lincoln (Royal Duchess). The class commended.

Clydesdale mare, in foal, or with foal at foot.—First prize, £20, T. Statter, jun., Stand Hall, Whitefield, Manchester (Princess); second of £10, G. H. Head, Rickerby, Carlisle, Cumberland (Deborah). Reserve: Lieut.-Colonel Robert Lord Lindsay, M.P. (Polly).

Suffolk mare, in foal, or with foal at foot.—First prize, £20, The Executors of the late T. Capon, Dennington, Wickham Market, Suffolk (Matchit); second of £10, Lieut.-Colonel Fuller Maitland Wilson (Bury Empress); third of £5 (specially recommended), H. Wolton, Newbourn Hall, Woodbridge, Suffolk (Diamond). Commended: W. Byford, The Court, Glemsford, Sudbury (Pride).

Mare, in foal, or with foal at foot, suitable for breeding

hunters.—First prize, £25, T. H. Miller, Singleton, Poulton-le-Fylde, Lancashire (Lady Emily); second of £15, J. Clarke, Beeston, Leeds, (Lady Byron); third of £5, L. Lywood, High Downs, Bridgnorth, Salop (Jassy). Reserve and Highly Commended: J. T. Robinson, Leekby Palace, Thirk (Go-a-head).

Mare, above 14 hands but not exceeding 15 hands 1 inch, in foal or with foal at foot, suitable for breeding hackneys.—First prize, £20, H. Overman, Weasenhall (Jenny Lind); second of £10, T. Tones, Cross Lane Head, Bridgnorth (Judy). Reserve and Commended: T. Latham, Little Whittonham, Abington (Miss Dodson).

Pony mare, not exceeding 14 hands.—First prize, £10, W. Coates, Scarborough Farm, Wincheombe (Kitey); second of £5, R. Milward, Thurgarton Priory, Southwell, Notts. (Brighteyes). Reserve and Highly Commended: G. Stokes, Camp Farm, Kingsbury, Atherstone (Polly).

Hunter gelding, three years old.—First prize, £20; W. Armstrong, Kendal, Westmorland (Banker); second of £15; Sir W. Lawson, Bart., M.P., Brayton, Carlisle; third of £10, G. J. Mitchell, Newton Mount, Burton-on-Trent (Feuian); fourth of £5, C. Cook, Taddington, Wincheombe (The Admiral). Reserve and Commended: G. B. Keeling, Hampton House, Penkridge (The Dean).

Hunter filly, three years old.—First prize, £20, J. Moffat, (Luna); second of £15, E. Phillimore, Prestbury Park Farm, Cheltenham; third of £10, J. B. Booth, Killerby Hall, Catterick (Duckling); fourth of £5, C. Byrd, Littywood, Stafford (Theodora). Reserve: The Stonerough Colliery Company (Alice Grey).

Hunter gelding or filly, four years old.—First prize, £30, F. Barlow, Hasketon, Woodbridge (Trezothnan); second of £20, F. Barlow, (Beckford); third of £10; C. Cook, Taddington; fourth of £5, G. J. Mitchell (Blankney). Reserve and Commended: W. Tudge, Coston Hall, Astou-on-Clun, Salop (Glendower).

Hunter, mare or gelding, up to not less than 15 stone.—First prize, £30, J. B. Booth (Banner Bearer); second of £20, T. H. D. Bayly, Edwinstow House, Ollerton, Notts (Borderer); third of £10, G. Van Wart, The Shrubbery, Birmingham (Loxley); fourth of £5, R. B. Oswald, Shelvock, West Felton, Salop (Filibert). Reserve and Commended: J. G. Watkins, Woodfield, Ombersley, Droitwich.

Hunter, mare or gelding, up to not less than 12 stone.—First prize, £25, the Earl of Coventry (Bird on the Wing); second of £15, S. J. Welfit, Tathwell Hall, Louth (Loiterer); third of £10, W. Armstrong, Kendal (Lallah Rookh); fourth of £5, G. Smith, Ailston, Stratford-on-Avon (Brenda). Reserve and Commended: J. W. Gardom, Butterton Park, Newcastle, Stafford (Britannia).

Carriage horses or mares, in pairs, under 6 years old.—First prize, £25, J. T. Robinson, Leekby Palace, Thirk (rans).

Brougham horse or mare, under six years old.—No competition. Roadster, mare or gelding, above 14 hands 1 inch, and not exceeding 15 hands 1 inch.—First prize, £20, J. Moffat (Covet); second of £10, W. Fell, The Close, Lichfield (Mahaomet); third of £5, J. Moffat (Land Agent). Reserve and Commended: R. Milward (Hilton).

Roadster, mare or gelding, above 15 hands 1 inch.—First prize, £20, J. Wark (The General); second of £10, G. D. Barham (Tearaway); third of £5, T. H. Miller. Reserve and Commended: T. Statter, jun. (Maiden Hand).

Colt, mare or gelding, above 13 hands, and not exceeding 14 hands 1 inch.—First prize, £15, G. Smith (Dick); second of £10, W. E. Wiley, Tamworth Road, Erdington, Birmingham (Bob); third of £5, J. G. Boraston, Kidderminster (Comet). Reserve and Highly Commended: R. Milward (Camperdown).

Pony, not exceeding 13 hands.—First prize, £10, F. Bower, Albion-street, Birmingham (Jumney); second of £5, W. Tyler, Friday Bridge, Birmingham (Billy). Reserve and Highly Commended: T. Statter, jun. (Queen Bee). Commended: G. M. Sexton, Wharstead Hall, Ipswich (Matchless); and T. Gatiss, North-street, Wolverhampton (Dot).

Agricultural filly, two years old (not qualified to compete as Clydesdale or Suffolk).—First prize, £15, J. Linton, Westwick Hall, Cambridge, (Princess); second of £10, J. Hawkesworth, Barton Fields, Barton Blount, Derby (Darling); third of £5, S. Davis, Woolashill, Pershore (Darling). Reserve and Highly Commended: D. Bridgwater, Lower Fortham, Glasbury, Brecon. Commended: J. Hawkesworth (Boss).

Clydesdale filly, two years old.—First prize, £15, T. T. Parker, Charnock, Chorley, Lancashire; second of £10, her Majesty the Queen, Windsor Castle (Kate). Reserve and Highly Commended: Her Majesty the Queen (Charlotte). Commended: T. Statter jun. (Highland Lassie).

Suffolk filly, two years old.—First prize, £15, W. Thompson, jun., Thorpe, Colchester, Essex (The Despised). No competition.

Agricultural pair of geldings or mares, of any age.—First prize, £20, C. W. Brierley, Rhodes House, Middleton, Manchester (Champion and Warwick); second of £10, T. Statter, jun. (Fanny and Diamond); third of £5, C. W. Brierley (Sen-

sation and Farmer). Reserve and Highly Commended: The Earl of Dartmouth, Patsbuhl, Albrighton, Wolverhampton (Shirley and Bowler).

Agricultural pair of geldings or mares, four years old.—First prize, £20, T. Statter, jun. (Smiler and Boxer).

Agricultural pair of geldings or mares, three years old.—First prize, £20, T. Statter, jun. (Thumper and Maggie); second, £10, C. W. Brierley (Bobby and Firt).

Agricultural gelding, three years old.—First prize, £10, E. Tongue, Manor House, Aldridge, Walsall (The Drummer).

Agricultural gelding, two years old.—First prize, £10, J. Perry, Salter's Hall, Claverley, Bridgnorth (Captain); second, £5, T. W. D. Harris, Wootton, Northamptonshire. Reserve: G. H. Head.

Agricultural gelding, yearling.—First prize, £10, T. Statter, jun. (Thumper).

CATTLE.

(All ages calculated to July 1st, 1871.)

SHORTHORNS.

JUDGES.—G. Bland, Coleby Hill, Lincoln.

W. Parker, Carleton Hill, Penrith.

J. Robinson, Clifton Pastures, Newport

Pagnell.

Bull above three years old.—First prize, £30, H. Thompson, Maiden Hill, Penrith (Edgar); second of £20, the Marquis of Exeter, Buryghy Park, Stamford (Telemachus); third of £15, the Rev. Walter Sneyd, Keele Hall, Newcastle-under-Lyme (Ironmaster); fourth of £10, J. Wright, Green Gill Head, Penrith (Man's Estate). Reserve and Highly Commended: R. F. Sofie, Hams, Eastleigh, Southampton (Lord Morpeth). Commended: T. Statter, jun. (Charlie).

Bull above two and not exceeding three years old.—First prize, £25, W. Linton, Sherriff Hutton, York (Lord Irving); second of £15, J. Outhwaite, Bainesse, Catterick (Royal Windsor); third of £10, Sir D. Baird, Bart., New Blythe, Preston Kirk, Haddington (Baron Lawrie); fourth of £5, Emily Lady Pigot, Branches Park, Newmarket (Bythis). Reserve and Highly Commended: W. and H. Dudding, Pantton House, Wragby, Lincoln (Standard Bearer).

Yearling bull above one and not exceeding two years.—First prize, £25, Colonel C. Towneley, Towneley, Burnley (Baron Hubback 2nd); second of £15, Lord Sudeley, Toddington, Wincheombe (Cherub); third of £10, J. Lamb (Ignoramus); fourth of £5, J. Meadows, Thornville, Wexford, Ireland (Prince Charlie). Reserve and Highly Commended: G. Garne, Churchhill Heath, Clipping Norton (Earl of Warwickshire 3rd). The class highly commended.

Bull calf above six and not exceeding twelve months old.—First prize, £15, W. and H. Dudding (British Flag); second of £10, W. Linton (Leeman); third of £5, T. Garne and Son, Broadmoor, Northleach (Red Prince).

Cow above three years old.—First prize, £20, J. Beattie, Newbie House, Annan, Dumfriesshire (Warrior's Plume); second of £10, A. Dugdale, Rose Hill, Burnley, Lancashire (Kent Cherry 2nd); third of £5, J. How, Broxbton, Huntingdon (Windsor Butterfly). Reserve and Highly Commended: W. Linton, Sheriff Hutton, York (Carnation). Commended: W. Bradburn, Welensfield, Wolverhampton (Red Rose); and W. J. Whitted, Abbey Farm, Wroxall, Warwick (Magnolia).

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £15, Emily Lady Pigot (Dame Swift); second of £10, J. How (Vesper Queen); third of £5, F. J. Savile Foljambe, M.P., Osberton Hall, Worksop (Concert). Reserve and Highly Commended: W. H. Hewett, Norton Court, Tamton (Nelly). Highly Commended: W. Hosken and Son, Loggan's Mill, Hayle, Cornwall (Countess of Oxford). The class highly commended.

Yearling heifer, above one and not exceeding two years old.—First prize, £15, J. Outhwaite (Lady Brough); second of £10, F. J. Savile Foljambe, M.P. (Fleur de Lis); third of £5, Colonel C. Towneley (Baron Oxford's Duchess). Reserve and Highly Commended: Colonel C. Towneley (Butterfly's Memento). The class highly commended.

Heifer-calf, above six and under twelve months old.—First prize, £10, A. Garrit, Scotchorn, Lincoln (Brilliant Rose 2nd); second of £5, Emily Lady Pigot (Victoria Victoria). Reserve and Highly Commended: W. and H. Dudding (Lady Grace). Highly Commended: R. Stratton, Burderop, Swindon (Mabel); and Colonel C. Towneley (Butterfly's Memento 3rd). Commended: C. W. Brierley (Bolivar's Flower).

HEREFORDS.

JUDGES.—H. Haywood, Blakemore House, Hereford.

W. Taylor, Thinghill Court, Hereford.

Bull, above three years old.—First prize, £25, W. Evans, Llandowais, Usk, Monmouth (Monaughty 3rd); second of £15, P. Turner, The Leen, Pembridge (Bachelor); third of £5, N. Benjafield, Short's Green Farm, Motcomb, Shaftesbury. Reserve and Highly Commended: J. Walker, Westfield House, Holmer, Hereford (Wonder). Commended: H. N. Edwards, Broadward, Leominster (Sir John).

Bull, above two and not exceeding three years old.—First prize, £25, J. Williams, Saint Mary's Kingsland (Royal Head); second of £15, G. Child, Westonbury, Pembroke (Star of the West); third of £5, J. Crane, Benthall Ford, Shrewsbury (Prince George). Reserve and Highly Commended: J. Harding (Tom Kinnersley). Highly Commended: Her Majesty the Queen (Prince George Frederick). The class commended.

Yearling bull, above one and not exceeding two years old.—First prize, £25, R. Hill, Orleton Court, Ludlow (Pearl Diver); second of £15, G. Child, Westonbury, Pembroke (Star of the West); third of £5, J. Crane, Benthall Ford, Shrewsbury (Prince George). Reserve and Highly Commended: J. Harding (Tom Kinnersley). Highly Commended: Her Majesty the Queen (Prince George Frederick). The class commended.

Bull-calf, above six and not exceeding twelve months old.—First prize, £10, H. N. Edwards (Alexander); second of £5, W. Taylor, Showle Court, Ledbury (The Wolverhampton Boy). Reserve and Highly Commended: H. N. Edwards (Albert). Highly Commended: R. Hill (The Colonel). Commended: W. B. Peren, Compton House, South Petherton (Perfection); W. Tudge, Adforton, Leintwardine (Vespasian); and J. Morris, Town House, Madley, Hereford (Vendome).

Cow, above three years old.—First prize, £20, W. B. Peren (Ivington Rose); second of £10, Philip Turner (Livia); third of £5, R. Tamer, Frodesley, Dorrington (Queen). Reserve and Highly Commended: G. Pitt, Chadnor Court, Dilwyn, Leominster (Highland 4th). Highly Commended: Sir J. R. Baily, Bart., M.P., Glanusk Park, Crickhowell (Riding Hood); and J. Williams, Saint Mary's, Hereford (Pansy).

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £15, Philip Turner (Rarity); second of £10, J. Harding (Dahlia); third of £5, Thomas Fenn, Stonebrook House, Ludlow (Duchess of Bedford 6th). Reserve and Highly Commended: G. Pitt (Sunshine 2nd). The class highly commended.

Yearling heifer, above one and not exceeding two years.—First prize, £15, J. Harding (Lizzie Jeffreys); second of £10, P. Turner (Plumb); third of £5, T. Thomas, St. Hilary, Cowbridge (Sunflower). Reserve and Highly Commended: J. Hungerford Arkwright, Hampton Court, Leominster (Miss Hungerford). Highly commended: P. Davis, Bickmarsh Hall, Alcester; W. Tudge, Adforton (Bonnie Belle); and H. Rawlins Evans, jun., Swanstone Court, Dilwyn, Leominster (Lady Oxford). Commended: R. Tamer (Princess Louise).

Heifer-calf, above six and under twelve months old.—First prize, £10, T. Fenn, Stonebrook House, Ludlow (Lady of the Tempe); second of £5, J. Morris (Madeline). Reserve and Highly Commended: T. Thomas (Rosalind). Highly Commended: Henry N. Edwards (Dewdrop); T. Fenn (Duchess Bedford 7th); and J. Hungerford Arkwright. Commended: T. Fenn (Blue Butterfly), and W. Tudge (Flem-de-lis).

DEVONS.

JUDGES.—S. P. Newbury, 4, Boringdon Villas, Plympton. T. Pope, Horningsham, Warminster.

Bull above three years old.—First prize, £25, J. H. Buller, Downes, Crediton; second of £15, Viscount Falmouth, Treghoman, Probosc (Narcissus); third of £5, J. Davy, Flitton Barton, North Molton (Duke of Flitton 4th). Reserve and Highly Commended: Her Majesty the Queen (Napier). Highly Commended: J. Pittfield, Symondsbury, Bridport (Triumph). The class commended.

Bull, above two and not exceeding three years old.—First prize, £25, J. Davy (Duke of Flitton 5th); second of £15, Viscount Falmouth (Jonquil); third of £5, W. Smith, Hoopern, Exeter (Pennsylvania).

Yearling bull, above one and not exceeding two years old.—First prize, £25, Viscount Falmouth (Cinnamon); second, £15, W. Farthing, Stowey Court, Bridgewater (Master Harry); third of £5, J. Davy (Duke of Flitton 6th). Reserve and Highly Commended: Viscount Falmouth (Kingscraft). The class commended.

Bull-calf, above six and not exceeding twelve months old.—First prize, £10, W. Farthing (Marquis of Lorne); second of £5, J. Davy (Conqueror). Reserve and Highly Commended: Her Majesty the Queen (Prince Imperial).

Cow, above three years old.—First prize, £20, W. Taylor, Glynley, Westham, Sussex (Profit's Duchess); second of £10, W. Taylor (Frederica). Reserve and Highly Commended: J. Davy (Lovely Queen). The class commended.

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £15, W. Smith, Hoopern (Duchess); second of £10, W. Taylor. Reserve and Highly Commended: T. L. Senior, Broughton, Aylesbury (Young Daisy).

Yearling heifer, above one and not exceeding two years old.—First prize, £15, J. Davy (Gay-lass); second of £10, J. H. Buller; third of £5, W. Farthing (First Fruit). Reserve and Highly Commended: G. Turner, Bramford Speke, Exeter (Princess Louise). The class commended.

Heifer-calf, above six and under twelve months old.—First prize, £10, J. Davy (Actress the 5th); second of £5, W. Far-

thing (Fair Rosamond). Reserve and Highly Commended: Her Majesty the Queen (Princess Frederica). Highly Commended: W. Farthing (Princess Louise). The class commended.

JERSEY.

JUDGES.—C. P. Le Cornu, Trinity Manor, Jersey. H. Tait, Shaw Farm, Windsor.

Bull, above one year old.—First prize, £10, W. Gilbey, Hargrave Park, Stanstead (Banboy); second of £5, G. Simpson, Wray Park, Reigate (Prince). Reserve: F. Simpson, Sion House, Bellborough, Stourbridge (Beauty, junior).

Cow above three years old.—First prize, £10, W. Gilbey (Duchess); second of £5, G. Digby Wingfield-Digby, Sherborne Castle, Dorset (Julia). Reserve and Highly Commended: W. Gilbey (Milkmaid). Highly Commended: Lord Chesham, Latimer, Chesham (Bella). Commended: Philip Gaudin, Spring Farm, St. Martin's, Jersey (Camelia); and J. G. Hubbard, Addington Manor, Winslow (Daisy).

Heifer, in-milk or in-calf, not exceeding three years old.—First prize £10, G. Digby Wingfield-Digby (Miss Edith); second of £5, J. G. Hubbard (Belle). Reserve and Highly Commended: G. Simpson (Myrtle). Commended: P. Gaudin (Stella); J. G. Hubbard (Butterfly); and Lord Chesham (Dream).

GUERNSEY.

JUDGES.—(As for Jersey.)

Bull above one year old.—First prize, £10, the Rev. J. Rundle Watson, Le Bocage, Guernsey (Trumpeter); second of £5, C. Le Page, Les Natiann, Guernsey (Billy). Reserve: E. A. Sanders, Stoke House, Exeter (Victor Emmanuel).

Cow above three years old.—First prize, £10, the Rev. J. Rundle Watson (Stella); second of £5, T. Blondel Le Page, Maison de Bas, St. Andrew's, Guernsey (Daisy). Reserve and Highly Commended: T. Statter, jun. (Smoky).

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £10, C. Le Page; second of £5, T. Blondel Le Page (Beauty). Reserve and Highly Commended: T. Blondel Le Page (Lily of Guernsey).

NORFOLK AND SUFFOLK POLED.

JUDGES.—(As for Devons.)

Bull above one year old.—First prize, £10, B. Brown, Thursford, Thetford (Norfolk Duke—Norfolk); second of £5, J. J. Colman, M.P., Carrow House, Norwich (Cherry Duke—Norfolk and Suffolk). Reserve: T. Brown, Marham Hall Farm, Downham Market (Bailiff—Norfolk).

Cow above three years old.—First prize, £10, B. Brown (Duchess—Norfolk). The class commended.

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £10, B. Brown (Countess—Norfolk); second of £5, J. Hammond, Bale, Thetford (Davy the 4th—Norfolk). Reserve and Highly Commended: Lord Sondes, Elmham Hall (Norfolk).

OTHER ESTABLISHED BREEDS.

(Not including the Shorthorn, Hereford, Devon, Jersey, Guernsey, or Norfolk and Suffolk Polled breeds.)

JUDGES.—(As for Devons.)

Bull above one year old.—First prize, £10, the Duke of Buckingham and Chandos, Stowe, Buckingham (Young Conqueror—Longhorn); second of £5, J. Godfrey, Wigston Parva, Hinckley, Leicestershire (Samson 2nd—Longhorn). Reserve and Highly Commended: T. Statter, jun. (Aberdeenshire Hero—Angus). Commended: R. H. Chapman, Upton, Nuncaton, Warwick (Earl of Upton 2nd—Longhorn).

Cow above three years old.—First prize, £10, J. Godfrey (Buttercup—Longhorn); second of £5, T. Statter, jun. (Princess of Aberdeenshire—Angus). Reserve and Highly Commended: R. H. Chapman (The Light of Other Days—Longhorn). Highly Commended: A. Dugdale (Highland Lassie—West Highland); and W. T. Cox, Spondon Hall, Derby (Beauty—Longhorn). Commended: The Earl of Harrington, Elva-ton Castle, Derby (Beauty—Ayrshire); and the Earl of Powis, Powis Castle, Welshpool (Lady Irvine—Ayrshire).

Heifer in-milk or in-calf, not exceeding three years old.—First prize, £10, T. Statter, jun. (Black Bess—Angus). Second of £5, the Duke of Buckingham and Chandos (Lady Mary—Longhorn). Commended: J. Godfrey (Beauty—Longhorn). The class commended.

DAIRY CATTLE.

JUDGES.—(As for Jersey.)

Pair of heifers under three years and eight months old in-milk.—First prize, £20, T. Statter, jun. (Rose and Beauty—Ayrshire); second of £10, T. Statter, jun. (Buttercup and Dairymaid—Ayrshire); third of £5, J. J. Sharp, Broughton, Kettering (Julia 4th and Julia 9th—Shorthorns).

Pair of cows, over three years and eight months old, in milk.—First prize, £20, T. Statter, jun. (Maid of Ayr and Maid of Midlothian—Ayrshires); second of £10, T. Statter, jun. (Maid of May and Maid of Craven—cross-bred); third

of £5, H. Crossley, Watkinson Hall Farm, Halifax (Yorkshire Cross). Reserve and Highly Commended: T. Nash, Featherstone, Shareshill, Wolverhampton (Lizzie and Royalty—Shorthorns). Commended: C. W. Brierley (cross-bred).

SHEEP.

LEICESTERS.

JUDGES.—R. Fisher, Leonfield, Beverley.
T. Potter, Yellowford, Thorverton.
T. H. Simpkin, Hoby, Leicester.

Shearling ram.—First prize, £20, G. Turner, jun., Alexton Hall, Uppingham; second of £10, the Rev. G. Inge, Thorpe Constantine, Tamworth; third of £5, the Rev. G. Inge. Reserve and Highly Commended: G. H. Sanday, Holme Pierpoint, Nottingham. Commended: G. Turner, Bramford Speke, Exeter; J. Borton, Barton House, Barton-le-Street, Malton.

Ram of any other age.—First prize, £20, G. Turner, jun.; second of £10, G. H. Sanday; third of £5, J. Borton. Reserve and Highly Commended: The Rev. G. Inge. The class commended.

Pen of five shearing ewes.—First prize, £15, T. H. Hutchinson, Manor House, Catterick; second of £10, J. Borton; third of £5, the Rev. G. Inge.

COTSWOLDS.

JUDGES.—R. Garne, Aldsworth, Northleach.
R. J. Newton, Campsfield, Woodstock.

Shearling ram.—First prize, £20, T. Brown, Marham; second of £10, T. Brown; third of £5, T. Brown. Reserve: T. Brown.

Ram of any other age.—First prize, £20, the Executors of the late T. Gillett, Kilkenny, Faringdon; second of £10, T. Brown; third of £5, T. Brown. Reserve: The Executors of the late J. Godwin, Troy Farm, Deddington.

Pen of five shearing ewes.—First prize, £15, The Royal Agricultural College, Cirencester; second of £10, The Royal Agricultural College. Reserve: C. Spencer, Gileston, Cowbridge, Glamorganshire.

LINCOLNS.

JUDGES.—C. Clarke, Scopwick, Sleaford.
J. Greetham, Stamford, Wragby.

Shearling ram.—First prize, £20, W. F. Marshall, Branson, Lincoln; second of £10, T. Cartwright, Dunstan Pillar, Dunstan, Lough; third of £5, W. and H. Dudding, Panton. Reserve and Highly Commended: R. Johnson, Kirkireton, Wicksworth. Commended: T. Cartwright, and C. Lister, Coleby Lodge, Lincoln.

Ram of any other age.—First prize, £20, W. and H. Dudding; second of £10, A. Hack, Buckminster, Grantham; third of £5, J. Pears, Mere, Lincoln. Reserve and Highly Commended: W. and H. Dudding. Commended: R. Johnson, Kirkireton, Derby.

Pen of five shearing ewes.—First prize, £15, T. Gunnell, Willow House, Milton, Cambridge; second of £10, T. Cartwright; third of £5, J. Pears. Reserve and Highly Commended: R. N. Morley, Leadenhain, Grantham. Commended: J. Byron, Kirby Green, Seaford.

OXFORDSHIRE DOWNS.

JUDGES.—(As for Cotswolds.)

Shearling rams.—First prize, £20, J. Treadwell, Upper Winchendon, Aylesbury; second of £10, G. Wallis, Old Shiford, Bampton, Faringdon; third of £5, G. Wallis. Reserve and Highly Commended: G. Wallis. Commended: G. Wallis; C. Howard, Biddenham, Bedford; A. F. Milton Druce, Burghfield, Reading; and F. Street.

Ram of any other age.—First prize, £20, J. Longland, Grendon, Northampton; second of £10, A. F. M. Druce; third of £5, G. Wallis. Reserve and Highly Commended: G. Wallis. Commended: J. Treadwell.

Pen of five shearing ewes of the same flock.—First prize, £15, A. F. M. Druce; second of £10, C. Howard. Reserve: F. Street, Harrowden, Bedford.

RYLAND AND OTHER LONG-WOOLLED BREEDS.

(Not qualified to compete as Leicester, Cotswold, or Lincoln.)

JUDGES.—(Same as for Lincolns.)

Shearling ram.—First prize, £15, J. Lynn, Church Farm, Stretton, Grantham (Lincoln and Leicester); second of £5, J. Lynn (Lincoln and Leicester). Reserve: T. W. D. Harris, Wootton, Northampton (Lincoln and Leicester).

Pen of five shearing ewes.—First prize, £10, T. W. D. Harris (Lincoln and Leicester).

SOUTH-DOWNS.

JUDGES.—H. Fookes, Whitechurch, Blandford.
J. S. Turner, Seaford, Sussex.

Shearling Ram.—First prize, £20, Sir W. Throckmorton, Bart., Buckland, Faringdon; second of £10, Sir W. Throckmorton; third of £5, W. Rigden, Hove, Brighton. Reserve

and Highly Commended: The Duke of Richmond, K.G., Goodwood, Chichester. Commended: J. and A. Heasman, Angmering, Arundel.

Ram of any other age.—First prize, £20, Sir W. Throckmorton; second of £10, W. Rigden; third of £5, W. Rigden. Reserve and Highly Commended: H.R.H. the Prince of Wales, K.G., Sandringham, King's Lynn, Norfolk. Commended: The Duke of Richmond (for two rams), and H. S. Waller, Farmington, Northleach.

Pen of five shearing ewes.—First prize, £15, the Duke of Richmond; second of £10, Lord Soudes, Elmham Hall, Thetford; third of £5, Colonel R. N. F. Kingscote, M.P. of Kingscote Park, Wotton-under-Edge. Reserve and Highly Commended: Sir W. Throckmorton. Commended: H.R.H. the Prince of Wales and the Duke of Richmond. The class commended.

SHROPSHIRE.

JUDGES.—B. Bond, Swansmoor, Great Haywood, Stafford.
W. Kemp Bourne, Fisherwick, Lichfield.
R. H. Masfen, Pendeford, Wolverhampton.

Shearling ram.—First prize, £20, C. Byrd, Littlywood, Stafford; second of £10, T. Mansell, Adcott Hall, Baschurch; third, £5, J. Stubbs, Burston, Stone, Stafford. Reserve and Highly Commended: J. Evans, Uffington, Shrewsbury. Commended: S. Beach, the Hattons, Brewood; T. Mansell; Lord Wenlock, Escrick Park, York; W. German, Measham Lodge, Atherstone (for two sheep); E. Bostock, the Hough, Stafford.

Ram of any other age.—First prize, £20, T. Mansell; second of £10, J. Evans, Uffington, Shrewsbury; third, £5, J. Coxon, Freeford Farm, Lichfield. Reserve and Highly Commended: T. Nock, Sutton Maddock, Shifnal. Highly Commended: W. Baker, Moor Bars, Atherstone (for two rams); S. Beach; C. R. Keeling, Yew Tree Farm, Penkridge; R. Edwards, Udlington, Shrewsbury; Lord Chesham, Laimier, Chesham, Bucks; and T. Mansell. Commended: G. Allen, Knightley Hall; J. Evans; S. Griffiths, Argoed, Overton; J. H. Bradburn; C. Byrd; Colonel Drott, M.P., Freeford, Lichfield.

Pen of five shearing ewes.—First prize, £15, S. Beach; second of £10, Lord Chesham; third of £5, Lord Chesham. Reserve and Highly Commended: W. O. Foster, Apley Hall, Shifnal. Highly Commended: W. Baker; H. Smith, Sutton Maddock, Shifnal; and W. Yates, Grindle House, Shifnal. Commended: W. Baker; S. C. Pilgrim, The Outwoods, Burbage, Hinckley; J. Pulley, Lower Eaton, Hereford; H. Matthews, Montford, Shrewsbury; J. Coxon; C. R. Keeling; J. H. Bradburn, Pipe Place, Lichfield; W. C. Firmstone, Rockingham Hall, Hagley, Stourbridge.

Ten Shropshire ewes, having had lambs in 1871.—First prize, £20, W. Baker; second of £10, S. Beach; third of £5, T. Nock. Reserve: J. H. Bradburn.

Ten Shropshire ewe lambs.—First prize, £15, J. H. Bradburn; second of £10, S. Beach; third of £5, Lord Chesham. Reserve and Highly Commended: R. Wyatt, Acton Hill, Stafford. Commended: J. Coxon.

Five Shropshire ram lambs.—First prize, £15, S. Beach; second of £10, T. Nock; third of £5, H. Smith. Reserve and Highly Commended: Lord Chesham.

The Shropshire breeders' Cup, value £10, to the Exhibitor taking the greatest number of Prizes in all the Shropshire classes, to Mrs. Sarah Beach, of The Hattons, Brewood.

HAMPSHIRE AND OTHER SHORTWOOLLED BREEDS.

(Not qualified to compete as Southdown or Shropshire.)

JUDGES.—(Same as for Southdowns.)

Shearling ram.—First prize, £20, J. Rawlence, Bulbridge, Wilton (Hampshire Down); second of £10, A. Morrison, Fonthill House, Tisbury, Wilts (Hampshire Down); third of £5, A. Morrison (Hampshire Down). Reserve and Highly Commended: R. and J. Russell, Horton Kirby (Hampshire Down). Commended: R. and J. Russell (Hampshire Down), and J. Rawlence (Hampshire Down).

Ram of any other age.—First prize, £20, J. Rawlence (Hampshire Down).

Pen of five shearing ewes.—First prize, £15, J. Rawlence (Hampshire Down); second of £10, J. Rawlence (Hampshire Down). Reserve: T. J. Torr, Dummer House, Basingstoke (Hampshire Down).

DORSETS.

JUDGES.—(Same as for Southdowns.)

Shearling ram.—First prize, £15, H. Mayo, Cokers Frome, Dorchester; second of £5, H. Mayo.

Pen of five shearing ewes.—No entry.

CHEVIOTS.

JUDGES.—J. Irving, Shap Abbey, Westmoreland.
R. Shortreed, Attonburn, Kelso, N.B.

Ram of any age.—First prize, £15, J. Robson, Bymess, Rochester, Northumberland; second of £5, J. Robson. Reserve and Highly Commended: J. Robson.

Pen of five ewes of any age.—First prize, £10, J. Robson; second of £5, A. Roxburgh, Caerloli, Llanrwst, Denbighshire. Reserve and Highly Commended: A. Roxburgh.

MOUNTAIN SHEEP.

(Not qualified to compete as Cheviots.)

JUDGES.—J. Irving, Shap Abbey, Westmoreland.

R. Shortreed, Attonburn, Kelso, N.B.

Ram of any age.—The class disqualified.

Pen of five ewes of any age.—Prize, £10, J. Peel, Knowlmore Manor, Clitheroe (Lank).

PIGS.

JUDGES.—J. Angus, Whitefield, Morpeth.

H. Aylmer, West Dereham Abbey, Stoke Ferry, J. Smith, Henley-in-Arden.

LARGE WHITE BREED.

Boar above twelve months old.—First prize, £10, P. Eden, Cross Lane, Salford, Manchester (Victor 2nd); second, £5, R. E. Duckering, Northorpe, Kirton-Lindsey, Lincoln. Reserve: H. Goodall, Areted, Sandbach, Cheshire (Young Casswell).

Boar, above six months and not exceeding twelve months old.—First prize, £10, F. H. Everett, Bridgham, Thetford, Norfolk (Sir Robert); second, £5, J. Wheeler, Long Compton, Shipston-on-Stour (General). Reserve: F. H. Everett (The Duke).

Breeding sow.—First prize, £10, P. Eden (Great Western); second of £5, R. E. Duckering. Reserve and Highly Commended: E. Davis, Old Mill-street, Wolverhampton. Highly Commended: J. and F. Howard, Britannia Farm (Duchess); P. Eden (Gipsy). The class commended.

Pen of three breeding sow pigs of the same litter, above four and under eight months old.—First prize, £10, P. Eden; second of £5, R. E. Duckering. Reserve and Highly Commended: R. E. Duckering. Commended: J. and F. Howard.

SMALL WHITE BREED.

Boar, above twelve months old.—First prize, £10, P. Eden (Young Prince); second of £5, J. Sagar, Lister Hills, Bradford (Premier). Reserve and Highly Commended: R. E. Duckering. Highly Commended: T. Comber, Redcliffe, Newton-le-Willows, Lancashire (Precursor).

Boar, above six months and not exceeding twelve months old.—First prize, £10, M. Walker, Stockley Park (Little John); second of £5, J. E. Fox, Mansion House, Great Horton, Bradford (Master McGrath). Reserve and Highly Commended: R. E. Duckering.

Breeding sow.—First prize, £10, R. E. Duckering (Topsy); second of £5, C. Roberts, Wakefield (Annie). Reserve and Highly Commended: C. R. N. Beswick-Royds, Pyke House, Littleborough, Lancashire (Wharfedale Queen). The class commended.

Pen of three breeding sow pigs, of the same litter, above four and under eight months old.—First prize of £10, P. Eden; second of £5, R. E. Duckering. Reserve and Highly Commended: J. C. Andrew, Crewekerne, Somerset.

SMALL BLACK BREED.

Boar, above twelve months old.—First prize, £10, W. M. Ware, Newham House, Helston, Cornwall (Gem); second of £5, H. Crossley, Broomfield, Ilkalfax (Black Prince). Reserve and Highly Commended: H. Crossley. Commended: G. M. Sexton, Wharstead Hall, Ipswich (King of the Forest); and G. M. Sexton (Favonius).

Boar, above six months and not exceeding twelve months old.—First prize, £10, W. M. Ware, (Ebony); second of £5, G. M. Sexton (Bothwell). Reserve and Highly Commended: G. M. Sexton (Cremorne). The class commended.

Breeding sow.—First prize, £10, G. M. Sexton (Hannah); second of £5, W. Hope, Par-loes, Barking (Aunt Hannah). Reserve and Highly Commended: P. Eden (Sally). Highly Commended: G. Turner, jun., Alexton.

Pen of three breeding sow pigs, of the same litter, above four and under eight months old.—First prize, £10, G. M. Sexton (Semblance, Substance, Symmetry); second of £5, G. M. Sexton (Three Little Wonders). Reserve and Highly Commended: T. Comber.

BERKSHIRE BREED.

Boar, above twelve months old.—First prize, £10, The R. A. College, Cirencester (Sambo 2nd); second of £5, A. Stewart, Saint Bridge, Gloucester (King of the Valley). Reserve and Highly Commended: H. Hamfrey, Kingstone Farm, Strivenham (Maple Grove). Highly Commended: J. Gilbert, Half-Way Farm, Perry Bar, Birmingham (Duke of Berks).

Boar, above six months and not exceeding twelve months old.—First prize, £10, The R. A. College, Cirencester (Sambo 4th); second of £5, The R. A. College, Cirencester (J. 3). Reserve, The Marquis of Westminster, Moat House, Tarpoley.

Breeding sow.—First prize, £10, The R. A. College, Cirencester (Sister to Sally 5th); second of £5, Lord Clermont, Ravensdale Park, Newry, Ireland (Young Oloroon). Reserve and Highly Commended: The R. A. College, Cirencester (Sally 6th). Highly Commended: John Spencer, Villiers Hill, Kenilworth (Gipsy Queen 2nd, and Princess 7th);

and A. Stewart, Gloucester (Bobtail 3rd). The class commended.

Pen of three breeding sow pigs, of the same litter, above four and under eight months old.—First prize, £10, The Rev. H. G. Bailey, Swindon; second of £5, J. Gilbert, Half-Way Farm, Perry Bar, Birmingham. Reserve and Highly Commended: The R. A. College, Cirencester (A 2 Family). Highly Commended: H. Stanley, Upton, Shifnal. The class commended.

OTHER BREEDS.

(Not eligible to compete in any of the preceding classes.)

Boar.—First prize, £10, J. E. Fox (Young Prince of Aire-dale); second of £5, P. Eden (Jackey). Reserve: T. Bantock (Young Robin Hood).

Breeding sow.—First prize, £10, P. Eden (Busy Bee, white, middle); second of £5, W. Parker, Bradford (Lady Sarah, white). Reserve and Highly Commended: R. E. Duckering (white, middle). Commended: C. R. N. Beswick-Royds (Miss Lucy, white, middle); and C. Roberts, Wakefield (Duchess of Wakefield, white, middle).

Pen of three breeding sow pigs, of the same litter, above four and under eight months old.—First prize, £10, C. R. N. Beswick-Royds (Rose, Shamrock, and Thistle, white, middle); second of £5, T. Bantock (middle). Reserve and Highly Commended: M. Walker (Three Lilies, white, middle).

BUTTER.

JUDGES.—W. Clark, 118, Temple-street, Bristol.

J. Robinson, Townhall-buildings, Newcastle-on-Tyne.

J. Watson, Carr's-lane, Birmingham.

Six lbs., to be made up in lbs.—First prize, £6, Lord Chesham; second of £5, S. M. Burtam, The Downs, Much Wenlock; third of £4, J. Marson, Acton Mill, Stafford; fourth of £3, E. Sharratt, jun., Dark Lane Farm, Longdon, Rugeley; fifth of £2, W. P. Hammond, Pool Hall, Piton, Wolverhampton. Reserve and Highly Commended: T. W. Peake, Compton, Wolverhampton. Commended: T. Ashcroft, Wallford, Eccleshall; and H. Smith, Baxter's House, Eaton Constantine, Wellington.

CHEESE.

The Produce of 1871.

JUDGES.—W. Clark, 118, Temple-street, Bristol.

J. Robinson, Townhall-buildings, Newcastle-on-Tyne.

J. Watson, Carr's-lane, Birmingham.

Coloured, over 6 inches thick.—First prize, £15, W. Duddlestone, New Lodge, Lilleshall, Newport, Salop; second of £10, T. Simon, Tern Hill, Market Drayton; third of £5, M. Burns, Oolstone Hall, Atherton. Reserve and Highly Commended: J. Clay, Kinsail, Oswestry. Highly Commended: R. Arnold, Shackerstone, Atherton. Commended: G. Gibbons, Tutley Farm, Bath.

Coloured, under 6 inches thick.—First prize, £15, R. Arnold; second of £10, M. Burns; third of £5, W. Smith, Rangemore Farm, Burton-on-Trent. Reserve and Highly Commended: H. Wood, Pucknall Farm, Romsey. Commended: M. Walker, Onslow; W. Duddlestone; and J. Carrington, Croxden Abbey, Uttoxeter.

Uncoloured, over six inches thick.—First prize, £15, H. Wood; second of £10, G. W. Prescott, Mius-hull Vernon, Middlewich; third of £5, G. Gibbons. Reserve and Commended: G. W. Prescott.

Uncoloured, under six inches thick.—First prize, £15, J. Harris, Fletchamstead, Coventry; second of £10, W. Smith, Rangemore Farm, Burton-on-Trent; third of £5, J. Clubb, Tatenhill, Burton-on-Trent. Reserve and Highly Commended: H. Wood. Commended: M. Walker and W. Duddlestone.

WOOL.

JUDGE.—J. Gurney, Hounslow.

Six Shropshire fleeces.—First prize, £6, Lord Chesham; second of £5, C. R. Keeling; third of £4, S. Beach, The Hattons, Brewrod; fourth of £3, Sir J. N. L. Chetwode, Bart., Oakley, Market Drayton; fifth of £2, T. S. T. Carrington, Eaton, Doveridge, Derbyshire. Reserve: Sir J. N. L. Chetwode.

FARMS.

JUDGES.—G. Jackson, Tattenhall Hall, Chester.

W. Sunday, Radcliffe-on-Trent, Nottingham.

J. Wheatley, Neswick, Driffield.

ARABLE.

First prize, £100 (by the landowners in Staffordshire and Shropshire), G. T. Forester, High Ercall, Wellington, Salop; second of £50, T. Winterton, Alrewas Hays, Lichfield, Highly Commended, and a special prize of £25: W. Brewster, Balderton Hall, Middle, Wem, Salop; Mrs. E. Sankey, Bratton Farm, Wellington, Salop. Highly Commended: G. A. May, Elford Park, Tamworth; and C. R. Keeling, Yew Tree Farm, Penkridge. Commended: J. Glover, Bangley, Tamworth; and E. White, Knowle House, Lichfield.

DAIRY.

First prize, £100 (by the landowners in Staffordshire and Shropshire), J. Clay, Kinsale, Oswestry; second of £50, M. Walker, Stockley Park, Anslow, Burton-on-Trent.

DAIRYMAIDS.

To the maker of the Prize Butter and Cheese in each class, 1st, 2nd, and 3rd prizes, in five classes, viz., £3, £2, and £1 in each class.

INSPECTORS OF SHEARING.

W. B. Canning, Elston Hill, Devizes.
W. Jobson, Buteland, Hexham.
J. B. Workman, Ridon, near Pershore.

VETERINARY INSPECTORS.

Professor Simonds, London.
Professor Varnell, Yarnmouth.
Assistant-Inspector.—J. L. Hunt, Birmingham.

STEWARDS OF LIVE STOCK.

Mr. Jacob Wilson, Woodhorn Manor, Morpeth.
Sir Watkin W. Wynni, Bart., M.P., Wynnstay, Ruabon.
Mr. R. Milward, Thurgarton Priory, Southwell, Notts.
Assistant Steward (Horses).—Mr. R. Leeds, Wicken House, Brandon, Norfolk.
Director.—Mr. B. T. Brandreth Gibbs, Half-Moon-street, London.

THE IMPLEMENT SHOW.

THE OPENING DAY.

The showyard is conveniently situated as regards visitors, being in the immediate vicinity of the town, occupying about 80 of the 100 acres of which the racecourse is composed, and for which the Local Committee pay a rent of £1,100. It has been leveled and drained; but the latter not very effectually, judging by Saturday's experience, and after the present downfall of rain, it bids fair to be a complete swamp. There is upwards of two miles of inclosure, and about three miles of implement and other sheds. Looking at the difficulties of transit and the boggy nature of the ground near the entrances and other parts of the yard, it is almost to be regretted that the Society waived the formation of the branch line of railway to the ground by the Local Committee; for the number of horses required to bring implements was very large—five at a time being required for even comparatively light loads, and we noticed what was labelled as a "Government Steam Train"—"The Cheuab," one of Thomson's road steamers attached to the "New Favorite" railway carriage, to run between "Thelum and Rawul Prindie," wherever that may be, floundering in the mud for some time near the contractor's gate, and throwing out in distress coal and water to lighten the load. The yard was opened to the public at nine o'clock on Saturday, but very little interest appeared to be taken on that day by either visitors or exhibitors; the former (at least the paying public) might, we should think be reckoned up in a few score. As for the exhibitor's stands, the greater portion were covered up, either to keep out the wet or because they had not yet arranged their goods; hence our inspection was carried on under difficulties. As regards the number of stands the show may be considered on a par with the Oxford meeting, but leaving out of consideration the steam-worked machines, there would seem to be fewer novelties. Notwithstanding the efforts of the Society to keep the objects shown as much as possible within the legitimate bounds of agricultural requirements, the catalogue is still over-weighted with an enormous lot of objects quite out of the pale of an agricultural show. For instance, in the mere index to the articles, at the end of the catalogue, whilst 17 pages suffice to enumerate the purely agricultural implements; 22 pages are devoted to the titles of "miscellaneous articles," and 9 pages more to "unclassified" ones, including such objects as chess-tables, croquet-tents, seats, &c., tailor's-stoves, gas-retorters, grates and ranges, washing machines and mangles, fishing nets and stockings, hair-dressing chairs, needle-threading machines; 8 exhibitors of sewing machines, bottle-washing machines and bottle racks. Even the carriage sheds are getting out of proportion, for there are no less than 19 exhibitors of various kinds of fancy vehicles, besides the legitimate carts, waggons and drays, &c., shown by others. In

our preliminary survey of the implement-yard this week, we must necessarily restrict ourselves to the improvements which are entered as "new implements," for it would be impossible in one issue to do justice to the 312 stands of implements and machinery in motion, the most noteworthy of these however will be dealt with in our next. We now take the exhibitors in the order of their arrangement. Among the novelties shown by the Reading Iron Works are too new horizontal fixed engines of one-horse and two-horse power, with high speed governors complete. A. C. Bamlett, of Thirsk, shows some improvements in his self-raking and one-horse reapers. The former will make six sizes of sheaves. S. Corbett and Son, of Wellington, exhibit several improvements, especially in their disc root pulpers with reversible plates for stripping, and which may be easily replaced at a small cost. One of these will pulp a cart load of mangolds in seven minutes. A new pulverizing plough has coulters on the share, and these sift and break the soil, and may be applied to all single or pulverizing ploughs. This plough has been tried against the American mould-board plough, and pulverizes the land much better. They also show some new single and double ploughs, the latter with digging breasts and a combined subsoiler and plough. A new principle of water-heater, which they have attached to engines, seems to work well, by the application of the exhaust steam passing through $\frac{3}{4}$ -inch tubes. Woods, Cockledge, and Warner, show a novel thrashing apparatus, invented by the Rev. O. Reynolds, of Debach, and improved and manufactured by them. By a simple process of bundles of wire placed on a reel, and moved by a handle, straw is converted by two boys into mats of a convenient size at leisure times of the year, and these when tied into bundles, stacked, and protected, are ready for instant use on the first fresh-built stack. These wire-fastened mats will continue sound during exposure a couple of years, and can be used over and over again. When laid they are secured against wind by metal broaches or hatch-pegs, connected with thongs of twisted wire, forming a continuous binder round the stack. In this system the thatcher uses two short and light ladders for placing the thatch, one reaching to the cover of the stack, supporting a hoisting apparatus by which the assistant raises each mat with its accompanying hatch-peg to the workman on the stack, the other lying on the roof, and secured to it by several steel prongs; on this the thatcher works without stepping on the stack. The process is alleged to be much cheaper than the ordinary mode, and requires no water or skilled labour. Woods and Cockledge also show a new strong iron-frame double-action turnip cutter, which will slice for bullocks, or cut finger pieces for sheep, and a cheap one-horse gear for general purposes. The dome top is an improvement, as it is impossible for animals to get between the arms of the driving-wheel, and accidents are thus prevented. Coleman and Morton, of Chelmsford, limit their new exhibits to hop implements. These comprise two hop cultivators; and a syringing engine, which has carried off the £10 prize. This consists of a circular water-barrel in iron, mounted on high wheels, and fitted with a powerful pump, to which an air-vessel is attached. John Cooke, of Lincoln, entered seven ploughs as "new implements," two being double-furrow ploughs, two general-purpose ploughs (one for light, and one for heavy land), a match plough, a trench plough, and a light plough suited for the colonies. John Weighell, of Pickering, entered as a new implement Read's Swathe Delivery Reaper, fitted with self-acting revolving reel, by which it can be adjusted to unequal crops without stopping; and a double corn-grinding mill, with flour-dressing machine attached. Ashby, Jeffery, and Luke, of Stamford, showed a strong, compact, and well arranged 8-horse power traction engine, suited for agricultural work, and for working the Fiskin ploughing tackle; a five-foot finishing thrashing machine, and several high-wheel horse rakes, so arranged that the teeth drop in hollows and rise over hilly land; also several wrought iron frame chafcutters, suitable for either hand or horse power. Maude and Walker, of Shrewsbury, had some excellent cheap and substantial galvanised iron cattle cribs and water troughs. George Holdom, of Fenny Stratford, exhibited two new corn seed drills, in which the frame is made entirely of iron; by means of an eccentric and ratchets on the working axle, this drill is raised for turning, and is steered from behind by a long powerful lever, the handle being set at a given angle—hence it does with one man less. John Freer and Co., Lough-

borough, exhibited two new grain and seed dibbling machines, which are adapted to every variety of grain and seed. James Coultas, of Grantham, entered for trial a large and effective corn and seed drill, for steam power, with Fowler and Co.'s patent fore steerage, which received the prize in its class. Hancock and Co., of Birmingham, exhibited some useful and effective machines for washing and cleansing potatoes and roots for cattle and other purposes. James and Son, of Cheltenham, showed an improved chain pump; as two men can raise about 3,000 gallons of water per hour with it, it ought to prove a valuable article for liquid manure or slush. J., B. and J. Sainty, of Wisbeach, were too late with their new corn drill for trial, and a land roller; but the new iron hurdles they show appear to be strong, portable, and cheap. Southwell and Co., of Rugeley, show some improvements in their chaff-cutters for hand and power. Theirs is the only implement which cuts three lengths by changing the leverage without moving the lever. They have added a patent lever and clutch to the horse gear, to throw it in or out of gear. Hunt and Pickering, of Leicester, had a few novelties in improvements to their one-horse reaper, which cuts five feet clear, to their two-horse grass mower and combined reaping and mowing machine; they also showed a patent nut guard, useful and simple. R. Hornsby and Sons, of Grantham, did not enter any thing as new, but had as usual a fine collection of implements, to which we shall do justice hereafter. J. and F. Howard, of Bedford, went in largely for steam-cultivating apparatus, but, as will be seen already from our reports, encountered a series of most disheartening misadventures. Among their new implements was an improved steam drill, or heavy drag harrow, adapted either for steam or horse power, and a patent plough with a wheel behind, avoiding the use of the slide and its consequent friction; a digging plough fitted with a skeleton breast, which in turning the furrow breaks and pulverizes the soil at once; some potato-raising ploughs, adapted also for earthing up potatoes. Among other improved implements were several double ploughs for different lands, a three-furrow plough which can be worked by three horses on light land, a turnover plough fitted with hind-wheels to reduce the draught, a light turn-wrest plough for hill sides, several sets of international harrows, a self-acting horse rake, and two safety boilers. Richmond and Chandler, of Salford, show an improvement in their chaff-cutters, to cut two lengths. This is effected by one of the knives being adjusted to a loose plate, which may be attached or detached at pleasure, according to the cut required. In their litter-cutter, by the addition of change-wheels, the machine is capable of cutting three, four, or six-inch lengths. Alfred E. Peirce, of London, had among his large collection of useful articles several novelties. Of these may be enumerated some strong serviceable corn-bins; a connectable jointed tubular ladder, light, strong, and suitable for any purpose; and some strong serviceable wheel and water barrows. Picksley, Sims, and Co. (Limited), of Leigh, showed a collection of their standard mowers and reapers, in which several improvements have been made, an improved fore-carriage being attached to the pole, and the machine makes a wider cut. In their improved horse rake there is a new lock lever, so that the hay collected cannot be delivered till the lever is removed. In the root-pulpers great improvements have been made in larger hoppers and cutting bed: by the peculiar shape choking is impossible. The double and treble-action turnip-cutters are very ingenious machines, easily adapted for pulping. They perform the operation of pulping, slicing, &c., as well as separate machines. Benjamin Perowne, of Eakenham, showed an invention to be attached to turnip-cutters, to prevent the last piece of a root escaping uncut. Wm. Sawney, of Beverley, exhibited a new riddler for cleansing and sorting potatoes, calculated to be useful. Haughton and Thompson, of Carlisle, exhibited an improved broad-cast corn and seed-sowing machine, capable of sowing a very large area in a day, and which is made in various lengths; also a roller one-horse gear, designed for working light machinery. Walker and Son, of Bingham, entered some new 12-row corn drills for trial, and exhibited a new setting-board for drill coulters. Ransomes, Sims, and Head, of Ipswich, had a number of new and improved implements, especially a very light double-furrow plough, which ploughs from 7 to 10 inches wide. It is thrown out of gear simply by turning it over to a slide on its side: is cheap and well

adapted to light farming. Their double turn-wrest plough can be applied to the same purpose. There are a couple of wheels in the middle, on which it turns round on the headland. It leaves no water-furrows, and is very handy to turn. Robert Boby, of Bury St. Edmund's, has an improved self-acting corn screen, requiring no manual labour; the cleaning collars are set in motion by an overshot or break wheel, which is worked by the weight of grain falling from the hoppers. John Warner and Son, of London, entered a garden engine, with improved apparatus for washing hop plants; their other novelties comprised a pillar engine for deep wells, some useful light and force pumps, Brooke's cheap fire-engine, with which two men can throw 30 gallons per minute to a height of 70 feet; a portable and effective farmers' fire-engine, for general purposes; and a force pump with hose and jet for cleansing out mud from the boilers of portable and traction engine. Robert Willacy, of Preston, showed his cattle feeder as exhibited at Oxford with improvements, and a foddering truck, and chaff, or pulp distributor adapted to it. Priest, Woolnough, and Michell, of Kingston-on-Thames, entered a new combined drill (two in one), for drilling 12 feet wide by steam power, and which could be separated when required to drill headlands by horse power. Amies, Barford, and Co., of Peterborough, had a large number of improved implements, for some of which they carried off prizes; these comprised a set of steam cultivating machinery and cultivating windlasses, snatch blocks, drag harrows for steam power, fitted with a novel arrangement for steering and turning; combined cultivator and drill, for either steam or horse power; Campan's patent anchors for steam cultivation; and a two-horse traction engine by Tuxford and Sons, of Boston, and an improved rope-porter for steam cultivation. Thomas Perkins, of Hitchin, had some improved Pirie's, three-furrow ploughs. Walter A. Wood, of London, showed some improvements in his self-delivery clamping reaper, and in his manual delivery one and two-horse reapers; also in his Excelsior lawn mower, a light and compact implement, not liable to get out of order. Whittaker and Co., of Oldham, had a new machine for moulding cog-wheels. Millard's Trent Foundry, Rugeley, had a great variety of their new American revolving mould-board ploughs for trial, for one of which they carried off the silver medal, a hand or power thrashing machine, and some of Jackson's angular mills; a self-revolving American horse rake, and a revolving mould-board potash raiser. J. and T. Young, of Ayr, entered an improved mowing machine with apparatus to carry the weight of the pole on the horses' back, and a combined reaper and mower fitted with the same apparatus. Lewis Wright, of Alford, had a self-ridging potatoe drill for ridging, setting, manuring, and covering the same at one operation. Edward Heady and Sons, of Cambridge, exhibited some new descriptions of hydraulic apparatus for streets, roads, pasture lands, gardens, &c. S. and E. Ransom, of Loudon, had a new pulley block to lift half a ton, and a safety sack hoist. Cambridge and Parham, of Bristol, a notched-wheel roller and clod-crusher, for use with the steam cultivator. Charles Burrell, of Thetford, a traction-engine with two of Thompson's road steamers or locomotive engines. William Weeks and Son, of Maidstone, had a number of hop engines and apparatus, for which they carried off the leading prizes. Edward Hayes, of Stony Stratford, had a large number of steam cultivating machines and implements for trial, including windlasses, anchors, and rope porters. Thomas Corbett, of Shrewsbury, showed improvements in his single and double furrow ploughs, and an improved American draining machine, an improved cattle conveyance, a winnowing and corn dressing machine and an elevator and weighing machine to work with it. Corbett and Chipchase, of Shrewsbury, an improved champion double furrow plough, and a combined horse rake and clover drill. Burgess and Key, of London, their self-raker reaper with self-delivery in sheaves clear of the horses' track, extremely simple in its arrangements, and their improved two-horse mowing machine, with both their levers placed well in front within reach of the driver. Hydes and Wigfall, of Sheffield, a number of new improved entrance gates, sheep and cattle fencing, and other articles. W. S. Boulton and Co., of Norwich, new lawn mowers, awnings, and other objects. J. M. Bell and Co., of London, showed some new butter churns. Henry Beare, of Newton Abbott, a new manure distributor for sowing broadcast guano, and all kinds of artificial manure in small or large quantities.

Wm. Ball and Son, of Kettering, two improved double ploughs, and one combined with a subsoiler; and an improved break for waggon. Wm. Waide, of Leeds, showed a collection of new revolving band chains of different sizes. Barnard, Bishop, and Barnards, of Norwich, among a number of useful articles, had the following novelties: a spring water-barrow, some new pattern cattle or horse troughs and an iron fruit truck with two revolving pairs for pyramid trees, and length of portable railway. Corcoran, Witt, and Co., of London, a double-lift safety jack-hoist for raisings and lowering light loads by one man's power. Wm. Ashton, of Horncastle, entered a chisel-tooth harrow on wheels, to work either with horses or steam. The Ravens-thorpe Engineering Company, Mirfield, entered two sets of steam-ploughing tackle, one of Fiskin's cultivators, 4-furrow balance-ploughs, and an improved harrow and frame, also by Fiskin, for trial. Wm. Hudspeth, of Haltwistle, entered a sheep-dipping apparatus, which appeared to be cheap and useful and what is much wanted in the hill districts. He also showed patent sewage-distributing pipes and branches. H. and G. Kearsley, Ripon, exhibited an improved double-action hay machine, with a new motion for reversing the rakes; and a light grass-mower, well-adapted for hilly and uneven ground. John Fowler and Co., of Leeds, had numerous sets of steam-ploughing and cultivating machinery, to the value of some £15,000, entered for trial, beside seed and manure drills, subsoil, draining, trenching, and ditching ploughs; the advantages of which are exemplified in the numerous prizes gained by the firm. Ruston, Proctor, and Co., of Lincoln, showed one of Nairn's, of Leith, improved road steamers, manufactured by them. Tangye Brothers and Holman, of London, exhibited a new snatch block, a dynamic-pulley block, and a double-lift safety hoist. Head, Wrightson, and Co., of Stockton-on-Tees, had a variety of new pulley block, calculated to lift different weights, as well as simple hand hoists. Brown and May, of Devises, showed two of Norton and Hawkesley's new grinding and disintegrating mills. J. R. Mackenzie, of Birmingham, several new fire extinguishers for trial. The Dunston Engine Works, Gateshead, some improved arrangements in mills, for breaking road metal, and crushing and grinding bones. Robey and Co., of Lincoln, a six-furrow plough adapted to Thomson's patent road steamers for steam ploughing by traction. Tasker and Sons, of Andover, improved folding-balance elevator. Tuxford and Sons, of Boston, a ten-horse power traction-engine, and an improved cultivating windlass. J. Cowdy, of London, a number of their new and improved hydrostatic weighing-machines, which are small, cheap, and portable. Milburn and Co., of London, a combined portable engine and drying machine. Davey, Paxman, and Co., of Colchester, two new vertical engines and boilers. Aveling and Porter, of Rochester, a winding-engine for steam ploughing on the direct two-engine system, several new agricultural locomotives, and a trolley and waggon. So much space being taken up with an enumeration of the specialities as far as novelty is concerned, a notice of the general and better-known exhibits in the yard must stand over till next week. Out of 313 stands, only about 80 presented anything novel, although some improvements have been made by several other exhibitors in well-known implements.

Having drawn attention to the specialities enumerated as improvements by the several exhibitors, we now proceed to make a running commentary on the stands of the various manufacturers. Although the weather and the ground were most unfavourable on the first three days, by Wednesday the Committee had made arrangements to improve as much as possible the facilities of movement by rolling the ground, by long lines of planking, and loads of straw, tan, and other material, so that the visitors were able to reach the various exhibitors' stands without being bogged. Judging from the number of continental agents present, and the general interest taken in the various stands, exhibitors will, we should suppose, be well-satisfied with the result. A. Aldworth, of Abingdon, had several hand-power chaff cutters, fitted with roller bottom, the feed drawn by sacking. T. Alcock, of Ratcliffe-on-Trent, showed some strong and simple chaff cutters, cutting two lengths without change of wheels, and some horse rakes, with high wheels, calculated to rake 7½ feet. W. Alway and Son, of Pentonville, London, exhibited a number of tin barrel churns, of various sizes; a milk cooler, for milk before sending by rail, to cool 40 gallons in 20

minutes; various kinds of railway milk cans, pails, kettles, pans, and skimmers. Arnold and Sons, the well-known instrument makers, of Smithfield, had a very fine collection of veterinary requisites, forceps, probangs, trocars, enemas, and such like. Amies, Barford, and Co., of Peterborough, amongst numerous exhibits of this firm, were their well-known water-ballast road and field rollers, press-wheel rollers, and clod-crushers, corn-grinding mills, and steam-food preparing apparatus. The Atmospheric Churn Company, of New Bond-street, had on their stand a number of their American churns, which are made by Griffiths and Browett, other dairy utensils, refrigerators and freezing machines. Aveling and Porter, of Rochester, besides their twelve-horse power engine, and several agricultural locomotives, exhibited a fifteen-ton steam road roller, which rolls 6 feet in width, and a trolley and waggon, for agricultural purposes, to be drawn by a locomotive. John Baker, of Wisbeach, exhibited several of his well-known and appreciated winnowing and screening machines and combined machines; and a set of Scotch side-delivery fanners. George Ball, of North Kilworth, had on his stand several strong carts for general purposes, a four-horse waggon, two double furrow ploughs, some iron single ploughs, scarifiers, and harrows. W. Ball and Son, of Rothwell, also exhibited several of their well known prize waggons and carts, several ploughs, scarifiers and diagonal and chain harrows, and a ridging plough; potato raiser and horse hoe combined, which carried off the first prize in New Zealand. A. C. Bamlett, of Thirsk, prides himself on his mowers and reapers, the improvements in which were noticed in our last; the prize two-horse manual delivery is now made with a driver's seat. Barrows and Stewart, of Banbury, besides a set of Smith's steam-cultivating apparatus, consisting of a portable twelve-horse engine with four-wheeled windlass, ropes, &c., had a three and a seven-tine steam cultivator, with anchors, snatch blocks and rope porters; several steam thrashing engines and mills, and some iron cattle cribs for the straw and fold yard. D. Bate, of Wolverhampton, showed a portable circular grist mill, simple in construction, readily moved and fixed, and requiring little working power, also a malt and oat crusher. J. Beach and Co., of Dudley, prided themselves on the success of their farinaceous food, as exemplified in the fine specimens of cattle, horses, and pigs shown in the yard which had been fed on their mixtures. Bell and Co., of Oxford-street, London, had a good farm boiler, and several box churns and butter machines. E. H. Bentall, of Maldon, made a fine display of the machines which are his speciality; chaff-cutters, root-pulpers, turnip-cutters, oilcake breakers, corn and seed crushers; besides this, he had Kibbler's scarifiers and improved pulleys. The Beverley Iron and Waggon Company (Limited) exhibited a great variety of articles including clod-crushers and rollers, mowers and reapers, and numerous carts and railway trucks, liquid-manure distributors, cake breakers, root washers, and cart and other wheels. R. Boby, of Bury St. Edmund's, gave special attention to the corn screens and dressing machines, of which he is a large manufacturer, and also showed several serviceable hay-makers and horse rakes. W. S. Boulton and Co., of Norwich, although exhibiting several liquid-manure carts, were specially noticeable for lawn mowers, engines, garden rollers, chairs, &c., for gardens. Bradburn and Co., of Wolverhampton, exhibited samples of their artificial phosphates and superphosphates made at the Wednesfield Works. Brown and May, of Devises, had several of their serviceable portable engines on the ground, working grinding and disintegrating mills. Their 2½ horse power engine at £80 is within the reach of all who require a compact and serviceable little engine. Burgess and Key, of London, limited themselves to showing their mowers and reapers and combined machines, with a good and cheap lever press for hay, cotton, wool, and other articles which require compressing for baling. Burney and Co., of London, showed a number of their new tanks, cisterns, and troughs, and corn bins, for which the firm has so high a reputation. The Bristol Waggon Works Company (Limited) had a large and fine collection of waggons and carts of all descriptions, including Miller's spring waggon, a brewer's dray, a farm waggon suited for ordinary work, a harvest cart, and farm carts in great variety; a cattle float with low crank axle, boarded roof, portable shafts to use at either end, and so constructed that cattle may walk in at one end and out at the other, deserves special mention; some light spring pony carts, with patent axles,

scut boards, and portable hay ladders, seem exceedingly useful, being well made and finished, and ranging from £12 to £15. The firm also showed several American hay rakes, some five and six coulter corn drills, and some excellent cheap winnowing machines; Warren's street-sweeping machine, effecting a great saving in labour and expense, should commend itself to the notice of Boards of Health. Charles Burrell, of Thetford, has gone in for the manufacture of traction engines and road steamers, horizontal fixed engines and boilers, portable and fixed corn mills, and flour-dressing machinery, thrashing and other agricultural machinery. Cambridge and Parham, of Bristol, had an excellent display of rollers, chain and tine harrows, and a portable steam-engine, fitted with their patent water-heater, working a finishing thrashing-machine. Charles Clay, of Wakefield, showed several cultivators, grubbers, and broad shares, adapted for light or strong land, and a Norwegian harrow with three rows of spikes. Carson and Toone, of Warrminster, had on their stand a great variety of chaff-engines, turnip-cutters, horse-hoes, and prize cheese presses, and safety horse gear; an ingenious apparatus in their single and double automatic lamb creepers, the peculiarity of which consists in a free opening of the roller frames from the outside alone, so that the lambs after feeding can return to the fold with distended stomachs without injury. Clayton and Shuttleworth, of Lincoln, showed eight of their portable engines of different horse power, driving thrashing-machines and elevators. The extent to which steam-power has been applied to farming purposes, is shown by the statistics given of the trade done by this one firm, for they state that they have manufactured upwards of 10,700 steam engines and nearly 10,000 thrashing machines. One of the Oxford prize 10-horse single-cylinder self-combined engine with boiler was shown. Coleman and Morton, of Chelmsford, showed several varieties of their cultivators, which have carried off so many first prizes; steerage horse-hoes, rotary corn-screens, oilcake cutters, and water-carts. J. Cooch (The Executors of the late), Harlestone, exhibited several of their corn-dressing machines with improvements. T. Corbett, of Shrewsbury, exhibited several of his double-furrow Champion ploughs, Excelsior plough with skim-coulter, clod crushers and land rollers, turnip hoes, drills and harrows, winnowers, cake breakers, root pulpers, and grinding mills. Corbett and Chippelase, of Shrewsbury, many well-known implements made by various makers. Corbett and Sons, of Wellington, exhibited three steam engines of their own make, grinding mills, chaff cutters, pulpers, rolls and cultivators. Corcoran, Witt, and Co., of London, had an interesting display of mill stones and tools for millers, &c., silk flour-dressing machine, bands and brushes, screens, oil feeders, needle lubricators, and other useful articles. J. Cornes and Co., of Nantwich, limited their exhibits chiefly to chaff-cutters and cheese-making apparatus, with one of their horse rakes, cultivators, horse hoes and grubbers, and a simple powerful bone mill. Cottam and Co., of London, had a miscellaneous collection of stable fittings. J. Coultas, of Grautham, had on his stand specimens of his corn, small seed, and corn and manure drills, manure distributors, liquid manure drills, and horse hoes. His general purpose drill is efficient; and the character of the steam worked drill is shown by the award of £10 given by the judges. Crosskill and Sons, of Beverley, besides their well-known clodcrushers and field roller, had several of their strong and light carts, wheels, and axles, several portable farm railways and trucks, an archimedean root washer, some cast-iron pig troughs, and a bone mill. E. Davies, of Wolverhampton, made a fine display of galvanised iron tiles and roofing, fencing wire, stable buckets, wheelbarrows, troughs, and other articles. J. Davies, of Wednesbury, had four cheap horizontal and vertical steam engines. Day, Son, and Hewitt, of London (purveyors of chemical compounds by appointment to the Prince of Wales and Her Majesty), exhibited a variety of cattle medicine chests and farriery appliances. James Davey, of Eynsham, exhibited sets of cart harness and ploughing gears. Davey, Paxman, and Co., of Colchester, had four steam engines on the ground, driving steam corn dryers. C. Denning and Co., of Chard, exhibited three of their chain corn drills made by them, an apple mill, with corn crushing apparatus, and some sets of horse gear. The Driffield Company showed specimens of their pure linseed cake. J. Eastwood, of Blackburn, had a 4-horse engine and boiler, with hot-water heating apparatus, and a number of compound-action

churns of various sizes. J. Evans and Sons, of Wolverhampton, a varied collection of pumps. W. C. Eytou, of Warrington, two steam engines and boiler, with a very simple and efficacious automaton expansion valve and governor. John Fell and Co., of Wolverhampton, had a large display of force-pumps, pump frames, and other apparatus, made by them. George Fletcher, of Wolverhampton, a fine show of field and other iron gates, wire fencing, stable racks, cattle troughs, and sheep hurdles. W. Foster and Co., of Lincoln, had an 8-horse power portable steam-engine, with single cylinder driving a combined finishing thrashing machine. John Fowler and Co., of Leeds, had on the ground two double sets of 20 horse power steam ploughing and cultivating machinery. In one set the engines were double cylinder, in the other single. They had also two double sets of 12 horse power single cylinder engines, a 14 horse power double cylinder engine, a 12 horse power single cylinder winding engine, and an 8 horse power double drum set, all furnished with the necessary appliances for steam cultivation. They also had a number of ploughs, ranging from eight furrows to four, several turning cultivators having thirteen, nine, or less tines, besides trenching, draining, and subsoil ploughs, and coulters, seed and manure drill. The drill is combined with a light cultivator or heavy harrow in front of the seed coulters, and a light seed harrow following. They also exhibited two 12 horse and two 6 horse traction engines, with waggons to be attached, carrying respectively six to four tons. The speed is $1\frac{1}{4}$ to 3 miles per hour at 150 to 160 revolutions of the engine. R. Garrett and Sons, of Saxmudham, had several of their portable engines of 6 to 12-horse power and a light and handy agricultural locomotive. Their engines are all furnished with a registered feed-water heater. This consists of a suction pump and set of valves connected with a pipe leading to the tube whence the exhaust steam escapes. As the suction and valves are timed to act with the escape of the steam, the latter, instead of passing up the funnel, is drawn into a volume of the feed-water, and thereby condensed, this process of course causing a corresponding increase in the temperature of the feed-water. A number of their thrashing and corn-dressing machines with straw elevators were in motion, and they also exhibited many of their excellent drills, horse hoes, and ventilators. P. and H. P. Gibbons, of Wantage, had four of their portable steam engines driving as many thrashing and dressing machines. Joseph Gilbert, of Evesham, had one of Ruston and Proctor's 6-horse portable engines driving a combined thrashing machine, and also exhibited several drills and horse hoes. W. Gilbert, of Abingdon, had a large number of excellent corn and seed drills. W. Glover and Sons, of Warwick, besides a good waggon and prize cart, exhibited a four-row cup drill, a chaff machine, and a circular sheep crib. Gower and Son, of Market Drayton, had upwards of twenty varieties of their Suffolk corn and seed drills adapted for various work, also a two-furrow drill presser. F. and C. Hancock, of Dudley, exhibited several butter machines, and machines for washing potatoes. R. G. Handley, of Birmingham, millstones, implements, and apparatus for mills. G. H. Harris, of Birmingham, several chaff-cutters, grist and other mills, pulpers and slicers, and other articles of his manufacture. D. Hart and Co., of London, exhibited a large variety of well-made and beautifully-finished weighing machines, including an automatic self-registering one, rapid in its action. The following advantages are claimed for these machines: The goods on the platform are weighed by means of two sliding weights on the steelyard. When these weights are both at zero they simply balance the weight of the platform and other working parts of the machine. To ascertain the weight of goods, the large weight is moved along the steelyard until it almost balances the articles weighed. The small weight is then moved along, until a perfect balance is obtained, and the exact weight of the goods is then indicated by the position of the sliding weights on the standard. This obviates the trouble of calculating the weight of loose balances, and the liability of the latter to get mislaid and lost is, of course, not possible with these fixed weights. When the machine is out of use, wear and damage to the "centres" are entirely prevented by the "relieving" apparatus, which unhook the steelyard, entirely disconnecting it from the working parts of the machine, at the same time lowering the platform on to solid supports, and the levers to the bottom of the frame, leaving the steelyard in a level posi-

tion. When the machine is balanced a free and delicate oscillation of the steelyard is obtained, so that any obstruction in its action can be instantly detected. G. Hathaway of Chippenham, had a collection of prize barrel churns on strong stands, which revolve on anti-friction rollers and are provided with air valve and stopper. Houghton and Thompson of Carlisle exhibited several high wheeled horse hay rakes, light in draft and of great capacity, a land roller, and some reaping and other machines. Edward Hayes of Stoney Stratford exhibited two 12-horse portable engines, a set of steam cultivating machinery with the necessary appliances. One of the most important novelties was the self-acting windlass manufactured by this firm. The belt from the fly-wheel to the engine is made to run upon either one or two fast pulleys, or one intermediate loose pulley on the windlass, these being like the three pulleys on the driving shaft of a planting machine. The belt-slipper, which may be made to throw the belt upon either of the drawing pulleys, and thus to drive the plough through suitable gearing in either direction, is connected with two stout coiled springs pressing in opposite directions. When thrown so as to bring the belt upon either pulley, one of these springs is compressed. A light line or cord extends from headland to headland, and by this, whenever the ploughman wishes to stop, he can disengage a catch, whereby the belt-shifter is forced aside by whichever coiled spring is under compression, and thus throws the belt upon the loose pulley. A simple steam brake, to check the speed of the windlass, is also provided. By the apparatus for stopping the plough without shutting off steam from the engine, the ploughman has his tackle under complete control in foggy weather, or in case of inattention on the part of the engine-man. This windlass, with an ordinary 12-horse power portable engine was selected by the Society for drawing the ploughs, cultivators, steam rolls, harrows, &c., belonging to Messrs. Fowler, Howard, and other makers, for testing the draft of the implements. The working of the engine and windlass while drawing Fowler's and Howard's 7-tine cultivator was very satisfactory. John Hensman, of Amptill, showed a 13-row corn drill, and improved winnowing machine. Hepburn and Sons, of London, had a large collection of their well-known composite and other belts. Hill and Smith, of Brierley Hill, had a large stand devoted to miscellaneous articles, but which comprised also harrows, cultivators, horse hoes, rollers, and chaff cutters. R. Hornsby and Sons, of Grantham, made a noble display of the implements for which the firm has obtained celebrity, especially portable steam engines driving thrashing machines, mowers, reapers, drills, and ploughs: in their double furrow plough the antifrictional principle is most fully carried out, slides or blades and other rubbing surfaces being entirely dispensed with and wheels and rollers used instead; the central lifting apparatus admits of the plough being turned within its own length; the parallel straightening lever ensures the uniformity of the furrows: in their treble furrow plough, the beam being a single straight piece of wood, ensures great strength and rigidity: in the double furrow plough the adjustment is somewhat different, the skim coulter being adjusted by a screw. Holmes and Sons, of Norwich, had one of their eight-horse power engines, driving a thrashing machine with elevator, several seed and manure drills, horse-hoes, and harrows. J. and F. Howard, of Bedford, had a large and very fine collection of implements on their stand, including, besides the steam-cultivating machinery and novelties noticed in our last, hay-makers, reapers, ploughs, and harrows. To the haymakers and cultivators high wheels have been applied. Their steam drill, with twelve coulters, has sown as much as three acres in an hour, and this carried off a first prize. Their combined ridging and subsoil plough, worked by steam, was awarded a first prize; a strong subsoil tine breaks up the hard ground between each ridge. Their set of patent harrows, worked by steam, also carried off a first prize, and their set of steam-cultivating apparatus, worked by a ten-horse power engine, took the second prize. E. Humphries, of Pershore, exhibited a finishing thrashing machine, which gained the Warwickshire Society's prize in June, worked by one of Clayton and Shuttleworth's engines, some cider mills and presses, and other useful articles. Reuben Hunt, of Halstead, confined himself chiefly to horse-gear, corn and seed dressing machines, turnip cutters and pulpers, oilcake breakers, chaff cutters, and horse-rakes. Hunt and Pickering, of Leicester, made a fine display of ploughs, rollers, drills, reapers,

chaff-cutters, pulpers, cake-breakers, hoe-fork suitable for any hoe, mowers, reapers, and agricultural carts. Thomas Hunter, of Maybole, Ayr, exhibited a double and single furrow plough, and several sets of Dickson's double-drill turnip cleaners. A. Jack and Sons, of Maybole, Ayr, had two combined reaping and mowing machines, and one of Pirie's double and single furrow ploughs. James and Son, of Cheltenham, showed three corn crushers, and several liquid manure distributors, for which they have obtained high honours; street water-carts, and clod-crushers. The Johnston Harvesting Company, of America, represented by J. G. Rollins, London, exhibited their self-raking reapers and mowers. P. Johnston, of London, had on his stand a variety of butter churns, milk-pails and pans. H. and G. Kearsley, of Ripon, had a number of grass mowers, reapers, and horse-rakes. Kemp, Murray, and Nicholson confined their exhibits to reaping and mowing machines, land rollers, turnip-slicers, grubbers, and Pirie's double-furrow ploughs. B. Kitmer, of Louth, exhibited three dressing and blowing machines of his make. J. L. Larkworthy and Co., of Worcester, showed two Cambridge rolls, for use between the hop rows, several Excelsior iron ploughs and harrows, root pulpers, a cider mill, an improved leverage horse rake, and a few miscellaneous articles. J. Le Butt, of Bury St. Edmunds, had some hand seed drills, corn screens, and haymaking machines. Lewis and Co., of Shrewsbury, had a large collection of their star chaff cutters at different prices, turnip cutters and pulpers, cake breakers, ploughs, land rollers, and clod crushers, mowing and reaping machines, and cheese presses. T. Mackenzie and Sons, of Cork, made a good display of their mower and reaper knife-grinders and rest, and their turnip and mangold sowers. H. R. Marsden, of Leeds, exhibited some of his stone breakers in action. The great value and importance of these machines is now fully understood and appreciated. Marshall, Sons, and Co., of Gainsborough, had several of their portable and vertical engines at work, driving thrashing machines and Haye's straw elevator. W. Mattison, of Bedale, had on show two reaping machines. Maude and Walker, of Shrewsbury, exhibited some wrought-iron ploughs of their make, with improved lever neck, a ridging plough, land roll, and some galvanised iron cattle cribs. R. Maynard, of Cambridge, had one of Barrow and Stewart's eight-horse engines setting in motion a sifting and elevating chaff engine, and also an oilcake breaker. Mellard's Trent Foundry, besides the American mould-board plough and other improved implements noticed in our last, exhibited some plough sledges, ridging ploughs, cultivators, harrows, rollers, drills, chaff-cutters, pulpers, and cheese making utensils. F. P. Milford, of Exeter, had some good general purpose waggons and carts. T. Milford and Sons, of Cullompton, exhibited a similar class of article. F. Morton and Co., of Liverpool, had a very large display of their wire fencing, gates, iron sheds and buildings. G. W. Murray and Co., of Banff, exhibited their new series of double furrow ploughs, with recent improvements, including steering and general management, which appear to give the ploughman such control over the implement that he can manage it as easily as a single plough; also a capital double furrow plough, convertible into a super and subsoil plough. The alteration is made by the front plough body being removed and a subsoil tine inserted in its place, which latter can be set so as to stir up the bottom of the previously ploughed furrow from four to eight inches deep, thus breaking up the solid pan and allowing the water and roots to get down. The same firm showed a very good double drill plough for two horses, and a new turnip sower, suitable for sowing turnips or mangolds, with compact attachment for sowing artificial manures along with the seed. Murton and Turner, of East Harling, showed a corn dressing machine, a seed drill, a mangold and turnip drill, and a ten-lever horse hoe. Musgrave Brothers, of Belfast, had an excellent display of stable fittings. W. N. Nicholson, of Newark, had about 40 different implements, including steam engines, haymakers and horse-rakes, cake breakers, land rollers, corn dressing machines with elevators, chaff cutters, and root pulpers. Uriah Nicholls, of Manchester, exhibited a three-horse vertical steam engine, with multitubular boiler combined. The North Moor Foundry, Oldham, had a steam engine working a centrifugal pump, and also showed several turbine water-wheels and steam fans. James Odams of Bishop's Stortford showed a new patent

horse-stalk elevator for raising hay and corn quickly into a stack by horse power. Oldham and Booth, of Kingston-upon-Hull, had some bone mills worked by one of Roby and Co's. portable engines. E. Page and Co., of Bedford, made a creditable display with several of their double-furrow and general purpose ploughs, harrows and horse-hoes, horse-rakes, chaff-cutters, pulpers and brick and tile making machines. F. Parkes and Co., of Birmingham, exhibited a good collection of draining tools, forks, spades, &c. G. Parsons, of Martock, had a corn mill, spring-waggon, and sets of his patent wheels. J. C. Payne, of Manchester, silent fans and machine belting and drilling machines. Penney and Co., of Lincoln, screens and dressing machines, root washers and other miscellaneous articles. T. Perkins, of Hitchin, several double and treble furrow ploughs, drag harrows, whippetrees, and folding shafts. Perkins and Bellamy, of Ross, had some good water-carts, sheep-dipping apparatus, and iron sheep-troughs. Picksley, Sims, and Co., of Leigh, had a fine collection of their standard reapers and mowers, and combined reapers and mowers, chaff-cutters, corn-crushers, roller-mills, and turnip-cutters. The horse-rake is fitted with a new lock-lever, so that the hay collected cannot be delivered till the lever is moved. J. D. Pinfold, of Rugby, had a small 2½-horse engine, for driving their farmers' grist-mills. They also showed a flour-dressing machine, and some of their prize brick and tile-making machines. H. Pooley and Son, of Liverpool, had a large collection of their weighing-machines, and their automatic grain-scales, which weigh and register from 1 0lbs. to 1,000lbs. of grain per minute, without cessation or interruption so long as the weigher desires to continue the operation. The scales are made to discharge themselves into the sacks direct, or into a low room or hopper. C. Price and Co., of Wolverhampton, showed some serviceable corn-bins. Priest, Woolnough, and Michell confined their exhibits to drills and horse-hoes, of which they make a variety. W. Rainforth and Son, of Lincoln, also showed some improved corn screens and malt and bran screens, a cake breaker, and other machines. Ransomes, Sims, and Head, of Ipswich, had on their stand one of the finest and most varied collections of ploughs in the show yard, adapted for all descriptions of work, a couple of agricultural locomotive engines of eight-horse power on Thomson's principle, but improved by Mr. John Head, intended for ploughing on the roundabout system, also one of Thomson's trains for agricultural produce and passenger traffic, consisting of a patent self-moving steam engine, waggons, passenger carriage, and other appendages. On common roads it will travel ten miles an hour with passengers, and three miles with produce. The firm had also several expansion engines working thrashing machines and elevators, and grinding mills. To enumerate their other well-known machines and implements is needless. The Ravensthorpe Engineering Company, Mirfield, exhibited two complete sets of Fiskin's steam ploughing tackle and set of cultivating apparatus. The system of cultivation by the light rope double windlasses comprises economy, simplicity, portableness, and durability. The Manila rope is light and strong, and heavy snatch blocks and cumbersome rope porters are dispensed with. The Reading Iron Works Company, besides some of their well finished engines, had several thrashing machines, mowers and reapers, horse rakes, and horse gear. R. and J. Reeves and Son, of Westbury, exhibited several descriptions of their liquid manure and seed drills, some manure and water carts, and other implements. Riches and Watts, of Norwich, had two of their vertical engines working some American grist mills, and one of Child's aspirators for dressing grain. Richmond and Chandler, of Manchester, showed a large and choice variety of chaff cutting machines, as to the excellence of which it is only needful to state that since the year 1867 they have taken the four first prizes of the Royal Agricultural Society. Among the latest improvements embodied in these machines is a new form of mouth-piece, by the use of which choking or stoppage of the "feed" is rendered impossible. This mouth is faced with steel, to prevent wearing away, and a regular sample, free from long straws, is always cut. It also acts as an ordinary "steel" for keeping the knife sharp. A pair of knives cutting against these mouthpieces will wear double the time of those working on the ordinary plan. The rise and fall of the top roller is regulated by spiral springs, in place of the old form of weight and lever, and their pressure is accurately adjusted to the thickness of the hay or straw in

the mouth. Two lengths of cut, and an instantaneous "stop motion" are regulated by a haulde at the side of the machine. The "reverse motion" is simple and effective, its action not endangering the machine in the least, as almost all other "reverse motions" do, unless the greatest care is exercised. An endless feel-web or lattice revolving at the bottom of the wooden hopper greatly assists the operation of feeding, especially in the larger sizes, which are worked by steam or horse power. In such cases the work can be performed with one less attendant than would otherwise be needed. A new "litter cutter," for cutting up straw into lengths suitable for bedding purposes, is also shown. This machine cuts from 3 to 6 inches in length, an arrangement effected by intermittent spaces in the gearing of the pinion and wheel. Just as the knife enters the cut the plain surface of the driving pinion comes in contact with a plain surface on the wheel of the roller, consequently the latter ceases to move until the contact of the teeth ensues, by which time the knife has passed the mouthpiece. E. and H. Roberts, of Stony Stratford, had a variety of implements of their make, including field rollers, ploughs, harrows, grist mills, and bean and cake mills. A portable stand for holding mowing and reaping-machine knives while being sharpened appeared a useful article. Robey and Co., of Lincoln, besides their new 6-furrow plough adapted to Thomson's road steamer for ploughing by direct action, had three of their engines driving thrashing machines and straw elevators. Robinson and Richardson, of Kendal, exhibited a number of their revolving barrel churns of different sizes and prices. P. Rogers and Co., of Birmingham, had a selection of weighing machines, platform and portable. J. G. Rollins, of London, made a large and varied display of all those useful American tools and implements for which he is agent. C. Russell and Co., of London, exhibited two small cheap horizontal steam engines and a vertical multitubular boiler. Ruston, Proctor, and Co., of Lincoln, had on their own stand six of their steam engines, besides others lent to exhibitors. These engines were driving some of their combined thrashing and finishing dressing machines. They attach to all their engines Chapman's variable expansion eccentric for regulating the power, and a simple water heater. J., B., and J. Sainy, of Peterborough, showed some patent horse shoes, cattle tanks and cribs, and some good field-gates. W. Sawzey, of Beverley, had four winnowing and corn-dressing machines, and barrows, troughs, and sack elevators. Samuelson and Co., of Banbury, make a creditable display of reaping and mowing machines, root cutters and lawn mowers. In their patent balance draught combined machine some improvements have been made this season, one a means of slowing the machine when reaping. Between the sickle and the connecting rod is a hard-wood pin, preventing all "gulling" of the sickle eyes, and thereby lessening the danger of breaking the knife. New oiling arrangements for the crank pin and an easier lift to the counter bar are further improvements. Their self-raking reaper is now provided with shafts for one of the horses, and a seat for the driver is now provided. The lawn mowers they show have a patent edge-chipping apparatus attached to them, consisting of a revolving knife cutting vertically against a fixed blade. Wallis and Stevens, of Basingstoke, exhibit their slow-motion automatic folding elevators, which will work with the trough nearly upright, and consequently elevate to a much greater height than others. They take up a large quantity, do not choke, and the chains never stop. They can be worked by a light horse. Woods, Cocksedge, and Warner, of Stowmarket, exhibited a large collection of their Oxford Royal prize horse-gears, in every kind of form from donkey-power to 4-horse. In their vertical steam-engines and boilers, the working parts are entirely independent of the boilers, being fixed on a solid iron frame-work, which rests on the bed-plate. Their Suffolk carts, in all sizes, were shown, and a watering-cart with a crank axle which delivers the water low to the ground, thus preventing dust. A general assortment of crushing and grinding mills were shown at work, crushing linseed and oats, and grinding barley, maize, and beans; and many stock feeding implements. E. Sherwood, Catterick, had one of his horse reaping machines on the ground. Smith & Grace, Thrapston, exhibited a number of their prize grist mills, chaff-cutters, and a combined clod-crusher and roller. Wm. Smith, of Kettering, had five of his improved prize horse hoes, and grindstones. James Smyth and Sons, of Peasenhall, a number of their corn, seed,

and manure drills and distributors, a class of machinery to which they have given attention for seventy years, and made more than 11,000. Southwell and Co., of Rugeley, showed nearly 100 useful machines and articles, including chaff-cutters, pulpers and strippers, corn-crushers, grist mills, curd mills and cheese presses, clod-crushers, field rollers, ridging and other ploughs, horse hoes and cultivators. Spear and Jackson, of Sheffield, showed some beautiful draining tools, forks, spades, shovels, saws, shears, axes, and other steel articles, for which the firm have a high reputation. The St. Pancras Iron Works, of London, exhibited all those requisites of stable fittings to which the company gives special attention. J. Stones and Co., of Birmingham, worked three of their brick and tile pressing machines. Tangey Brothers and Holman, of London, had one of their best speed regulating governor steam engines, with vertical boilers, and several of their special steam pump cylinders, adapted for raising different quantities of water; they also showed some lifting jacks. W. Tasker and Sons, of Andover, worked a thrashing-machine and folding balance elevator with one of their 8-horse engines. J. Teawick, of Grantham, exhibited his improved permanent anchor with shaft for steam cultivation, his self-adjusting pulleys and wheels, his steel-jawed finger for preventing the knives of reaping and mowing machines being clogged, and his fountain lubricator for the same kind of machines. Thomas and Taylor, of Manchester, had a very large and fine collection of their hexagon eccentric churns; also much domestic machinery. Robert Tinkler, of Penrith, also exhibited churns of various sizes. J. Topham and Co., of High Wycombe, exhibited two multiple needle thatch-sewing machines, which can produce waterproof thatch $\frac{3}{4}$ to 2 inches in thickness, and the rows of stitching put in any position, by hand power at the rate of 1,000 feet per hour. E. R. and F. Turner, of Ipswich, had two of their portable engines, driving thrashing and grinding mills; they also exhibited many crushing mills, cake breakers, gear-work, and other articles. Their 4-horse power engine was fitted with their recently patented self-acting variable expansion gear and equilibrium slide-valve, for which they claim the advantage of great economy in fuel. The cylinder is steam-jacketed, and the steam passages are reduced to a minimum length, being no longer than the thickness of the metal of which the cylinder is composed. The cut-off is controlled by the governor, which by an ingenious contrivance alters the throw of the eccentric and consequently the travel of the slide-valve. More or less steam is thus brought to act on the piston as the load on the engine requires, and this is effected without any attention from the driver. The boiler of the engine is of the ordinary substantial build of the firm, and is provided with their newly-introduced ejector water-heater, which is also a valuable fuel economiser. A very neat set of thrashing machinery of 5-horse power presented several points of interest; portability combined with great strength was especially noticeable. The engine had ample boiler and cylinder capacity, and both engine and machine were mounted on substantial travelling wheels. The thrashing machine was provided with a patent rotary adjustable screw, and finished the corn for market. The vibrating riddle, &c., being suspended on spring hangers and well balanced, gave to the machine great steadiness when in work, and thus avoided those severe strains to the framing which so rapidly cause a machine to wear out. The novelty in this stand consisted of a coprolite crusher and grinding mill for same, which obtained the Society's prize last year at Oxford. The firm has devoted much attention to this and other machinery for the preparation of artificial manures. The crushing mill for breaking down the raw material consists of a pair of chilled rollers mounted on substantial framework, and provided with pressure levers, &c., and by which the coprolites are reduced to the size of small beans ready for feeding the stones. The latter are of best French burr specially chosen for the purpose, and provided with driving gear and framework of ample strength and solidity for the severe work to which they are necessarily subjected. A small machine for shelling maize by hand power, suitable for the export market, we examined with much interest. Tuxford and Sons, of Boston, had eight of their engines of different power at work with thrashing machines and some of Appold's centrifugal pumps. Their cultivating windlass is worthy of special note. This consists of two drums placed on each side of a wheel which is driven in the ordinary way by

an engine. But its speciality consists in breaks being fixed on the inside of the driving wheel; these are brought to bear by means of a small screw under the command of the attendant, and by bringing one of them down to the inside of the drum to be set in motion, it is at once started, and when the windlass or rope requires to be reversed the other drum is set in motion in the same way. This is not only the least expensive form of windlass but it is the safest and most effective, for the attendant can either stop the implement or reverse the draught of the rope in an instant; while, by setting the break to the exact horse-power required to draw the implement, any danger from stones or other obstructions is avoided, for on coming in contact with any unexpected impediment the break slips on the drum and no mischief occurs. W. S. Underhill, of Newport, had three of his portable engines working thrashing machines and blast elevators; a number of drills, grubbers, horse-hoes, ploughs, cultivators, harrows, and horse-rakes.

Our list of the awards to implements last week was complete and correct with the exception of a commendation to C. Burrell, of Thetford, for his eight-horse traction engine, and a high commendation to Aveling and Porter, of Rochester, for their six-horse power agricultural locomotive for general purposes. We also omitted to mention that no award was made for hop-cultivating machinery to suspend manual labour.

Passing now from the implements to the seed and manure exhibitors—

Sutton and Co., of Reading, as usual, placed themselves well before the farming public, by a fine display of those numerous seeds, roots, &c., in which they do so large a trade. Some fifty varieties of peas, an imperial cabbage weighing 15lbs., fine collections of roots, potatoes, turnips, kohlrabi of this year's growth, red globe mangolds, long yellow, and Italian ryegrass sown April 25, and yet five feet high, and producing ten tons to the acre, testified to their zeal in the cause of agricultural improvement. T. Gibbs and Co., seedsmen to the Royal Agricultural Society, did themselves justice in the fine collection of agricultural roots, grass and other seeds, and of cereals in the ear, British and foreign dried and growing specimens of grasses, &c. James Carter and Co., of London, also made a noble display of farm, grass, and other seeds of a similar character to those shown by the firms just mentioned. Two or three local firms had stands of seeds and roots.

The manure exhibitors were numerous, comprising Webb and Co., of Worcester; Goulding, of Dublin; Gibbons, Griffin, and J. Bradburn and Co., of Wolverhampton; Packard and Co., of Ipswich; Proctor and Ryland, of Birmingham.

THE GENERAL MEETING

took place in the show-ground on the Tuesday, Lord Vernon in the chair.

The Secretary read over the list of farm prizes as given in the Prize List.

EARL POWIS moved a vote of thanks to the Mayor, Corporation, and inhabitants of Wolverhampton for the reception which they had accorded to the Society.

SIR WATKIN W. WYNN seconded the motion, as he thought everyone would allow that the inhabitants of the town had afforded every facility for holding the show.

The motion was adopted, and acknowledged by Sir John Morris.

MR. TORR proposed a vote of thanks to the railway companies for their arrangements for the meeting.

MR. SHUTTLEWORTH seconded, and it was carried.

MR. RANDELL moved a vote of thanks to the local committee at Wolverhampton for their endeavours to promote the success of the meeting.

LORD CHESHAM seconded the motion, which was carried, and acknowledged by Mr. Bantock.

MR. JOHN LOWE (Birmingham) said that although it might be useful to thank the railway companies for conveying stock and implements to the place of exhibition at moderate rates, yet the two companies—the London and North Western and the Great Western—had not met the public requirements by allowing people to visit Wolverhampton at a reduction of fare. He spoke on behalf of Birmingham, an important town in the immediate district, the inhabitants of which place had no opportunity of visiting the show except by payment of

ordinary fares. On previous occasions, and especially at Leeds, the Midland and other companies made concessions in the price of tickets, and the result was that on the first shilling day 70,000 persons passed the turnstiles. Up to that moment, however, neither of the companies he had referred to had given any intimation of a reduction of fare from Birmingham. He thought Birmingham ought not to have been left in the cold in that way, and that the artisans of that town would feel that they had been shabbily treated by the companies. Upon the occasion of races, which were less improving to the population, a reduction of fares was made, and he therefore contended that the London and North Western and the Great Western Companies were not entitled to the thanks of the Society. To aggravate the matter, excursion trains at low fares were run from the small towns and villages beyond Birmingham, but they passed through that town without picking up the traffic, which, he said, was an insult to the inhabitants.

A Member suggested that the vote of thanks to the railway companies should be omitted at future meetings; otherwise a hostile amendment might be proposed. He could understand the local committee being thanked; but he did not see why they should thank the railway companies, who were always well paid for what they did.

Another Member complained that proper accommodation was not found for passengers who paid the full fare.

Sir WATKIN WYNN explained that the reason why Birmingham had not the same advantage as other places with regard to reduced fares was, that an agreement had been come to between the two companies that neither should under-sell the other. This rule had been adopted all over the system, in order to prevent that quarrel which existed some years ago, and which proved so disastrous to everybody. He was not going to defend the railway authorities entirely in not having made arrangements for cheap fares; but the excursions were run from places beyond Birmingham, which were not competing points, and therefore the companies could charge whatever they liked. Birmingham being a competing point, it was not in the power of the Great Western to charge reduced fares without the two companies meeting together and coming to an arrangement. He believed it was to the interest of the railways to give every facility to the Birmingham people, and at the same time, to do all they could to keep their clients at other times in the best possible humour.

Mr. THURSTON suggested that in future the Council should ascertain what arrangements the railway companies would make, before a locality was selected for holding the show. That was a most important question to be taken into consideration before visiting a particular town. He hoped that in future railway companies would carry passengers at such fares as would recoup the Society for any loss that it might sustain.

Sir WATKIN WYNN said the Great Western lost considerably by the Oxford Show.

Mr. BANTOCK asked if certain privileges were not granted to the exhibitors at the show?

Mr. JENKINS, the Secretary, replied, that as a broad principle there was a reduction of one-half of the return fare.

Mr. BANTOCK defended the railway companies from the complaints which had been made, and observed that if representations were made to the companies it would be to their interest to make such concessions on behalf of Birmingham as would be beneficial to all parties. He explained that when the application for a siding into the show-yard was abandoned, the railway companies pledged themselves to make certain charges; but that arrangement had not been adhered to, and the matter was now being investigated.

Lord CHEESHAM said the stock was carried by the companies at their own convenience, and the consequence was that the animals were knocked about so disgracefully that they were not fit to be shown anywhere else. He always sent his stock by passenger train, for which he paid; there were, therefore, no thanks due to the railways.

In reply to Lord Bridport, the Secretary said the arrangement submitted to the Council by the two railway companies was that of a system of combination tickets, which would carry the holders on the railway and admit them to the show-yard, the basis of the arrangement being that each party to the bargain should make a concession. The railway companies were prepared to issue return tickets at a single fare, plus 10 per cent., on condition that the Society made a reduction equal

to 40 per cent. on the prices of admission. On the shilling days the arrangement was to be the same, but the railway companies felt that the traffic would be so large on those days that they did not stipulate for a reduction of more than 20 per cent. by the Society. The Council was of opinion that they would not be justified in making a reduction of 40 per cent. to the inhabitants of Birmingham and other places, and at the same time charge the full price to the inhabitants of Wolverhampton.

Sir John Morris moved, and Mr. Aveling seconded, a vote of thanks to the President, for whom three cheers were given.

LORD VERNON said the Royal Agricultural Society was the greatest educational engine in the country. One of its principal advantages was its exclusion, as much as possible, of everything sensational, and its devotion to practical business. The greatest proof of this was the absence of the jumping of horses at the show, and those attractions which were certainly much more sensational than useful. This year, too, those articles which were not really useful to agriculture had been put at a comparative disadvantage in their exhibition. The great advantage of the Society visiting a town like Wolverhampton was the bringing of the enlightened workman into contact with those who produced his food, while the latter, on the other hand, had the benefit of seeing the centres of industry, where the forces of nature were employed in making the machinery for the cultivation of the soil. The two greatest features of the show were the exhibition of steam cultivators and traction engines. It would be impossible for any local Society to undertake the exhibition and trial of those particular implements, which required not only a vast area of ground, but the highest possible engineering skill in testing. If the presentation of a cup, which he had been allowed to offer during his presidency, produced what so many members of the Council were desirous of seeing, viz., the bringing of the means of cultivating by steam within the reach of the smallest farmer, he was sure that they would consider that they had performed one of the greatest works they could. He congratulated Mr. Fowler on winning the cup. He was the most formidable competitor for anyone to compete against. To the skill and organisation which he exhibited on the field, as well as to the discipline of his men, much of his success was due. Speaking of the trial of traction engines an important feature in the Society's operations, there was now a Bill before Parliament for the regulation of traction traffic, and he was satisfied that the trials, which were conducted as they always should be, by the judges and engineers with a patience beyond all praise, would be considered most valuable by the outside world. He expressed his high sense of the assistance given to the Society by the Local Committee, who had had unusual difficulties to contend with. He believed the trials had been conducted by the engineers in a way which would satisfy every exhibitor.

On the motion of Viscount BRIDPORT, seconded by Mr. Turner, a motion was passed requesting Sir Watkin W. Wynn to undertake the presidency of the Society at the close of the present meeting.

Sir WATKIN WYNN, in response, said he would ascertain what facilities could in future be offered to visitors to the show by the Great Western Railway Company. However, he made no promises, and expressed his satisfaction at the holding of the show next year at Carlisle.

THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.—The following list gives the attendances day by day.

Monday, at Five Shillings...	...	...	2,654
Tuesday, at Two and Sixpence ...	...	...	7,964
Wednesday, at Two and Sixpence ...	...	...	11,514
Thursday, at One Shilling ...	...	...	52,466
Friday, at One Shilling ...	...	...	33,624

107,322

The total shows a gain in the receipts of, it is said, about £1,500 over Oxford, where, however, the attendance, especially on "the popular days," was much smaller than had been expected; and the Society loses money by the Wolverhampton Meeting.

THE BREEDING OF PRIZE SHORTHORNS.

Ex fumo dare lucem.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Now that the decisions of the Royal judges have relieved us once more from the heavy clouds laden with Bates' incense which have so long oppressed us, and the Shorthorn world opens its eyes to see things as they really are, allow me to assist in the diffusion of light by sending you the following brief analysis of the blood of the several prize-taking Shorthorns. It has been a work of labour, and in calculations so complicated there may possibly be some mistakes; but nothing has been extenuated or set down in malice. Allow me, further, to suggest that it would be highly advantageous if the Royal Society enforced their own rule, and disqualified those cattle whose descent for four generations, *verified by the Herd Book*, was not forthcoming.

It appears from this analysis that thirty-three prizes (reserve numbers inclusive) were awarded in the Shorthorn classes at the Royal show this week. Of these eighteen were taken by Shorthorns in whom the *Booth blood* preponderated to the extent of one-half or more. Five prizes were taken by Shorthorns who were half or more *Bates*. Several of the prize-takers were of *Booth* families, not one of *Bates*. Considering the number of *new* families with which Kirklevington has inundated the country, and the noise that has been made about them, the result of this crucial test is at least extraordinary.

I am, sir, yours obediently,

Heldidon, July 13th, 1871. JOHN STORER.

BRIEF ANALYSIS OF THE BLOOD AND BREEDING OF THE SHORTHORN CATTLE WHICH OBTAINED THE PRIZES (RESERVE NUMBERS INCLUSIVE) AT THE ANNUAL SHOW OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND, HELD AT WOLVERHAMPTON, JULY, 1871.

CLASS XXXVI.—BULL above three years old.

1st, 248.—Mr. Thompson's Edgar (19680) is of very old and very mixed blood. Rather more than two-eighths of his blood is *Bates*, exactly one-and-a-half-eighths *Booth*, and one-eighth *Knightley*; the remainder, being nearly one-half, is derived from other sources.

2nd, 254.—Marquis of Exeter's Telemachus (27603) is of one of Mr. Charge's fine old families, crossed with the Mason, Fawkes, *Booth*, and *Bates* bulls; rather more than two-eighths of his blood is derived from *Bates* sources, and inconsiderable part from *Booth* ones.

3rd, 262.—The Rev. W. Sneyd's Ironmaster is of mixed blood. Through his sire he has two-and-a-half-eighths of his blood derived from *Bates* sources, and has remotely several descents from the *Booth* blood. He is a grandson of 7th Duke of York (17754).

4th, 251.—Mr. Wright's Man's Estate (26806) has a short pedigree, in which are some well bred bulls. He appears to have little or no *Booth* or *Bates* blood, except what he derives, diminished by one-half, from his sire Edgar, first prize bull.

Reserve number, 252.—Mr. Sofie's Lord Morpeth is through his sire two-eighths *Bates*, two-eighths *Charmers-Knightley*. No further pedigree is given either in the catalogue or the *Herd Book*.

CLASS XXXVII.—BULL above two and not exceeding three years old.

1st, 282.—Mr. Linton's Lord Irwin is of a comparatively recent family. Nearly five-eighths, or considerably more than

half his blood is *Booth*, an inconsiderable portion is *Bates*, and about as much is derived from the *Sylph* family, the remainder from various mixed sources.

2nd, 270.—Mr. Outhwaite's Royal Windsor, bred by Mr. Willis, and from one of his families, is six-eighths (or three-quarters) *Booth* blood; he has no *Bates* blood.

3rd, 286.—Sir D. Baird's Baron Lawrie 3rd, bred by Mr. Barelay, is by his celebrated prize bull Heir of Englishman (a son of Mr. Jonas Webb's Englishman and a *Seraphina* cow), the dam being of a good family of Mr. Dudding's. The blood of this pedigree is very good and very mixed; there is a certain quantity of *Bates* blood, but the most marked is the *Knightley*, of which there is more than two-eighths.

4th, 269.—Lady Pigot's Bythis (25790) is a pure *Booth* bull of Mr. Booth's celebrated Bliss family, crossed with a bull of the Mantalini tribe.

Reserve number, 273.—Messrs. Dudding's Standard Bearer is five-and-a-half-eighths, or nearly three-quarters, *Booth*. He also contains some of Lord Spencer's, the Gwynne, and Mr. Wilkinson's blood; there is no *Bates*.

CLASS XXXVIII.—YEARLING BULL above one and not exceeding two years old.

1st, 304.—Colonel Towneley's Baron Hubback 2nd is of an old and well-known family, so repeatedly crossed with the *Bates* blood that he is practically a *Bates* bull; he inherits, however, some *Spencer* blood from Grand Duke of Lancaster (19583), a little *Booth* from Royal Duke (16865), some Lord Carlisle, Barmpton Rose, and other blood from Brennus (8902), and is descended from other strains further back.

2nd, 294.—Lord Sudeley's Cherub is of the *Seraphina* family, his dam being Mr. Barelay's noted cow *Seraphina* 13th, the dam also of Heir of Englishman (24122). Through the *Seraphinas* (a mixed family of no great antiquity) a little more than two-eighths, or one-fourth, of this bull's blood is derived from the *Bateses*; four-eighths, or one-half, of his blood comes from his pure *Booth* sire.

3rd, 298.—Mr. Lamb's Ignoramus has his pedigree so boldly given in the catalogue as to lead one to suppose either that the family is not in the *Herd Book*, or, if it is, that the pedigree was drawn up by some one who, in Shorthorn matters at least, may claim the bull's name. He appears to be descended from the bulls of Mr. Sanders, of Nunwick, and, like his grandsire Edgar's (19680), his blood seems to consist of *Bates*, *Booth*, *Knightley*, and more mixed blood, the first being in rather the larger quantity.

4th, 303.—Mr. Meadows' Prince Charlie is of a short and recent family, to which *Booth*, or partly *Booth*, bulls have been lately used. The amount of *Booth* blood is about six-eighths, or three-fourths; the remainder is derived from various sources.

Reserve number, 296.—Mr. G. Garne's Earl of Warwickshire 3rd is of Sir C. *Knightley*'s Walnut family, the *Fawsley* element being, however, nearly destroyed by repeated *Bates* crosses; one-eighth of *Knightley* blood remains, the remaining seven-eighths is *Bates*, with a very slight admixture of *Booth*.

CLASS XXXIX.—BULL CALF above six and not exceeding twelve months old.

1st, 312.—Messrs. Dudding's British Flag is of a family which came originally from Mr. Hutton, of Gate Burton, and has since been crossed with bulls partially or wholly *Booth*. His blood is nearly five-eighths, or considerably more than one-half *Booth*; he has also a good deal of the *Mason* and

Spencer best blood. Very remotely there is an inappreciable small quantity of Bates blood through Cleveland Lad 2nd.

2nd, 316.—Mr. Linton's Leeman is of a well bred family, with a Booth substratum, on which the Booth blood has been regrafted; he is about six-eighths (three-quarters) Booth, with remotely a little Bates blood.

3rd, 310.—Messrs. T. Garne's and Son's Red Prince is of one of Mason's best families, continuously crossed with the best bulls. The sire is one of Mr. Booth's bulls, and a bull of Booth extraction largely crossed with Bates is the grand-sire; there is other Booth blood more remotely. As nearly as can be calculated the amount of Booth blood approximates to six-eighths, or three-quarters, while the amount of Bates is a little more than one-eighth; the remainder is principally Mason.

Reserve number.—In the Award of Prizes given to me in the show-yard, and marked "incomplete," there is no reserve number in this class.

CLASS XL.—COW above three years old.

1st, 328.—Mr. Beattie's Warrior's Plume, bred by Mr. Torr, descends from the Bates Waterloo family; she has, however, had since four crosses of pure Booth bulls, so that she is practically a Booth animal, fifteen parts of her blood out of sixteen being of that strain; it should also be borne in mind that the family from which she descends left the hands of Mr. Bates before he began the process of adulteration by infusing into his herd (as his successors have also done on a much more extended scale than he did) the *modern alloy* which he derived from the Matchem cow by Matchem.

2nd, 327.—Mr. Dugdale's Kent Cherry 2nd is of a famous old family, going back like so many other good things to Mr. Charge's herd. A little more than four-eighths, or one-half, her blood is derived from Kirklevington; there is also some Booth, Barmpton Rose, Old Cherry, and other good blood.

3rd, 321.—Mr. How's Windsor Butterfly is of ancient Booth family, and by a Booth bull. Two crosses, one pure Bates, the other the cross of Master Butterfly (who was two-eighths Booth) intervene. This cow has five-and-a-half-eighths Booth, one-and-a-half-eighths of Master Butterfly's blood other than Booth, and one-eighth Bates.

Reserve number, 331.—Mr. Linton's Carnation is the dam of his second prize bull-calf Leeman, in Class 39; she is about four-eighths, or one-half, Booth.

CLASS XLI.—HEIFER IN-MILK OR IN-CALF not exceeding three years old.

1st, 339.—Lady Pigot's Dame Swift is a pure Booth heifer of the Farewell family; for a half-cross five generations back, which introduces into her veins the splendid Mason blood of Cassandra, by Matchem (2251), can scarcely be said to impair her claims.

2nd, 340.—Mr. How's Vesper Queen is nearly pure Booth also. Descended from the herd of Mr. Jolly, of Warlaby, she has six crosses (and partially a seventh) of Booth bulls. The non-Booth portion of her blood is fractional.

3rd, 335.—Mr. Foljambe's Concert is of one of the most ancient Mason families latterly crossed with bulls containing Booth and Bates blood combined; five-eighths of her blood has its origin in these two sources, the Booth element somewhat prevailing.

Reserve number, 348.—Mr. Hewitt's Nelly is entirely of Mr. Stratton's blood, which contains some Bates, but much more Booth.

CLASS XLII.—YEARLING HEIFER above one and not exceeding two years old.

1st, 365.—Mr. Outhwaite's Lady Brough has the pedigree so curtly given that it cannot be identified with that of any family in the *Herd Book*. Her sire (Baron Killerby) has no number attached to him in the catalogue, so that it is impossible to know how he was bred. The next two bulls were both bred by Sir W. Lawson, are of very good, but very mixed blood, and both go back to Mr. Outhwaite's old sort. The fourth, and last, has a very short pedigree indeed, which is principally Booth. If it is permitted to guess, the probability is that the Booth blood preponderates in this heifer; there is a little Bates.

2nd, 358.—Mr. Foljambe's Fleur-de-Lis is of the same old Mason family as his third prize heifer, Concert, in the pre-

ceding class; and they are not only by the same sire, but their grandams were own sisters; the dam of this one, however, is by a very celebrated Booth bull. This heifer is four-and-a-half-eighths (or more than one-half) Booth; the proportion of Bates in her blood is one-and-a-half-eighths.

3rd, 377.—Colonel Towneley's Baron Oxford's Duchess is of the Barmpton Rose family, very largely crossed with other blood, and is by the same sire as his first prize bull in Class 38. She is four-and-a-half-eighths, or more than one-half, Bates, and one-eighth of her blood is Booth.

Reserve number, 378.—Colonel Towneley's Butterfly's Memento, by the same sire as the above, is of the same family, and a granddaughter of the dam of the preceding one; the proportion of blood is much the same, but in this heifer there is (through her grandsire) rather more Booth, and the quantity of Bates blood is (but fractionally only) smaller. This pedigree is given in the catalogue imperfectly.

CLASS XLIII.—HEIFER-CALF above six and under twelve months old.

1st, 394.—Mr. Garfit's Brilliant Rose 2nd is of one of the most ancient and best known families, the Blanche or Sockburn tribe, which goes back to a period antecedent to the times of the Collings. In the last four crosses in her pedigree Bates, Booth, Princess, and other blood has been combined in the most wonderful manner. This heifer's blood is more than three-eighths (not so much as three-and-a-half-eighths) Bates, and nearly (not quite) two-eighths Booth; though her sire is of the Princess family, that blood has been so strongly crossed out that (not taking into consideration his remote descent from the Princesses through the Gwynnes, or hers through the double descent from Belvedere, both which tell fractionally) she has only one-eighth of Princess blood.

2nd, 392.—Lady Pigot's Victoria Victrix is on all sides pure Booth, of the Mantalini family, crossed with the Bliss.

Reserve number, 398.—Messrs. Dudding's Lady Grace descends from a very old Shorthorn family, for forty years in the possession of the Dudding's. She is from the same dam as Countess of Yarborough, second as a yearling at Oxford last year, and first as a calf at the Yorkshire year preceding. This heifer is by a sire of the same family, and nearly similarly descended, as Mr. Foljambe's second prize heifer in Class 42, and third prize heifer in Class 41. She is considerably more than half of the Booth blood, and has remotely on both sides a dash of Bates.

DR. VOELCKER'S ANALYSES.

Messrs. Keighley Maxsted and Co., of Hull, have forwarded another analysis of the kaint, stating that this was sent by them from Tyne docks out of a cargo of genuine Leopoldshall kaint, per Glenogwen, shipped by Mr. Otto Radde, of Hamburg, and invoiced to Mr. Shatru as usual. The cargo was analysed at the time of shipment by Dr. Ulex of Hamburg, and found to contain 24.06 per cent. sulphate of potash as per his certificate of analysis No. 14,092, and subsequently instructions were given to the railway company at Tyne docks, in whose warehouses the kaint is stored, to take an average sample of the bulk as it now lies in store, and to send it direct to Messrs. Teschemacher and Smith, whose certificate is as under:

We hereby certify that we have examined the sample of kaint, and the following is the result, viz., sample marked ex Glenogwen contains—

Sulphate of potash	...	...	...	22.80
Sulphate of lime	...	...	...	1.30
Sulphate of magnesia	...	...	...	9.90
Muriate of magnesia	...	...	...	12.20
Muriate of soda	...	...	...	33.80
Insoluble	...	...	...	1.10
Moisture and combined water	...	...	...	18.90

100.00

TESCHEMACHER AND SMITH.

Mining Lane, E.C., July 13th, 1871.

DEATH OF MR. JOHN CLAYDEN, OF LITTLEBURY.

As had been feared, Mr. Clayden never really rallied from the fit of paralysis with which he was attacked on the station at Watton after attending the Merton sale, but gradually sunk and died in the village on the morning of Tuesday, July 4. He thus survived but a few weeks the death of his brother-in-law Mr. Samuel Jonas—a prominent man like himself, not only about home but as an eminent English agriculturist.

Mr. John Clayden was born, where he continued to farm, at Littlebury, in July, 1805. He was the eldest of seven children, the family of Mr. William Clayden, a well-to-do yeoman and practical farmer, far in advance of his own times. As such, he was a frequent attendant at the famous Holkham sheep-shearings, and personally well known to Mr. Coke, afterwards Lord Leicester, who once called at Littlebury on his way to London. The son, John, began life at a good school in his native village; but in 1817 his father brought him up to London, and placed him with Mr. Flower, who, noticeably enough, kept a school at Islington, a locality with which his pupil, was destined hereafter to be so directly identified. Young Clayden remained here until the Christmas of 1819, when he went bodily into the business of agriculture, being put to every practical operation on the farm, which he gradually took up as his strength increased; this hard service being of course occasionally relieved by a seasonable degree of recreation, as he evinced all an Englishman's fondness for field-sports, saw no harm in witnessing the race for the Two Thousand, and we ourselves have encountered him in the field with the Puckeridge. In a few years, however, the father's failing health compelled his son to undertake the more responsible duties of actual management; and by the year 1827 the direction of the farm, with the buying of stock, the sale of corn, and so forth, was in his charge. Mr. Clayden, senior, died in the year following; and at the age of twenty-three his eldest son came into the control of a business which included the farming of eight hundred acres at home, and of another large occupation, about ten miles off, which his father had been superintending for an aged relative. In the first instance, the brothers John and William Clayden took their own farm conjointly; but in 1832 the younger brother removed to Linton, in Cambridgeshire, leaving to John the undisputed possession of Littlebury. The active, business-like habits of Mr. Clayden soon gave him a standing and repute amongst his neighbours, conspicuous amongst whom was the late Mr. Jonas Webb; and the two became fast friends. Beyond frequent visits to each other's houses, they were almost invariably to be seen together at the agricultural shows just then springing up, and amongst which, previous to the formation of the Royal Agricultural Society, the Saffron Walden gathering held a good place. The tastes of the two friends, moreover, "hit" very much as to the

best kinds of stock, so that they were often associated together as judges. And there were few better "all-round" judges than John Clayden. Whether it were over cart-horses, cattle, sheep, or pigs, he was never out of his element; and, as a consequence, no one was so continually called in as referee—that is, from the particular class over which he might be acting. As an exhibitor, his chief successes were with his Southdown sheep, his Suffolk horses, and his Shorthorn cattle. On the death of Mr. Jonas Webb Mr. Clayden was appointed Chairman of the Agricultural Hall Company, but his public duties were by no means confined to this office. He was a member of the Council of the Royal Agricultural Society of England; a member of the Council of the Smithfield Club; a member of the Committee of the Farmers' Club; one of the Directors of the Agricultural Hotel Company; the Chairman of the Nitro-phosphate Manure Company, and one of the Honorary Secretaries of the Royal Agricultural Benevolent Institution. Then, he had been Mayor of Saffron Walden as often as Whittington was of London; but he found time to farm in the very best style a thousand acres of land which he held under Lord Braybrooke, about one hundred acres belonging to other proprietors, and eight hundred acres more of his own. Mr. Clayden was a man of very active, business-like habits, while he united with these a special charm in his cheerful, genial manner, that, backed again by his high character, had served to culminate the success he has so deservedly achieved in the annals of modern agriculture; and in the beginning of the year 1870 a testimonial was presented to him at a dinner at Saffron Walden. Mr. Clayden, who had been twice married, leaves a family of two sons, and five daughters.

If anything were needed to mark the high esteem in which Mr. Clayden was held in the agricultural world, and by those with whom he was more immediately connected, such want was well supplied by the attendance at his funeral in Littlebury church. Notwithstanding the fact of its being the Royal week at Wolverhampton, where many of his friends were imperatively engaged, and also the very unfavourable weather, it having rained the whole day without ceasing, yet at least 350 gentlemen and farmers from far and near were at the funeral in mourning. This was not complimentary mourning only, but deep and heart-felt sorrow was among them all: many also from the different companies and societies in London with which our friend was engaged came down to pay the last tribute of respect to him they had so much esteemed in their business relations. The funeral was of plain and simple character. Near relations or connexions only were invited; but on entering the little village street on the way to the church very many others joined the procession; the pathways being lined with tradesmen, labourers, and others; sorrowful on-lookers, who felt they had "lost a friend." Mr. Clayden's landlord, Lord Braybrooke, with the Rev. Mr. Oldham, his chaplain; Messrs. Nockolds and King, his lordship's estate agents, joined the procession to the church and vault, followed by a very large train of sorrowing friends. The service was most impressively performed, and on leaving the graveyard such remarks as "God bless him!" "He was a friend," were heard in faltering tones from many who had known him long and well.

GOOD AND BAD NEIGHBOURS.

BY CUTHBERT W. JOHNSON, F.R.S.

It was an early observation of the cultivators of the soil that there are good and bad neighbours even in the vegetable world. The Roman farmers noticed the vigour with which the vine vegetated when planted near to the elm. They were wont to call that tree the husband of the vine, and it has been supposed that the elm was, in fact, first introduced into England by the then masters of our island when they made their vineyards.

They were well aware that, although there is "a friendship" between some plants, there is "enmity" between others. Cato, one of the very early Roman authors, noticed that the vine is at "enmity" with the cabbage. And these facts were observed by more than one author of the sixteenth century. Thus, Conrad Heresbach, who was born in 1508, remarks in his treatise on husbandry, "because there is a natural friendship and love between certain trees, you must set them the nearer together, as the vine and the olive, the pomegranate and the myrtle; others," he continues, "have a natural hatred, as the vine with the filbert and the bay."

Modern cultivators have noticed other facts of a similar kind, as that the acacia tree is a bad neighbour; the gardener makes the same remark as to the cabbage tribe; the agriculturist is well aware how well the corn flower (*Centaurea cyanus*) flourishes amid his cereal crops, and in no other place, and how the poppy almost always attends his crops of peas. He further notices how very vigorously the plants of wheat and rye flourish amid his tares.

These observations have, within the last year or two, led in a few places to some very practical and successful trials with our root crops. These experiments are hardly so well known to the agriculturists of our islands as is desirable. They are not only valuable in themselves, but they appear to open a field of research, which in all probability will lead to other important results. I allude to the growth together in the *same rows* of the swede turnip and the mangold. We are aware of the difficulty with which for some time back the swede has been cultivated in many portions of our island, and this to such an extent that in considerable districts its cultivation has been abandoned. It is therefore most important that it has been found again to flourish on many soils when sown in conjunction with the mangold, and this not in only the best turnip soils but on the poor exhausted gravels of Bedfordshire—a county where the rainfall certainly does not aid the dryness of the soil, for the average annual fall of rain is there the least of all the English counties, being only about twenty inches—(it was only about fifteen inches in 1870). The mode of cultivation they adopt has been so well described to me by my friend Mr. John Purser, of Willington, near Bedford, that I need hardly attempt to give it in any other language. It was in a letter with which he favoured me in June of the present year that he observed, "I have grown now for six or seven years mangolds and swedes (not white turnips) together, and with great success—not a failure have I yet known. Upon our *hot gravelly soil* we sow all upon the *flat*: it is far better than on the *ridge*. My plan is this: I drill early in April four pounds of mangolds per acre, and another drill follows running one hole only, which is about a pint of swedes, in the same rows. When we set them out we leave as nearly as we can three, some only

two, mangolds to one turnip. The swedes grow very large, and very sound and healthy. Before we adopted this plan our land *refused for years to grow a turnip at all*. We put them into pits or clamps by the second or third week in October, and they come out in the spring as sound and healthy as the mangolds. Very many other farmers near here are doing the same, and with equal success. We certainly grow a greater weight per acre than we ever have done with turnips only."

It being then established that the growth of certain plants is accelerated by having particular neighbours, we naturally inquire into the reason for this interesting fact. It is probable that it arises from some emanation either from the roots or the leaves of a plant which is grateful to its neighbour. It has been supposed by some rose cultivators that its fragrance is increased by having a leek or an onion for its neighbour. Phillips, who died in 1708, in his "Cyder," alludes to this opinion.

— The Pæstan rose unfolds
Her bud more lovely near the fetid leek
(Crest of stout Britons), and enhances thence
The price of her celestial scent.

That plants excrete from their roots peculiar matters is a pretty reasonable conclusion, although almost all the chemical investigations directed to this question are attended with uncertainty, since in most of these the plants examined were placed in water, or other matters foreign to their natural position. My brother, Mr. G. W. Johnson, in his work on "The Science and Practice of Gardening," has given a very clear *résumé* of the evidence hitherto produced on this very considerable question. "If," he remarks (p. 48), "the roots of plants do give out peculiar and varying matters to the soil which sustains them, it aids to explain why one rotation of crops is superior to another, as well as why fallowing is beneficial. Fallowing gets rid by decomposition of any offensive excrementitious matters, as well as accumulates that which is desirable to plants; and one crop may succeed better after some predecessors than others, because their exuvia are more salutary."

These facts may be all explicable by the supposition that roots emit into the soil various excrementitious substances. Let us then inquire whether this supposition has been substantiated by direct experiment. M. Decandolle, an eminent French philosopher, was one of the earliest supporters of this opinion, and MM. Baquerel and Macaire found that when barley and other grain were made to vegetate in pure chalk, acetate of lime was formed in it, evidently by acetic acid (vinegar) being emitted by the young roots, and this combining with the lime of the chalk formed the acetate. M. Braconnot washed the soil in which the poppy had grown during ten successive years, and obtained from it a considerable quantity of acetate of lime.

The late Professor Johnston, from a series of deductions founded on chemical analysis, arrived at the conclusion "that the roots of plants do possess the power of excreting some of the substances which are held in solution by their sap, on its return from the stem, and which, having performed their offices in the interior of the plant, are no longer fitted to minister to its sustenance or growth. This excretory power is not confined to the emission of

Inorganic substances; other soluble matters of organic origin are also permitted to escape into the soil, although whether of such a kind as must be injurious to the plant from which they have been given out, or to such a degree as *alone* to render a rotation of crops necessary, has not been hitherto well determined."

Liebig is also of opinion that the roots of plants throw out excrements. He remarks: "The experiments of Macaire-Princep have shown that plants made to vegetate with their roots in a weak solution of acetate of lead (Goulard's extract), and then in rain-water, yield to the latter all the salt of lead which they had previously absorbed. They return, therefore, to the soil all matters necessary to their existence." Again, the late Dr. Daubeny found that when a plant freely exposed to the atmosphere is sprinkled with a solution of nitrate of strontian the salt is absorbed, but is again separated by the roots and removed farther from them by every shower of rain which falls upon the soil, so that at last not a trace of it is to be found in the plant. When bulbous roots, such as hyacinths, are allowed to grow in plain water, this gradually acquires a brown colour. It therefore," adds Liebig, "cannot be denied that excrements are actually given off by plants, although very possibly they do not produce them to the same degree."

Macaire, in his investigations to which we have referred, observed that when plants were made to grow in pure water for several days, soluble matter was certainly emitted from their roots, which could be detected both by its colour, taste, and smell, and also by chemical reagents, and that this soluble matter *differed very much with the kind of plant*. He further observed that water charged with the excrements of a leguminous plant, although decidedly injurious to another plant of the same kind, suffered a plant of wheat, whose roots were immersed in it, to live perfectly well, while at the same time the yellow colour of the water diminished in intensity.

It can hardly be said in explanation of the good derived from growing swedes and mangolds as close neighbours, that the ingredients they absorb from the soil or from the atmosphere, are different. Professor Johnston found in 100 parts of the turnip and the mangold grown on the same soil

	Turnip.	Mangold.
Water	88.46	85.13
Sugar	6.90	0.67
Gum	0.09	9.79
Albumen	0.19	0.09
Casein	—	0.39

The proportion of water and dry matter in various root crops the Professor ascertained to be as follows:

	Water.	Dry matter.
Sugar beet	85	15
Red beet	82	13
Mangold (short red).....	85	15
White turnip	92	8
Purple-topped ditto	87½	12½
Yellow (Swedish).....	88	12
Kohl rabi	86	14
Red turnip	81½	18½
Cabbage	92	8
Red carrot	87	13
White ditto	80	20

Professor Way ascertained the average amount in lbs. of the mineral matters contained in one ton of the bulbs of the turnip and mangold to be as follows (*Jour. Roy. Ag. Soc.*, vol viii. p. 199):

	Turnips.	Mangolds.
Silica	0.34	0.54
Phosphoric acid	1.77	0.66
Sulphuric acid	2.33	0.65
Lime.....	1.76	0.41
Magnesia	0.47	0.43
Peroxide of iron	0.07	0.12
Potash	6.07	4.99
Soda	1.46	3.62
Common salt	1.49	5.29

The entire plants, bulbs, and tops, yielded per ton—

	Turnips.	Mangolds.
Silica	0.55	0.56
Phosphoric acid	1.90	0.87
Sulphuric acid.....	2.51	0.90
Lime	3.76	0.87
Magnesia.....	0.59	0.89
Peroxide of iron	0.18	0.15
Potash.....	5.84	5.54
Soda	1.38	2.91
Common salt	2.37	6.51
Chloride potassa.....	0.53	—

The mangold, a native of a warmer climate than our own, is not successfully cultivated, so far north as the swede turnip, but, like that root, succeeds upon almost all soils. These, and other questions relating to the cultivation of the mangold, some short time since engaged the attention of the Highland Society of Scotland. They awarded two prizes to Mr. R. J. Thomson, of Kilmarnock, for his researches on this very valuable root. In one of his prize essays he says: "Mangolds grow within a wide range of latitude: crops are raised at St. Helena, at 16 degs. south latitude; and they are successfully grown in Scotland, at 56 deg. north latitude. It will succeed on almost all soils, even in those of the most opposite descriptions: a deep friable loam, abounding in organic matter, is the most suitable; but a light land farmer says, 'We always sow our mangolds on our lightest land, where it is too light for potatoes'; and a heavy land farmer observes, 'My mangolds are invariably grown on the stiffest land, where it's no use growing swedes.' They are sometimes grown year after year on the same soil. The Rev. R. Whittaker has grown them in Lancashire for nearly twenty years consecutively on the same ground—a clay soil; the crop he has raised being from 27 to 32 tons per acre."

Then, again, the same manures which promote the growth of the swede are also as well applied to the mangold.

The best dressing for mangolds is a question which has also engaged the attention of the Highland Society. In another prize-essay by Mr. R. J. Thomson, he describes the result of his trials with certain phosphatic and ammoniacal manures. The manures he applied, and the mean weight of the bulbs produced, per acre, from two plots will be found in the following table:

Manures applied.	Produce. Tons. cwts.
Ash dung, 30 loads; Peruvian guano, 10 cwts. ...	14 7½
Dung, 30 loads; common salt, 2 cwts.	15 9½
Dung, 30 loads; superphosphate, 10 cwts.	12 5
Dung, 30 loads; salt, 6 cwts.	9 15½
Dung, 30 loads	9 15½
Dung, 30 loads; guano, 4 cwts.	12 12½
Dung, 30 loads; guano, 4 cwts.; superphosphate, 3 cwts.; salt, 2 cwts.	14 7½
Dung, 30 loads; guano, 4 cwts.; superphosphate, 4 cwts.; salt, 2 cwts.	14 5¼
Dung, 30 loads; guano, 3 cwts.; superphosphate, 1 cwt.; salt, 2 cwts.	11 9½
Dung, 30 loads; guano, 3 cwts.; superphosphate, 2 cwts.; salt, 2 cwts.	12 1½
Dung, 30 loads	9 15¼

Now the reader will remark that these are the fertilizers which are also well applied to the soil for swedes,

If, then, the chemical composition of the swede turnip and the mangold is so similar—if they appear to absorb the same constituents from the soil, or the atmosphere—we are naturally inclined to the opinion that the mangold emits from its roots or its leaves something that is peculiarly grateful to the swede. But whatever may be our ignorance of the true explanation of the fact, this want of knowledge does not diminish the importance of the discovery. And, moreover, the advantage of planting as immediate neighbours the mangold and the swede will, in all very reasonable certainty, be derived from cultivating other plants in close juxta position. For instance, we are all aware that, like the swede turnip, red clover, formerly so valuable in our rotations, is in many

districts grown with increasing difficulty, or its cultivation only attempted at long intervals. Now, is there not a reasonable hope that, like the swede turnip, its growth may be restored by growing it in conjunction with some other plant? Has any reader remarked a hint from dame Nature to this purpose. Is not the potato disease to be got rid of by planting the sets with some other root for its neighbour? Here again we are taking only another reading from dame Nature's book. She does not shower the seeds of any one, but of many grasses over our soils, and she crowds together the trees of our primeval forests of various kinds, only reducing them to a single variety or two where the mean temperature becomes so low that only the Scotch fir or the birch can exist.

THE GAME LAWS IN THE COLONIES.

A despatch, it appears, was addressed during last autumn by the Earl of Kimberley to the Governors of the Colonies, requesting information concerning the laws in force as to trespass, also as to the preservation of game, and the result has now been published in the form of a Blue Book, with observations appended, that make some of these enactments intelligible to English readers. We learn, with but the single exception of the small settlement of Labrian, either laws directly affecting game, or under the form of trespass acts, are in operation throughout the whole of her Majesty's colonial dominions; and that where such had not hitherto existed, it has recently been thought necessary to prevent the too rapid destruction of birds and animals.

Amongst the North American colonies we see from the report of the Governor of Prince Edward Island, that whereas the very great destruction of partridges, or tree grouse, has tended to render these birds scarce, and if continued without some further restriction, there was reason to fear that they would be exterminated, an act was passed in 1864, by which it was made illegal to shoot, kill, or destroy any partridges, or tree grouse, between the 1st of January and the 1st of October, under penalty of ten shillings, or in default of payment, committal to gaol for a period not exceeding one month. At Newfoundland partridges and snipes are not to be killed between 25th of January and the 1st of September; rabbits or hares not between 1st of March and the 1st of September; deer not between 1st of March and the 15th of July; and the eggs of wild-fowls are not to be destroyed.

In British Columbia it is unlawful to have game in possession between 1st of March and the 10th of August, or venison between 1st of February and the 1st of August; or to collect or destroy the eggs of any grouse, quail, prairie-fowl, pheasant, or partridge: a fine not exceeding fifty dollars is inflicted for each offence, or in default of payment imprisonment for a term not exceeding one month: informers to receive one-half the penalty.

At the Bermudas an act exists for the extirpation of the crow and the preservation of other birds. The preamble observes, This bird has become a nuisance, and is very destructive to young domestic poultry, and the few native birds which are esteemed the gardeners' friends, but are fast becoming extinct through the depredations of the crows, which are rapidly increasing, and getting very numerous. It is deemed expedient, for the better success of agricultural industry, that the crow be extirpated, and the native wild birds be protected, and their increase encouraged. For every crow destroyed a reward is given of two shillings, and for every egg sixpence; whilst any person shooting any red bird, blue bird, blackbird, or cat

bird, ground dove, chick of village, or quail between 1st of January and the 1st of September will be fined not less than five, or more than twenty shillings.

Throughout the West India Islands the laws appear to be confined to acts of trespass. We select the island of Antigua as an example of those generally in force: "It shall be lawful for the proprietor or possessor of any plantation to cause any animals found trespassing to be captured and impounded in the parish pound with certain fines attached, and in default of their being redeemed within three days, the cattle so impounded shall be sold by public auction. If any damage shall be committed by the trespass of cattle, which cannot by reason of their wildness be impounded, it shall be lawful for the magistrate to issue his warrant, authorizing the proprietor of the property to shoot or otherwise destroy such cattle. In the cases of persons who shall unlawfully persist in coming or remaining in any plantation, lauds, or premises after being warned not to come therein or to depart therefrom, shall be committed to the common gaol to be kept to hard labour, or be compelled to pay the fine of five pounds, according to the discretion of the magistrate."

At the Cape of Good Hope, the proclamation of the governor states that "existing regulations against the destruction of game, and for the preservation of some particular species not having succeeded, and owing to the rapidly increasing population it daily becomes more necessary to guard against the total destruction of game in the colony, it is therefore ordered, that from the 1st July until the 30th of November all persons whosoever are strictly forbidden to shoot any pheasant, partridge, korban, wild peacock, ostrich, buck, comprising the whole antelope species, hare, or zebra, under the penalty of fifty rix-dollars for each head of game so killed, or in default of payment to undergo one month's imprisonment." From this prohibition however are exempted farmers and other free persons travelling through the country and shooting game for their actual consumption on the road. "In order to encourage the preservation of game, certain rewards shall be given to all persons who destroy vermin or animals, such as the tiger, wild dog, wild cat, mouse-hound, and hawk; the same to be paid out of the local treasuries on the production of the head of the animal." At Natal the governor observes: "The object of the first game-law which was passed in 1866 is two-fold—first, to protect the game during the breeding months; second, to prevent wilful trespass on private property, and also on Crown lands, in pursuit of game at any time." The eland, hartebeasts, and ostrich are now very rare in the colony, and without some provision would probably soon have

become extinct. With them may be classed also the secretary bird, which is valuable for its habit of destroying snakes, with which the colony is everywhere infested. Trespassing in pursuit of game is of frequent occurrence in consequence of the lands being unenclosed: waggondrivers, Kafirs, and others are in the practice of shooting game wherever they can find it, and at all seasons, and frequently of burning the grass for the purpose of discovering game; and Kafirs mostly hunt in company with dogs, not only over their own and Crown lands, but also over private property, even against all warning and remonstrance, and commit great damage and large destruction of game.

Amongst the eastern colonies, we find in Ceylon an act to prevent the wanton destruction of elephants and to restrict their removal from the island. This has risen in consequence of a tour made by the Governor in 1868 in certain districts where he says that observation has shown him the wanton destruction going on through the whole of that portion of the island visited. This is all caused by the demand which has arisen for elephants in India; and the elephant catchers desert their legitimate cultivations in the villages, and wander over the country, catching as many young elephants as they can, and for each one they catch destroying three or four old females. Upwards of 150 had been captured and paid for by the Pattanis, or natives of India, during the year, their price varying from £5 to £25. An ordinance has been passed reuderling it penal to catch or shoot elephants without a licence, except when trespassing on cultivation, when the fact shall be reported to the nearest headman. The government agent to be empowered to grant licences to sportsmen on the

payment of a certain fee, as it is not this sort of shooting that does harm, but the constant harassing and destroying of the females of the herd when they charge in defence of their young ones. At Hong-kong any person, by an act of 1870, who shall kill, wound, or attempt to kill or wound, or take any birds such as woodcocks, snipes, land-rails, wild ducks, teals, widgeons, sea birds, and birds of prey, shall be liable to a fine not exceeding ten dollars, with or without imprisonment not exceeding one month.

Throughout the Australian and New Zealand colonies laws are in operation against trespass and favouring the import of game. In New South Wales all birds such as pheasants, partridges, and grouse, with the birds and animals indigenous to the country, are protected during the breeding season from 6th August to 31st December. Any persons destroying imported game at any time are liable to pay a penalty not exceeding two pounds in addition to the value of the bird destroyed, or any person destroying native game within the period named to pay a like sum; and for destroying eggs or having such in his possession to pay a penalty not exceeding ten shillings for each egg so destroyed or found in his possession. In Tasmania the Trespass Act was passed rather in the interests of sheep-owners than game-preservers. The holders of large tracts of country, used as sheep-runs, wished for protection against persons engaged in kangaroo hunting. Certain other acts endeavour to provide for the protection of both imported pheasants, partridges, grouse and hares, and for native game. They are, however, considered only moderately effective in their provisions, and those interested in game desire enactments of greater stringency.

STOCK SALES.

SALE OF MESSRS. LENEY'S SHORT-HORNS,

AT WATERINGBURY, KENT, ON WEDNESDAY, JULY 5.

BY MR. STRAFFORD.

In May, 1869, Messrs. Lency drafted 23 heifers and 20 bulls from their herd; they were brought under Mr. Stafford's glass and averaged over 60 gs., though this price was enhanced by 500 gs. for the calf Grand Duke of Kent, which was finally not delivered, so that the average would be reduced about 10 gs. This year 32 heifers and 13 bulls were put up, the average for 44 head sold being £74 4s., consequently Messrs Lency may be congratulated on a good sale, especially as 17 out of the lot were calves of this year. The time appointed for the sale was not happy; the first Wednesday in the month is the meeting of the Royal Agricultural Society's Council, and other agricultural engagements are also held in London on that day, moreover Wolverhampton took many away, and all the south country farmers are in the midst of hay harvest, the attendance was therefore smaller than many expected. But in yearlings and calves there is little choice for business men, and the sale only offered an attraction to those who wished to increase their herds by the addition of fashionable blood.

The animals were certainly brought out in excellent condition. A few of the older yearlings were out grazing, but most of the calves were in boxes. A heavy thunderstorm at noon drove the company under cover, and while Mr. Sartoris took the chair at the lunch, others walked out to see the dams, among which were several

fine cows. Soon after two a few more dropped in by the down train, and the business commenced.

The Charmers and Knightleys were the attractive lots in the catalogue, and no high prices were obtained until lot 3, a specimen heifer by Fifteenth Grand Duke was brought in; after some sharp bidding from Mr. Sheldou, she went at 120 gs. to Mr. Bland for Mr. W. Angersteiu. Lot 1, the first heifer offered, was descended from Lord Ducie's Louisa, and sired by Cambridge Duke 3rd, the first prize bull at the late Essex show; she went cheap enough to Mr. Thornton for Mr. Brassey at 67 gs. Mr. Lancaster bid strongly for Baroness Fawsley, a good ribbed heifer, and finally got her for 150 gs. Rose of Autumn, a very pretty heifer, own sister to lot 1 bulls, had been intended for show purposes, but lot 10 being unwell she was substituted, and went for 115 gs. to Mr. Larking, who also got Specimen 2nd, rather a plain heifer for 105 gs. Twin Duchess 5th, with two Duke crosses on a pure Charmer, was put up at 100 gs., and seemed rather dear at that, but the biddings continued, and Mr. Angerstein secured her at 185 gs. A Gwynne calf, with two similar crosses to the last heifer, but a white, was bought by Mr. Howard at 90 gs. One of the best lots in the sale was Oxford Fawsley 3rd, a white heifer, with four Bates crosses on Sir Charles Knightley's Rosy tribe. The opposition was keen for her up to 200 gs., and then Mr. Lancaster and Mr. Thornton fought it out until the former got her at 310 gs., the latter taking a pretty roan calf, lot 24, for Mr. Brassey at 215 gs. Lady Bates, a deep roan heifer of a rather outside family of that blood, with only one Duke cross, made the high sum of 160 gs. Baroness Fawsley Second, a red deficient-girthed heifer of the Rosy line, went for 125 gs. to Mr.

Sartoris. There was only one daughter of the sweet-looking Chorus cow offered, and that Mr. Dun wisely bought at 70 gs., although a thin white calf. There was some fun in the biddings for Charming Duchess 2nd. Mr. Sheldon and Mr. Larking's agent bidding side by side, one cool, one hot, until the cool man won at 190 gs.

Last time the demand for bulls was dull, and three white ones were passed out unsold. This year the first was last, for lot 13, Grand Duke of Geneva 2nd, a little roan calf, came into the ring before lot 1, sucking his dam, the 7th Duchess of Geneva, a magnificent white cow. After they had walked round the ring and were duly admired, the company was solicited to make an offer; five hundred was said to have been bid, but after three calls at five hundred it was taken away; if "anybody likes to give 800 it will be sold." The biddings were very languid for Master Knightley, and Mr. Armstrong got a very useful bull at 50 gs., whilst His Grace, nearly own brother to the 185 gs. heifer, made but 30 gs. A very promising masculine calf by Third Duke of Geneva went to Mr. Cobb for 51 gs., and the dozen, many of which were mere calves, averaged £30 14s. 3d.

COWS AND HEIFERS.

Lady Louisa's Duchess, by Cambridge Duke 3rd.—Mr. John Thornton for Mr. H. Brassey, 67 gs.
 Thorndale Garland, by 12th Duke of Thorndale.—Dr. Armstrong, 34 gs.
 Specimen, by 15th Grand Duke.—Mr. Bland for Mr. Angerstein, M.P., 120 gs.
 May Duchess 2nd, by 15th Grand Duke.—Mr. J. B. B. Elliot, 34 gs.
 Rose of Kent, by 15th Grand Duke.—Mr. D. Mackinder, 49 gs.
 Baroness Fawsley, by 15th Grand Duke.—Mr. W. Lancaster, 150 gs.
 Charming Duchess, by 15th Grand Duke.—Mr. J. W. Larking, 70 gs.
 Fawsley 11th, by Lord Oxford 2nd.—Mr. Gipps, 44 gs.
 Chaplet, by 15th Grand Duke.—Mr. C. Collard, 35 gs.
 Duchess of Brailes, by Duke of Brailes.—Mr. Bland for Mr. Angerstein, M.P., 105 gs.
 Specimen 2nd, by 15th Grand Duke.—Mr. J. W. Larking, 105 gs.
 Rose of Spring, by Lord Oxford 2nd.—Mr. J. B. B. Elliot, 44 gs.
 Lady Louisa's Duchess 3rd, by Cambridge Duke 3rd.—Mr. C. A. Barnes, 35 gs.
 Duchess of Brailes 2nd, by Duke of Brailes.—Mr. Bland, for Mr. Angerstein, M.P., 61 gs.
 Twin Duchess 5th, by 15th Grand Duke.—Mr. Bland for Mr. Angerstein, M.P., 185 gs.
 Lady Gwynne, by 15th Grand Duke.—Mr. Charles Howard, 90 gs.
 Oxford Fawsley 3rd, by Grand Duke of Kent.—Mr. W. Lancaster, 310 gs.
 Lady Bates, by 15th Grand Duke.—Colonel Kingscote, 160 gs.
 Baroness Fawsley 2nd, by 15th Grand Duke.—Mr. F. Sartoris, 125 gs.
 Lady Flora 3rd, by Knightley.—Mr. Gipps, 40 gs.
 Lady Superior 3rd, by 15th Grand Duke.—Mr. Kingsnorth, 31 gs.
 Sweet Jenny Jones, by Knightley.—Mr. Gipps, 46 gs.
 Charming Lady, by 15th Grand Duke.—Mr. J. Thornton for Mr. H. Brassey, 215 gs.
 Countess 3rd, by 15th Grand Duke.—Sir G. R. Philips, 70 gs.
 Chaff, by 15th Grand Duke.—Mr. White, 32 gs.
 May Duchess 4th, by 15th Grand Duke.—Mr. B. Hale, 27 gs.
 Charming Duchess 2nd, by 15th Grand Duke.—Mr. H. J. Sheldon, 190 gs.
 February Butterfly, by Sir Charles Knightley.—Mr. F. Cobb, 26 gs.
 Columbia's Duchess 2nd, by 15th Grand Duke.—Mr. C. Howard, 58 gs.

Duchess of Brailes 3rd, by 15th Grand Duke.—Sir G. R. Philips, 60 gs.
 Rose of May, by 15th Grand Duke.—Mr. T. Kingsnorth, 25 gs.
 Rose of Autumn, own sister to lot 1 bulls.—Mr. J. W. Larking, 115 gs.

BULLS.

Master Knightley, by Lord Oxford 2nd.—Dr. Armstrong, 50 gs.
 His Grace, by Lord Oxford 2nd.—Mr. Philip, 30 gs.
 Third Duke of Kent, by 15th Grand Duke.—Mr. Gipps, 52 gs.
 The Red Knight, by Sir Charles Knightley.—Sir G. R. Philips, 25 gs.
 Geneva Duke, by 3rd Duke of Geneva.—Mr. F. Cobb, 51 gs.
 Shakespeare, by Sir Charles Knightley.—Mr. J. Russell, 25 gs.
 Janizary, by Sir Charles Knightley.—Mr. T. Kingsnorth, 22 gs.
 Partisan, by 15th Grand Duke.—Mr. T. Kingsnorth, 16 gs.
 Milcote, by Sir Charles Knightley.—Mr. Pilcher, 21 gs.
 Belleville, by Sir Charles Knightley.—Mr. Ford, 18 gs.
 Young Butterfly, by Sir Charles Knightley.—Mr. Benstead, 16 gs.
 General, by Sir Charles Knightley.—Mr. F. Wythes, 25 gs.
 Grand Duke of Geneva 2nd, by Grand Duke 15th.—Not sold.

SUMMARY.

32 Heifers averaged	£90 10s. 0d.	£2,895 18
12 Bulls averaged	£30 14s. 3d.	363 11
44 Averaged	.....	£74 3s. 10d.
		£3,264 9

THE SMEETH HERD.—This stock, the property of Mr. F. Murton, of Smeeth, near Ashford, was sold by Mr. Stratford the day after Mr. Leney's sale. The herd had been bred from Lord Faversham's, Mr. Clayden's, Mr. Langston's, Mr. Wells, and other herds, and crossed with suitable sires, but it lacked fashionable blood, and prices were not very high. Among the top ones were Inventus 12th, 30 gs. (White); Kentish Lady, 36 gs. (D'Arth); Kentish Lassie 2nd, 36 gs. (Tappenden); Princess, 34 gs. (White); Rosabel, 37 gs. (Allen); Minette, 25 gs. (Allen); Pride of Kent, 30 gs. (Collard). Safeguard (27409), the bull in use of the Surmise tribe, went for 42 gs. to Mr. Hayward and the 35 head averaged £25 15s. Some Kentish rams, for which Mr. Murton is celebrated as a breeder, made good prices.

SHORTHORN SALES.

HER MAJESTY'S,

AT THE

PRINCE CONSORT'S SHAW FARM, WINDSOR CASTLE, ON
 WEDNESDAY, JULY 19, 1871.

BY MR. H. STRAFFORD.

"The Royal herd was founded by the late lamented Prince Consort, with the object of breeding animals of real utility both for the dairy and the butcher." We believe that a lot of useful dairy cows was the first start of the herd, to which thorough-bred bulls were used from Mr. Manning's and Mr. Majoribank's stocks; but Sir Charles Knightley's herd laid the foundation of the pedigrees; Mr. Wilson, the steward at the time, selecting, at the Fawsley sale, in 1856, two cows, Alix, still alive, and in her 18th year, and Cold Cream. The main portion of the stock is bred from these two cows, who, as well as their offspring, have been exceedingly prolific. Two or three other tribes were comprised in the catalogue, but which have as yet not attracted much demand, except Mr. Arbuthnot's old Tuberosa, of Caliph family. Bulls were then hired from Mr. Booth's herd at Warlaby, and this

practice, except during the year of the cattle plague, has continued up to the present time, Royal Benedict (27348) being now in use.

A good continental trade was always done at Windsor, until the time of the cattle-plague, when the stock so greatly increased that the first public sale was announced of about 50 head, a fourth of which were bulls, to take place in October, 1867. Just at that time, Mr. Sheldon sent over from America to England some young animals of the highly fashionable Bates' blood. After remaining some weeks in quarantine at Southampton, they were brought to Windsor for sale, and accommodated with Royal boxes. Graceful as the act was, it proved in the end mutually beneficial: party, or perhaps tribe, feeling did not at that time run so high. An immense company came to see the American cattle, and greatly assisted the Royal sale, especially of the female portion, forty-two head averaging £44; the bulls, however, made only £25 a-piece. This year the time of sale was moved from October to July, and this, as it proved, was an unfortunate change. In the week after the Royal Meeting, the country, favoured at last with the sight of the sun for three whole days together, was in the midst of hay harvest; while, further, it was the first day of the Lincolnshire show. The attendance was, therefore, small; and from this, coupled with the apparently draught nature of the stock, no high prices were realised. The first half-dozen cows were ten years old and over, and some of the others were doubtful breeders.

Colonel Kingscote presided at the lunch, at which about 150 sat down. The usual loyal and complimentary toasts were given, and business commenced about two o'clock; Mr. Strafford previously remarking the good effects that had been done by introducing well-bred cattle, and eulogising the good works of the late Prince Consort. The first lot, a daughter of Alix, by Mr. Booth's Prince Alfred, a very fine massive old cow, brought but 28 gs., a trifle over butcher's price. Caroline, a long, broad backed cow, went for 32 gs. Graceful 2nd, also a good specimen, was bought by Mr. W. H. Dunn—very cheap at 45 gs.; and Mr. Grant purchased Pauline (45 gs.), and Florida, a deep, good heifer (67 gs.), for Captain Elliott. Honesty, bred by Mr. Adkins, of the Knightley strain, very full of hair, but a questionable breeder, made 50 gs.; and Mr. G. Garne gave 49 gs. for a daughter of Alix, by Rajah. Many of the heifers were rough in their quarters, which gave a slack appearance to their backs; still there seemed much substance about them, and, considering that no well-bred cow had two direct crosses of the Booth bulls, they sold fairly well. Mr. Gilhey bought several to go to Spain.

The bulls were all of good colours, but some of the older ones were not very first-rate. Mr. Sturgeon bought two or three at cheap prices; and a very good calf, Earl Russell, went for 63 gs.—the top bull price—to Mr. Thornton, for Australia. Another good calf of the Cold Cream tribe made 46 gs. Some remarkably fine heifers were shown at some distance from the farm, as well as a number of large brood cows, with capital udders, from which better stock than that sold might be expected. A very good judge has observed that the strength and reputation of a herd is always shown by the bull average exceeding that for cows. If this theory be true, the fact that the average for bulls was nearly £2 beyond that for cows, and nearly £10 in excess of that in 1867, may go to argue that there are brighter days and higher averages in store for the Royal herd, more especially when the strong and contrary lines of blood in the sires and dams are the closer united, and their type more thoroughly fixed.

SUMMARY.

	£	s.	d.	£	s.
41 cows.....	33	2	9	1,358	14
14 bulls.....	34	19	0	489	6
55 Averaged	£33	12	0	£1,848	0

MESSRS. HARWARD AND DOWNING'S,

AT WINTERFOLD, KIDDERMINSTER, ON THURSDAY,
JULY 20, 1871.

BY MR. H. STRAFFORD.

The same causes that operated against the attendance at Her Majesty's sale doubtless were in force at Winterfold, as the ring and the luncheon tent showed accommodation for a much larger company than was present. Nearly every other field, too, might be seen with the grass cut, as this from its discoloured appearance had apparently been there some time. The catalogue of sale comprised a number of choice families, of the Kirklevington, Blanche, Surmise, Waterloo, and Wild Eyes tribes; and the first, being very pure of their kind, were the attraction of the sale. Messrs. Downing and Harward had spared neither trouble nor expense to establish the herd in what may as yet (from the local competition) be called an undeveloped district. They had selected cows of the most fashionable blood, paid Captain Gunter 500 gs. a-piece for Duke bulls, and failing the supply at Wetherby, had imported Eighth Duke of Geneva, of the same blood, from America at 800 gs. This reputation brought together many admirers of the blood, among whom were Capt. Oliver, Mr. Sheldon, Mr. Leney, Mr. Bowley, Mr. Riel, and the agents of the Duke of Devonshire, Lord Skelmersdale, Lord Penrhyn, Lord Chesham, Lord Fitzhardinge, Col. Kingscote, Sir G. Philips, Sir Curtis Lamson, Mr. Pavin Davies, and other well-known breeders. On a close inspection of the cattle by the catalogue, it became apparent that the sale, like that at Windsor, was of a draught character, and with the exception of two or three fashionables, no large figures were expected. The two first cows went very reasonable, but Kirklevington 16th being probably one of the purest and best of the tribe, was much sought. She had been confined in too small a box for calving, consequently in March last her calf came dead; she showed, however, every appearance of health, and in order that she might not be thrown away a reserve of 300 gs. was placed upon her. When she entered the ring this explanation took place, and she was put up at a 100 gs. which went on by five's and fifty's until 300 gs. was reached. Mr. Thornton then bid five and the competition went on until fifty was called, but another "five" was sufficient, and the cow for which 500 gs. was bid in 1869 was sold for 355 gs. to Lord Bective; Mr. Leney, it was said, being the opposition. Some of the Blanche or Sockburn cows were deep good animals, though apparently wanting hair; but they sold well, Mr. Kirbell, for Lord Chesham, giving 85 gs. for Cherry Blanche 2nd, and 52 gs. for Lady Mary 2nd. Another Kirklevington by the 7th Duke of York, a fair good roan heifer, had calved in March, but the calf was lost, and she was only recently bulled; the biddings were not very spirited, still she at last reached 175 gs., being bought for Mr. Pavin Davies. The next lot, Kirklevington 10th, was rather wanting in pure Duke crosses, and being a little doubtful as well, went only for 55 gs. to Mr. Leney. Mr. Foster gave 83 gs. for a very good Blanche, and Mr. Savill 50 gs. for another of the same blood; although white, Lady Waterloo seemed unlike a breeder, and had returned after six

months quietude, so she was put up at 200 gs. and withdrawn. Kirklevington 22nd, a white heifer by 5th Lord Wild Eyes from Kirklevington 16th, was quickly in the market, and the biddings went merrily along up to 270 gs., when Mr. Thornton's three hundred secured her as well as the dam, for the Earl of Bective. Countess Blanche, a deep good useful heifer, made 71 gs. (Capt. Webb), and Mr. Loney took Tacita 4th at 51 gs., and Tacita at 60 gs. Lady Worcester 8th, the only specimen of the Wild Eyes tribe, went to Col. Kingscote at 80 gs., while a little red Kirklevington calf by Fifth Duke of Wharfedale was sold to Mr. Ashburner, a tenant-farmer, at 100 gs. Some of the other calves by 3rd Duke of Claro went cheap.

The bulls, as a whole, rather wanting in condition, were not a first-rate lot. The two Oxford bulls were both reserved at a 100 gs. each. Earl Lally, a yearling, made but 36 gs. (Mr. T. Morris), and Earl of Chatham, a light roan full of hair and quality, went cheap enough to Mr. Simmons at 70 gs. Two or three of the younger ones were not offered. Some fine cows, for service by Eighth Duke of Geneva, were staying with the rest of the herd, among which were several rich coloured good cows and heifers.

SUMMARY.

	£	s.	d.	.....	£	s.
39 cows.....	61	15	9	.....	2,409	15
11 bulls.....	29	19	5	.....	329	14
50 averaged	54	15	9	.....	£2,739	9

SALE OF THE LATE SQUIRE FARQUHARSON'S SOUTHDOWNS,

AT LANGTON, ON TUESDAY, JULY 4TH.

BY MR. T. ENSOR.

The Guaville flocks which on this occasion were brought to the hammer, comprised about 3,000 pure-bred Sussex Downs—ewes, wethers, hogs, and lambs—and, besides the sheep several cart-horses, and a collection of agricultural implements, were submitted to competition. The sheep of the late Squire were as true-bred Sussex Downs as any in the country, owing their celebrity to the flocks of the Duke of Richmond, Lord Walsingham, the late Mr. Jonas Webb (whose sales Mr. Farquharson frequently attended), the late Mr. Eilman, the late Mr. H. Boys, Mr. Henry Fookes, and Mr. Goringe, of Sussex. To the Duke of Richmond's Mr. Farquharson had a particular partiality, sparing on no occasion either expense or trouble to secure in symmetry and general excellence the choicest of animals. His sheep were in fact the pick of many famous flocks, for Mr. Farquharson was a connoisseur upon whose judgment practical farmers could rely. The sheep to be disposed of on Tuesday were catalogued in 130 lots, which consisted chiefly of pens numbering 20 sheep each. There were 19 lots of two-tooth, 17 of four-tooth, and 15 of six-tooth ewes. Of chilver hogs there were 25 lots, while the wether hogs were sold in 15. The chilver lambs numbered 24 pens, and there were ten of wether lambs, the last set down in the catalogue.

The 3,000 sheep were disposed of with remarkable rapidity, although the competition throughout was keen. The two-tooth ewes, in 19 lots, each numbering 20 sheep, were the first submitted to competition, and realised £856, or an average of a little more than 45s. each sheep. Mr. Butler, a cattle dealer, was the purchaser of five lots at 45s. and 46s. Four lots were knocked down to Mr. Dickinson, who gave from 39s. to 45s. Mr. Dowding bought at 47s.; and at 1s. less than that figure, Mr. Cresdee, of Wareham, a considerable purchaser of the former sale, had another lot. The rest went to Mr. Whittle, Mr. Look, Mr. Pearce (for Major Hussey, Burton Bradstock), Mr. Jones, and Mr. Forester (steward to Lord

Portman), the prices ranging from 44s. to 48s. The four-tooth ewes fetched still higher figures, the average of 17 lots being a trifle more than 47s. per sheep, and the total sum realised, £803. Messrs. Cresdie, Butler, Whittle, W. Smith (Exeter), Wells, R. Fowler, and Jones were the purchasers, the successful bids running from 46s. to 50s., Mr. Fowler purchasing at the latter price. Fifteen pens of six-tooth ewes were eagerly bought at from 46s. to 50s. Mr. Fowler again gave the latter figure, as did also Mr. Jones and Mr. Butler. The other purchasers were Messrs. William Smith, Cresdee, Whittle, Taylor, and Groves (Danroy Farm). Four lots of old ewes, purchased by Messrs. Groves, Forester, and Charles, fetched from 38s. to 43s., or an average of 41s. The two-tooth wethers did not muster strongly. There were only two pens of 25 each, and these changed hands at 57s. and 59s., Mr. Wake giving the former sum, and Mr. Henry Fookes the latter. Although, as a rule, size told against "the squire," he generally held his own in regard to breed and quality, even in competition at the leading shows against more gigantic rivals. For the chilver hogs, forming two dozen and one lots, the biddings ranged from 43s. to 46s., the buyers being Messrs. Forester, Cresdie, Charles, Butler, G. Wood Homer (who bid the top figure), W. Smith, Jones, and Captain Thresher. The 25 lots fetched about £1,140. Wether hogs were disposed of to Messrs. Strange, Jeffery, Wake, and Cresdie, at from 46s. to 49s., the 15 lots bringing in about £780. Chilver lambs, numbering about 500, realised from 17s. to 23s. each, Mr. Read, of Ibsley, purchasing pretty extensively; the other buyers were Messrs. Cresdie, Pearce, Ford (Weymouth), Bailey, and Whittle; the 24 lots realised about £450. Wether lambs, in lots of 50, and one of 30, went at from 22s. to 25s. to Messrs. Bailey, Warren, Bennett, Cresdie, Jeffery, and W. Fookes, the whole coming to above £550. The sale was brought to a termination at about four o'clock, the whole of the 3,000 sheep having been knocked down within a couple of hours. A rough calculation of the day's proceeds shows that about £5,700 was given for the 3,000 sheep and lambs, comprising the Guvville flock. The Hinton flock fetched £2,605, and the Langton £2,765 10s., while the takings of the first day's sale exceeded £7,000, so that the whole of the farm produce was of great value.

SALE OF STOCK AT THE WOLVERHAMPTON MEETING.—Shorthorns: Lord Sudeley's Cherub to Mr. Cochrane (Canada); Mr. Meadows' Prince Charlie to Mr. C. W. Brierley; Colonel Towneley's Baron Hubback 2nd to Mr. Gibson (America); Colonel Towneley's British Baron to Mr. Snell (Canada); the Rev. Bruce Kennard's Oxford Duchess to Mr. Cochrane; Mr. Ladd's Lord Oxford heifer to Mr. Miller (Canada); Mr. Hosken's Countess of Oxford to Mr. Gibson; Mr. Beattie's Sonnie to Sir Tatton Sykes; Mr. C. Barnett's Belinda Oxford to Mr. Cochrane; Mr. Outhwaite's Lady Brough (with certain contingencies) to Mr. Gibson; Messrs. Garne's Nellie Booth to Mr. Cochrane; Colonel Towneley's Lady Oxford to Mr. Miller; Colonel Towneley's Butterfly's Memento to Mr. Gibson; Mr. C. A. Barnes' Royal Duchess 2nd to Mr. Cochrane. An offer of 700 gs. for Mr. Beattie's Warrior's Plume was refused. On the show-yard Lord Dunmore purchased five heifers of the Oxford and Red Rose tribes, from Mr. Cochrane, of Canada, which are to cross with the two Duchess calves in October, and for which immense prices were paid; and Duchess 97th has produced another bull-calf, which has already been sold for 1,000 gs. Herefords: Mr. Hill's Pearl Diver, Mr. Child's Star of the West, and Mr. Harding's Lizzie Jefferys were sold for shipment to Australia, and most of the Cotswold ewes and Berkshire pigs which changed hands go to Canada. The demand for bulls was very slack.

BUTLEY LAMB SALE.—The first lots sold were four-score lambs consigned by Lord Rendlesham, 60 of which made from 31s. to 36s. 6d. Fourteen score wether lambs from J. Lewin, of Wantisden Hall, sold at from 23s. to 29s. 6d.; whilst 280 black-faced ewe lambs, from the same noted flock, made from 27s. 6d. to 34s. 6d. each. Of 280 Down lambs, from Mr. Samuel Wolton, 100 fetched from 25s. 6d. to 30s., the rest making from 18s. to 23s. 6d. Some half-bred lambs from Messrs. R. and A. Crisp, Gedgrave, sold at

prices varying from 20s. to 29s. 6d. each. Some fat sheep, consigned by Mr. A. Crisp, reached as high as 62s. 6d.; and 46 two-shear wether sheep from Mr. R. Crisp, from 50s. to 60s. 6d. 140 lambs from Mr. H. M. Gobbitt, 18s. 6d. to 25s. 6d. 100 Down crones from Mr. Samuel Wolton Butley Abbey, 33s. 5d. to 45s.

LAMB SALE AT KESGRAVE.—The first flock offered was that of Mr. C. Bantoff, Howe's Farm, Martlesham. The first lot of 20 half-bred Leicester lambs was bought by Mr. Green for the high price of 42s., and the next score fetched 41s. a-head, Mr. Cobbold, Trimley, being the purchaser. One lot of 40 made 35s., two made 34s. 6d., two 34s., two 33s. 6d., and two 29s. Crones fetched from 29s. to 47s. 6d. The next flock was that of Mr. King, Rushmere Hall, and the top price of lambs was 42s. a-piece, given by Mr. W. Wilson, Baylham, for 25 half-bred ewe lambs; the others, in lots of 40, fetching from 25s. 6d. to 41s. Cast ewes made 50s. to 54s., and crones 35s. 6d. Mr. E. Tye, Melton, bought the first lot of lambs from Foxhall Hall (Mr. Wainwright's) for 32s. 6d., and other lots fetched from 23s. to 34s. Mr. Wicks bought 5 crones for 40s. each. Mr. W. Turner's (Kesgrave Hall) black-faced ewe lambs made from 21s. 6d. to 35s. 6d. The wether lambs made from 19s. to 31s., and two-and-a-half score of crones made 33s. 6d. The highest price made by the ewe lambs from the Haugh Farm, Sutton (Mr. A. Smith's) was 40s., the other prices being from 20s. to 35s. The wethers fetched from 20s. to 33s. 6d. Mr. King bought three scores shearing black-faced ewes at from 53s. to 60s. Mr. H. Wolton's (Newbourne Hall) Southdown lambs made from 27s. to 33s. 6d.; his crones fetched 37s. 6d. to 43s. 6d. Mr. H. Biddell bought most of the Southdown ewe lambs from Mr. J. Everett's (Brightwell Hall) at 27s. to 28s. 6d., and Mr. E. Tye bought ten score wethers at 32s. to 33s. 6d. Mr. Hicks bought half-a-dozen fat Southdown sheep at 72s., and Mr. J. Garrod bought seven at 61s.

MR. HENRY FOKES' SOUTHDOWN LETTING.—The annual sale and letting of Mr. Henry Fokes' South Down Rams which took place on Saturday, July 8, at the Blandford Wool Fair, was attended by the principal Southdown breeders in this and adjoining counties. The sheep were considered equal, if not superior, to any ever offered in this county, combining great size and substance, with good quality and colour, and very heavy wool bearers; they were never housed, and consequently in good healthy condition. The catalogue contained 73 sheep, 71 of which were actually sold or let at an average of about £12 each, only two sheep not finding customers. The highest prices given were by Capt. Thresher, 16 and 21 guineas; Mr. Moyses, 15½ guineas; Mr. Kent, 18½ guineas; Mr. Cane, 14, 19, 25, and 13 guineas; Mr. Beasant, 12½ and 25 guineas; Mr. Baunton, 14 guineas; Mr. Crane, 15 guineas; Mr. House, 16 guineas; Mr. South, 15 and 16 guineas; Mr. Mayo, 14 guineas; Mr. H. Richards, 12 guineas; Mr. C. Pope, 12½ guineas. The highest price realized was for a fine three-year-old sheep, which, after a spirited competition, was let to Mr. J. Moore, of Littlecot, for 32 guineas. The sale was conducted by Mr. T. Ensor, in his usual quick and business-like manner, and all were disposed of in rather over the hour, the amount realized being about £850.

AGRICULTURAL INTELLIGENCE, FAIRS, &c.

BASINGSTOKE FAIR.—Between 8,000 and 9,000 sheep, being considerably more than last year, were penned. Good prices were realized. Mr. F. Budd obtained the prize of 10 gs. for the best pen of 100 Hampshire Down wether lambs, bred and fed by the exhibitor. He also obtained the prize of 10 gs. for the best pen of ewes fed by the exhibitor from the 31st of October, to consist of not less than 50 nor more than 100, taken in proportion of 10 in every 50 ewes kept by the exhibitor. To Messrs. J. and H. White, of Broak Oak, Odiham, was awarded the prize of 10 gs. to the person who should pen the largest number of sheep and lambs. Mr. J. Moore, of Viabes Farm, obtained the piece of plate, value 20 gs., for penning the largest number of sheep and lambs. Mr. G. K. Budd, Clidlesden; Mr. E. Cobden, Preston Candover; Messrs.

Palmer, Clidlesden; Mrs. Emily Cliff, Sherborne St. John; Mr. Wigg, Basing; Messrs. Bradby, Preston; Mr. W. B. Boxall, Strathfieldsaye; Mr. J. Moore, Pewsey, Wilts, and Mr. J. Young, Preston, were also successful exhibitors.

BOSTON SHEEP MARKET.—An average supply with a fair trade at 8½d. to 9d. per lb.

DUNDEE FAIR.—Fat cattle, which were less numerous than last year, were rapidly bought up at prices fully up to the average of last year. Lean cattle, and especially Irish spare stock, were shown in large numbers, and although the prices asked were much the same as last year, sales were very stiff, and at the close of the market many lots remained unsold. The best lot in the market—eight three-year-olds—was bought by Mr. James Nicoll, Forfar, at £27 each. He also bought nine three-year-olds at £25. Mr. George Nicoll, Forfar, sold 17 two-year-olds at £19, and three at £14. Messrs. Dodds and Bathie sold 21 two-year-olds at £17. Milch cows, chiefly Ayrshires, were a fair show so far as numbers were concerned, and the lots exhibited were in splendid condition. Mr. Batchelor, Craigie, sold eight cows at prices ranging from £19 to £26; and Mr. Liddell, Denny, sold five—the largest and best lot of Ayrshire cows in the market—at prices ranging from £16 to £25. Other lots also changed hands at prices much the same as the above. The stock of horses in the market was much larger than last year. The best cart mare in the market was sold at £50. James Napier, Glasgow, bought four horses, one at £45. Messrs. Lindsay, Dundee, bought a horse for £40. Ten horses at prices ranging from £17 to £60 were sold by Mr. McFarland, and Mr. Wilkie sold five at prices ranging from £30 to £50. Mr. David Peters sold several work horses at from £10 to £42. Ponies were in great demand, and the show not being large, good prices were obtained.

GRANTHAM FAT STOCK MARKET.—400 and 500 very fine sheep sold readily at 8d. to 9d. per lb., also some excellent beasts realized 9s. 6d. to 10s. per stone. There were some store stock, which sold well.

HORSHAM LAMB FAIR.—The number of lambs must have exceeded that of last year considerably, and the top price made, we believe, was 45s., for a pen of 50 sold by Mr. Ireland, of Timberley, Bury. A lot of ewes sold at 55s. Messrs. Emery, of Hurston, sold at 4s.; they were very fine lambs. Mr. Atkinson, of Dorking, bought a nice lot of tegs at 48s. Messrs. Penfold, Cokeham House, near Worthing, sold head lambs at 37s., and seconds at 29s. 6d.

HUNTINGTON FAIR.—There was a great demand for horses. Good waggon and cart horses fetched from £40 to £50, hacks from £20 to £30, and ponies from £7 to £15. There was a scarcity of cows and calves, and those in the fair in many cases were sold three and four times over. The sheep, which were in large numbers, sold remarkably well at advanced prices. This was the best business fair held at this place for many years.

LINCOLN FAT STOCK MARKET.—Good supply of fat beef, small supply of sheep, trade brisk at about the previous week's prices. Beef 10s. per stone, mutton 8½d. to 10d. per lb.

MUIR OF ORD SHEEP MARKET.—Lambs sold at 30s. and ewes at 60s., being respectively 5s. above last year.

NEWARK FAT STOCK MARKET.—The supply was not at all equal to the demand, there being a very large attendance of buyers from the Mansfield, Sheffield, and other districts; prices were accordingly even higher than last week.

NEWTON-STEWART MONTHLY MARKET.—Prices ranged for three-year-olds from £13 13s. to £15 15s each; two-year-olds £9 10s. up to £13, and cudgals £5 to £8 15s. Of pigs there were several carts on the stance, and all sold at 9s. to 12s. 6d. each, according to age and quality.

SLEAFORD FAT STOCK MARKET.—A good show of first-class fat sheep, which met with a brisk trade at fully last week's prices. Grand show of fat beasts, which were disposed of at extreme rates. Fair show of pigs. Mutton realised from 8½d. to 9½d. per lb., beef 10s. to 11s. per stone, lambs from 28s. to 46s. each, pork 7s. to 7s. 6d. per stone.

SPILSBY FAIR.—The show of sheep was remarkably small, but although prices ruled high, trade was brisk, and in a short time all were sold, making from 8d. to 9d. per lb., according to quality. The show of beasts was better than that of sheep, still neither in quantity or quality was it equal to

that which used to be seen at Spilsby fair. There was a lively trade, and the best animals (whether intended for the butcher or the grazier) were quickly caught up. Beef made fully 10s. per stone, and in some instances somewhat more was obtained. Store beasts also fetched remarkably high prices, and many persons who from the abundance of keeping were obliged to buy, wondered how they should see their own again. The show of horses, although somewhat better in quality, was in respect of numbers not equal to that of last year.

STOCKBRIDGE FAIR.—Trade opened very briskly at prices ranging from 8s. to 10s. per head higher than last year. The supply was short, and the greater part sold by the middle of the day at the following prices: Lambs from 2s. to 3s. 6d., Mr. Wyeth, of Bossington, obtaining 4s. for a superior lot; Mr. Flower, of Longstock, and Mr. Lywood, of Houghton, also realising over 40s. per head. Ewes sold from 40s. to 54s., Mr. Allee, of Rookley, selling at the latter price, and

Mr. L. Lewis, of Leckford, at 52s., wethers 46s. to 55s. each. The show of ram lambs was much less than usual.

SWAFFHAM FAIR.—The show of lambs was not quite equal to that of last year in point of numbers, though the difference was nothing to speak of; but the prices realised were remarkably high. The prices ranged according to quality, the poorest kind fetching only about 25s. per head, while some very superior animals realised as much as 46s. 6d. We heard of one large quantity which sold at 38s. per head, a second which made 37s., and a third 36s. per head. The general run might be said to be from 30s. to 40s. The bullock fair was thinly represented, but the prices realised were good.

WORCESTER FORTNIGHTLY FAIR was moderately supplied with stock, but the attendance of buyers was small. The auction sales were lower than usual. Beef ranged from 8½d. to 9d. per lb., mutton 8d. to 9d. Pigs rather cheaper.

AGRICULTURAL REPORTS.

GENERAL AGRICULTURAL REVIEW FOR JULY.

We have seldom experienced a more variable month than that now brought to a close. July 1871 will be remembered on account of its abnormal and lugubrious character, and more particularly on account of the great disappointment that farmers have had to contend with in regard to the hay crop. Seldom have the anticipations formed with regard to the yield of grass been brighter, and seldom have hopes so justly formed been so completely dispelled. Haymaking has progressed very slowly throughout the month, cutting and carrying having been much interrupted by the frequent rains. The yield has proved to be much less than was promised a few weeks back, and the quality has deteriorated greatly. Still there is a fair hope of a good aftermath, but the aggregate yield, though heavier than last year, is disappointing.

The month opened cold and wet, and serious apprehensions were at one time entertained for the safety of the growing crops. Vegetation generally was arrested, and wheat was beginning to lose colour, more particularly on light lands. On well-farmed and heavy soils appearances have never been such as to justify real alarm this year, but the reports have not been uniformly satisfactory. Wireworm and mildew have made their appearance, but these complaints are local, and it is to be hoped that the damage is restricted to the particular quarters from which the accounts come. The break in the clouds that took place during the closing portion of the month had a wonderful influence for the better upon the crops. Vegetation has been powerfully stimulated, and much progress has latterly been made. Wheat now presents a more favourable appearance, and though the harvest cannot be early, and the yield will probably prove below the average, we do not look for any serious falling-off in the crops. The fields are now rapidly changing colour, and it is thought that in some of the forward districts the early wheats will be ready for cutting before the first week in August. At the same time the harvest cannot become general for some little while. Meantime the wheat trade has ruled very dull, owing to the more satisfactory accounts received of the growing crops, and to the liberal receipts of foreign produce. Prices have uniformly tended downwards throughout the month, and wheat closes 2s. to 3s. per qr. cheaper for Russian and American descriptions, and about 2s. lower for other sorts, as compared with the values current on the opening of the month.

Barley and oats are well spoken of, the abundant moisture having greatly benefited the latter crop. Beans and peas have podded well, and promise a good return. Roots generally are favourably reported upon, though potatoes vary somewhat in quality.

The demand for spring corn has been inactive. Maize and oats have been in heavy supply, the imports having been on an excessive scale. Prices are consequently 2s. to 3s. per qr. lower on the month. As usual at this period of the year, barley has been little inquired after, and the quotations are nominal. Very few beans or peas have been on offer in Mark Lane.

Hops at one period presented a very discouraging appearance, the bine being very backward and much attacked by vermin. The market consequently became excited, but with the return of more favourable weather a reaction has taken place.

English wool has been in constant demand, owing to the agitated state of the goods market, and the quotations have tended upwards. There appears reason to believe that this year's clip will be disposed of at high rates.

REVIEW OF THE CATTLE TRADE FOR THE PAST MONTH.

A firmer tone has characterized the Cattle trade during the month. The Lincolnshire season has now well set-in; but up to the present time the stock has not come to hand in good condition, notwithstanding the abundance of grass. Certainly some good weight-carrying animals have been exhibited, but really choice stock has been comparatively scarce. Prospects, however, are decidedly satisfactory. A large crop of hay has been secured, although no small proportion has been carried in indifferent condition, owing to the unsettled weather. The root crops also promise to turn out well, so that there will be an abundance of food during the winter months. The total receipts of stock from our own grazing districts have been about an average as regards number. From abroad a fair supply has come to hand, including some good-conditioned Oporto stock. The trade has been firmer, and the value of the best Scots has improved to 6s. to 6s. 2d. per 5lbs.

The show of sheep has been moderate. Some choice stock has been received from our own districts, and the quality of the foreign breeds has not been unsatisfactory. As in the case of beasts the demand has been active, and prices have risen, the best Downs and half-breeds now selling at 6s. 8d. to 6s. 10d. per 5lbs.

Lambs have been firmer, and the best breeds have been disposed of at 8s. per 5lbs.

Rather large supplies of calves have been on offer. There has been a fair demand, at full prices.

Pigs have commanded but little attention, at steady currencies.

The arrivals of beasts from our own grazing districts, as well as from Scotland and Ireland, thus compare with the three previous years:

	July, 1868.	July, 1869.	July, 1870.	July, 1871.
From Norfolk, Suffolk, &c.	1,800	300	1,100	1,625
Lincolnshire, Leicestershire, &c.	6,600	5,300	4,800	6,320
Other parts of England.....	3,700	2,020	2,800	1,095
Scotland	96	47	97	60
Ireland.....	170	450	120	120

The annexed figures show the total imports of foreign stock

into London during the past month, and at the corresponding periods in the three previous years :

	1868.	1869.	1870.	1871.
Beasts.....	6,037	8,784	6,806	5,049
Sheep and Lambs	24,905	30,772	37,991	52,446
Calves.....	2,282	4,669	4,340	3,779
Pigs	2,316	3,349	3,230	5,520

The total supplies of stock exhibited and disposed of at the Metropolitan Market during the month have been as follows :

	Head.			
Beasts	15,655
Sheep and Lambs	136,500
Calves	5,500
Pigs	780

COMPARISON OF SUPPLIES.

July,	Beasts.	Sheep & Lambs.	Calves.	Pigs.
1870	24,843	211,610	5,350	1,155
1869	20,240	176,880	4,485	1,129
1868	24,312	195,250	3,938	1,360
1867	18,590	136,480	3,117	1,755
1866	21,710	158,990	3,778	2,420
1865	26,010	149,960	5,757	2,480
1864	27,394	147,890	4,653	3,140
1863	24,070	169,870	3,822	2,682
1862	22,392	151,060	2,339	2,632
1861	19,740	156,140	3,523	3,240
1860	19,870	153,600	3,133	2,428
1859	19,600	166,632	3,600	2,430
1858	20,468	154,922	4,262	3,290

Beasts are selling at 3s. 6d. to 6s. 2d., sheep 4s. to 6s. 10d., lamb 6s. 6d. to 8s., calves 3s. 8d. to 6s., and pigs 3s. 6d. to 4s. 8d. per 8lbs., to sink the offal.

COMPARISON OF PRICES.

	July, 1868.		July, 1869.		July, 1870.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Beef from	3 0	to 5 0	3 0	to 5 8	3 0	to 5 6
Mutton ...	3 0	to 5 0	3 0	to 5 8	3 4	to 5 6
Lamb.....	5 0	to 6 0	5 6	to 6 0	6 4	to 7 0
Veal	3 6	to 5 0	4 6	to 5 8	3 10	to 5 6
Pork	3 2	to 4 4	3 10	to 5 2	4 6	to 5 8

NORTH NORTHUMBERLAND.

As has been our course of procedure for a long series of years past to report in our plain and disinterested way the agricultural prospects from this northerly district, we cannot help looking back with regret to the many changes by the ravages of death or otherwise occasioned among our early correspondents, nor can we review the agricultural reports from the south to the utmost limits of the far north without hoping at least some of the alarmists will by the blessing of Divine Providence be agreeably relieved from anticipated ruin. Our cereal crops are now so far advanced towards maturity that some calculation may be relied on, so far as bulk of straw appears. Wheat is not yet entirely in full ear, and will be late, and many parts on our best breaks thin, singularly so where seeded in a rough state, either after beans or land in a poachy state. Autumn-sown will yield by far the best bulk. Wherever land had extra working during the last dry summer and autumn the wheat plant got loose at the roots, hence blanks very thin and of a dark colour. Offshoots continue to tiller up, and the crop will reap very irregular and uneven. Winter and spring sown promise a fair average of ordinary seasons. Barley is a full bulky crop on all well-farmed land. Oats are various; large breadths very short, and shoot out uneven, and the fields are dotted with black spots—always a signal for a bad-yielding crop. Beans are very good, but not great breadths. Peas are fair and have great breadths, sown where grass seeds had failed; invariably very bulky, and are being very freely used for store feeding. The welcome planetary rainfalls during the last days of June, and up to the time we write, have proved beneficial to meadows and pasture lands. Our grazing store and fattening stock are, with few exceptions, on full feed, and more healthy than for several seasons past. Hay, as anticipated, has cut up light, but generally better than last year, the foggage or aftermath fresh and hopeful for autumn feed. Hay from such land has been generally put together without loss

or spoil, and where diligence has been the rule, safely stacked. Old meadow will yield much better than was expected early in the season. It is also pleasing to observe the healthy appearance of the turnip crop. We may ride or drive for days without seeing a blank. All available hands have for weeks past been thinning and cleaning, and the contrast with last season is really singular. If we escape the wire mildew, which often destroys the plant in September, we may anticipate a full crop. Potatoes are more various; the breadth planted will vary little than usual, but many blanks are visible in parts in consequence of seed not vegetating, and, almost general, from the ravages of rooks. On light, or on almost any soil, they have this season been most destructive; and when we look at the industry of the vermin from twilight to dawn, it is no easy matter to keep watchers. It seems singular there should be so many advocates for nursing and preserving rookeries. There are many pests working against cultivated crops, but we have always deemed the rook the most destructive to the seed newly down, or when pointing a braird they will take it out entirely if not scared or destroyed. The rook is the only fowl we have that digs up the potato or other leguminous seed; and we have seen cornstacks attacked and nearly pulled down by these pretended grubbers. The wood-pigeon is also very destructive, but only to the leaves of plants in winter; and then their beak is not formed like that of the black gentlemen for digging and breaking up roots. Sparrows and rabbits are also great pests on a farm, and should be treated as vermin.—July 21.

NORTH WALES.

A month since we imagined we were about to have another dry summer, like those of 1869 and 1870, but ever since then we have had little else but rain. It came just in time to save the turnips and mangolds, which could not start for want of moisture, and many fields of the former had to be re-sown, the drought and the fly removing all hope of a crop by any other means. The pastures, too, except on the damp soils, were beginning to burn, and the prospects of the hay crop were anything but cheering. The condition of things has been entirely changed by the wet weather which has ruled during the latter part of June and the whole of July up to the present. Now the root fields, except where they were patchy before the rain came, are looking as well as could be desired, barring weeds, which have grown apace, and the yield of hay will be generally good—in many instances heavy. As, however, it is rarely that we are favoured with weather suitable for all things, so the late rains, which have been of such service, have also, by their having been so protracted, greatly retarded the process of haymaking. A very limited area was cut and saved just before the rains set in, but the bulk has yet to be secured, and the work has been, and is still, carried on under great difficulties. Never was the proverb, "Make hay while the sun shines," more applicable than now. One day is bright, with a fine drying breeze; the next, rain, with south-west wind; and thus it has been alternating for weeks. The barometer has had a lively time of it, always on the move, up or down, but it has not reached a high point for some time. Much hay has been in the fields for three weeks or more, but most of that which was cut in the latter part of June has been carted during this week when we have had two good days and one tolerable one. Last Sunday was so fine and bright that many who had been waiting some time determined to put in the scythes in force the following day (mowing machines are scarcely known, except in the Vale of Clwyd and the adjoining lands), and a great extent has been cut since. There will be little of good quality this year, and scarcely any saved without having been washed. As we write, the wind blows strong from the south-west, and the mercury falls. Corn generally looks well, and both barley and oats promise satisfactory returns. Wheat is not thick, but carries a healthy appearance. Before the rain, straw of all kinds, except in our low-lying situations, was very short, but there is now a good length. Potatoes give every indication of yielding well. Cattle and sheep command excellent prices: the latter have been unusually scarce during the spring and summer. Grazing will be profitable this year, and it is time that the summer graziers should have a turn, for they have been out of pocket the last two years. We are sorry to see that the practice of cutting turf for burning still continues in many instances in enclosed

lands. It is a great mistake to suppose that our peaty moors are of little value except for fuel. If they were drained—and in nine cases out of ten they may be—and the surface manured, they would carry heavy crops of grass, though not perhaps of first quality. We saw a forcible illustration of this a day or two ago, where an industrious farmer had pursued the plan we suggest in portions of an extensive moor; and although the work of amelioration had only been done during the past three years at various times, we saw heavy crops of grass

growing on the reclaimed parts, contrasting strangely with the worthless rubbish produced on the undrained and unmanured portions. In this instance the landlord had found the pipes, the tenant doing the labour; and the latter was satisfied that he should this year be repaid the entire cost of his outlay. We wish we could witness a little more of this spirit of enterprise amongst the general body of our Welsh farmers. True, many of them are short of capital, and more, we fear, lack energy.—July 21.

REVIEW OF THE CORN TRADE DURING THE PAST MONTH.

The month of July has been extremely variable, with but little of real Midsummer weather in it. There has in fact been much of the cold and wet of April. The rain at first was welcome, being greatly needed; but it soon came in such quantities, and so frequently, that hay-makers have had an unusually trying time, and but little has been gathered perfectly sweet and dry, while much has been discoloured and seriously damaged, with a good portion yet on the field. This catching weather happening also at the blooming time of the wheat, there is some reason to fear the results, and already we hear much red-gum has appeared and mildew to diminish the yield and reduce the quality. It is to be hoped that steady and fine weather will soon set in, or the corn will fare like the hay, with much more serious consequences to the country. The spring corn has, however, improved, especially, barley, beans, and peas, which, in some localities, are very promising, as well as oats. During the last half of the month the temperature has, however, been raised, and the third week was mostly fine, and this circumstance, with the heavy imports from various foreign parts, has brought down the value of wheat about 3s. per qr. Were it not, however, for these free imports we should have been much dearer instead of cheaper, as there has been a general falling off in the country and London supplies, for on the fourth Monday the returns only noted the English arrivals as 800 qrs., and the general deliveries show 147,864 qrs. in four weeks, against 179,383 qrs. in 1870, or 31,519 qrs. short, notwithstanding the higher prices that have ruled. The fact is the wants of France and other neighbouring countries at one time made large demands upon us, and with our rising population and extending business, consumption has gone on faster than calculated; and should the weather become much worse, our present imports and stocks would soon be lost sight of in the emergency. However our own crop may turn out, America and Russia appear in condition to fill a large void, with, perhaps, only France as a competitor, as Spain and Italy are said to have had fair gatherings. We regret to find that the rain has already done damage to potatoes, and that the disease has appeared in so many places that growers are forcing them off at low rates in preference to taking the risk of keeping them. The following are the prices quoted in the several places named. White wheat in Paris 62s. 6d., red 61s.; wheat at Bordeaux, 54s. 6d. to 58s., Berdianski at Marseilles 56s. 6d.; wheat at Louvain, 62s. 6d., at Liege and Namur 62s., at Brussels 59s., at Maestricht 55s. 6d.; Polish wheat at Amsterdam, 61s.; white Zealand at Rotterdam, 50s. to 60s.; red wheat at Hambro', 60s. cost, freight, and insurance; wheat at Cologne, 54s., fine wheat, for delivery in October at Pesth, 49s.; high mixed at Conigsberg and Pantzje, 60s. cost, freight, and insurance; Barletta wheat at Naples, 51s.

6d., at Leghorn 59s.; good wheat at Stettin 53s. at Mayence 59s.; soft wheat at Algiers, 44s., Berdianski at Genoa 56s., Native at Valladolid 53s., at Valparaiso 58s. 6d. cost, freight, and insurance; at San Francisco, 60s. cost, freight, and insurance; No. 2 spring red at New York, 49s. cost, freight, and insurance, per 480lbs.,

The first Monday in Mark-lane commenced on a small supply of English wheat, but the foreign arrivals were plentiful. The show of fresh samples from Essex and Kent during the morning were extremely limited. With some rain after a frost in the previous week, and a great appearance of uncertainty as to another fall, prices of good wheat rather hardened, and the former Monday's rates were more readily paid. There being a good attendance from the country foreign also experienced a better inquiry, but prices were no higher. Not many cargoes afloat were on hand, and previous prices were maintained. As the rain which threatened in town soon came down abundantly in the country the general tendency to lower rates was checked, and some markets noted much firmness, but a few places gave way 1s. per qr., as Birmingham, Lynn, and Stockton. Liverpool was also 2d. per cental down on Tuesday, but on Friday was unchanged. Edinburgh noted a decline of 6d. to 1s. per qr. on wheat, and it was the same at Glasgow. Dublin was very much in calm at unaltered values.

On the second Monday there was another small English supply, but quite enough foreign, though rather less than on the week previous. The weather since Tuesday having taken up fine, it was impossible to sell unless at a decline of 1s. to 2s., though scarcely any fresh samples were exhibited on the Essex and Kentish stands. Almost nothing was done in foreign, though holders generally were prepared to accept a similar reduction. Fine cargoes afloat not being numerous were no lower, but those out of order realised very irregular prices, according to deterioration or the disposition of holders. The weather again becoming unsettled, and very few samples of wheat being brought to the several country markets, many farmers declined selling at any reduction, not being influenced by the London decline; but at a few principal places 1s. less was accepted, as at Hull, Leeds, Lynn, Barnsley, St. Ives, &c. Liverpool was rather in favour of buyers on Tuesday, and 1d. per cental down on Friday. Edinburgh was again 6d. to 1s. cheaper, and Glasgow fully 1s. below previous rates. There being no Irish wheat for sale at Dublin, foreign found a better sale, at about previous rates.

On the third Monday there was the smallest English supply, and the largest foreign, of the season. Though almost nothing appeared from the near counties the return of fine weather quite paralyzed trade, and prices of the few samples exhibited were certainly 1s. to 2s. cheaper to sell. Some factors who would not accept 2s. reduction,

kept their samples to the following Friday, when matters were not at all improved. In foreign scarcely anything was passing, and it was useless to press, though a similar decline would have been accepted. Fine cargoes afloat were fully 1s. to 2s. lower, and inferior parcels out of order sold at very irregular prices, and with great difficulty. Though the weather was fine all the week, so little wheat was offered at many country markets that farmers were indisposed to accept the decline of London; but, Hull, Leeds, Wakefield, Birmingham, Bristol, Manchester, Market Raisin, Wolverhampton, and Lynn, were down 1s.; while, Louth, Alford, and a few other places were 1s. to 2s. cheaper. Liverpool gave way 1d. to 2d. per cental on Tuesday, and 2d. more on Friday. Edinburgh was also 6d. to 1s. lower, and Glasgow very dull, and cheaper to sell. With no Irish wheat at Dublin, rates of foreign were rather easier.

On the fourth Monday there was another very small return of English wheat, but plenty from abroad. The show of samples from the near counties, during the morning, was trifling. From the return of rain, and poor accounts of the growing crops, prices were firmer at the previous Monday's rates. As respects foreign, the heavy arrivals of low quality from Russia reduced values of these sorts 1s. per qr., and at the reduction sales were limited; fine white sorts were unaltered in value.

The arrivals for four week's into London were 7,500 qrs. English, 200,485 qrs. foreign, against 18,197 qrs. English, 112,214 qrs. foreign for the same time in 1870. There were 3,365 qrs. exported in the month. The imports into the kingdom for four weeks ending 15th July were 3,138,291 cwt. wheat, and 366,597 cwt. flour, against 1,945,632 cwt. wheat, and 309,682 cwt. flour for the same period in 1870. The London arrivals commenced at 60s. 9d., and closed at 60s. 1d. The general averages began at 59s. 11d., and finished at 58s. 6d.

The flour trade throughout the month has been dull, though the manufactured article has been cheaper relatively than English wheat. The absence of a French demand has been very disappointing to millers, and stocks in London have accumulated both in country-made and foreign qualities, there being nearly 100,000 sacks English and 200,000 barrels foreign in London. Country sorts have, however, only given way 1s. per sack, but barrels have declined 1s. 6d. to 2s. Norfolks were worth 37s. to 38s., barrels 24s. to 26s., and 27s. for prime. The imports into London for four weeks were 53,631 sacks English, and 20,377 sacks 103,913 barrels foreign, against 53,405 sacks English, and 5,149 sacks 39,253 barrels foreign in 1870. The exports to France, &c., have only been 429 cwt.

With many fresh arrivals of maize from America this grain has been constantly declining in value, the reduction in the value of new corn being about 3s. per qr., and on old 1s. to 2s.; but since the fall in prices there has been a good demand. As further liberal shipments of the last crop are yet expected from America prices still have a downward tendency, but stocks as yet are not heavy. The receipts in London for the four weeks were 82,206 qrs., against 22,141 qrs. in 1870.

The English crop of barley being apparently exhausted the arrivals have been small, and the malting season being over prices have kept nominally the same. Foreign arrivals also being limited, parcels in good condition have maintained their value; but those out of order, of which there were many, were sold according to their condition at irregular rates. Useful 50lbs. per bushel can be had at 25s., and heavier in proportion. The arrivals into London for four weeks were 313 qrs. English, 26,639 qrs. fo-

reign, against 56½ qrs. British, 47,148 qrs. foreign in 1870.

The malt trade has been very inactive, but the nominal price has not been reduced. The exports for four weeks were 2,792 qrs.

The foreign import of oats has continued on a very extensive scale, but the English supplies were limited, and only one small lot has been received from Scotland. On the first Monday there was no reduction in price, the two last weeks of the previous month having seriously given way, but in the three following weeks Russian sorts declined 1s. 6d. to 2s.; so that fair 38lbs. per bushel corn has been sold at 18s., and 40lbs. at 20s.; but Swedish qualities in good order have not fallen in the same proportion, nor has native corn. With prices so low heavy losses have been incurred, and the arrivals being beyond immediate consumption over 200,000 qrs. have been stored. The imports into London for four weeks were, in English sorts, 2,794 qrs., Scotch 253 qrs., Irish none, foreign 367,006 qrs., against 2,177 qrs. English, 1,060 Irish, 213,081 qrs. foreign for the same period in 1870. Our exports this month have been small, viz., only 761 qrs. In fact the export trade has been overdone, and many cargoes returned back from Belgium.

Though the supplies of native beans have been limited, they have held out better than expected, and foreign arrivals have largely increased. With but a small consumption at this time of year, and maize having materially fallen as well as oats, this grain has followed, and lower rates by fully 3s. per qr. have been accepted; and as further large arrivals are yet expected from Egypt, prices seem likely to go down still more, unless anything should befall the growing crops, which, on the whole, are said to be looking well. New Egyptian beans are offered at 33s. and 34s., mazagans being worth 38s. to 39s. The imports into London for four weeks were 652 qrs. English, 14,079 qrs. foreign, against 1,338 qrs. English, 1,896 qrs. foreign in 1870.

Very few English peas have appeared during the month, and there were only moderate supplies of foreign. The trade has been very limited, but, with small stocks on hand, a retail demand has been experienced for feeding white sorts at 38s. to 39s., boilers to 42s. The London imports for four weeks were 170 qrs. English, 5,741 qrs. foreign, against 629 qrs. English, 16,739 qrs. foreign in 1870.

With very short supplies of linseed, this grain has maintained its value throughout the month, but its high price has much curtailed the demand.

As respects cloverseed, trefoil, and other agricultural seeds, a poor yield is so generally anticipated that prices have been hardening, but, for want of stocks, no large speculative purchases have taken place.

COMPARATIVE AVERAGES.

Years.	WHEAT.		BARLEY.		OATS.	
	Qrs.	s. d.	Qrs.	s. d.	Qrs.	s. d.
1867...	27,393½	65 1	637½	35 1	1,459½	28 4
1868...	25,642½	65 0	258½	37 4	1,024½	30 11
1869...	39,368½	60 2	289½	32 0	659	26 0
1870...	38,318½	49 8	592½	31 2	1,423	25 6
1871...	29,263½	58 6	365½	34 7	968½	27 10

AVERAGES

FOR THE PAST SIX WEEKS:	Wheat.		Barley.		Oats.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
June 10, 1871.....	59 9	38 6	25 11			
June 17, 1871.....	59 7	35 11	26 10			
June 24, 1871.....	59 11	38 10	27 8			
July 1, 1871.....	59 1	38 10	27 5			
July 8, 1871.....	59 0	34 10	27 1			
July 15, 1871.....	58 6	34 7	27 10			
Aggregate of the above ...	59 4	36 3	27 1			
The same week in 1870.....	49 8	31 2	25 6			

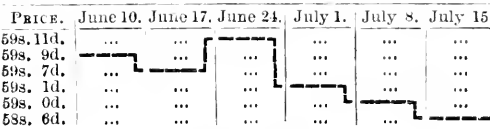
CURRENT PRICES OF BRITISH GRAIN AND FLOUR IN MARK LANE.

	Shillings per Quarter.
WHEAT, new, Essex and Kent, white.....	58 to 59
red.....	51 55
Norfolk, Lincolnsh., and Yorksh., red.....	51 55
BARLEY.....31 to 34.....Chevalier.....	38 42
Grinding.....29 31.....Distilling.....	35 39
MALT, Essex, Norfolk, and Suffolk.....	60 67
Kingston, Ware, and town-made.....	60 67
Brown.....	49 55
RYE.....	38 39
OATS, English, feed 23 to 26.....Potato.....	27 32
Scotch, feed.....00.....Potato.....	00 00
Irish, feed, white 21 24.....Fine.....	25 26
Ditto, black.....19 21.....Potato.....	26 32
BEANS, Mazagan.....37 38.....Ticks.....	37 38
Harrow.....39 43.....Pigeon.....	44 49
PEAS, white, boilers.....38 42.....Maple 43 to 46 Grey, new 37 40	
FLOUR, per sack of 280lbs., best town households.....	47 50
Best country households.....	39 42
Norfolk and Suffolk.....	37 38

FOREIGN GRAIN.

	Shillings per Quarter.
WHEAT, Dantzic, mixed.....55 to 57.....extra.....	60 to 61
Königsberg.....56 58.....extra.....	57 58
Rostock.....54 58.....fine.....	55 56
Silesian, red.....52 55.....white.....	54 56
Pomera., Meckberg., and Uckermark.....red.....	54 56
Russian, hard, 41 to 43.....St. Petersburg and Riga 45 49	
Danish and Holstein, red 52 54.....American 52 55	
Chilian, white 58.....California 59.....Australian 59 60	
BARLEY, grinding 26 to 31.....distilling and malting 34 37	
OATS, Dutch, brewing and Poland 19 to 27.....feed 17 21	
Danish and Swedish, feed 21 to 23.....Stralsund.....	21 24
Canada 18 to 20, Riga 18 to 20, Arch. 18 to 20, P'sbg. 19 23	
TARES, Spring, per qr.....small 42 50.....large 00 00	
BEANS, Friesland and Holstein.....	42 43
Königsberg.....36 to 41.....Egyptian.....	33 34
PEAS, feeding and maple.....37 40.....fine boilers.....	37 40
INDIAN CORN, white.....31 34.....yellow.....	29 32
FLOUR, per sack, French.....00.....Spanish, p. sack 00 00	
American, per brl.....23 24.....extra and d'ble. 25 26	

FLUCTUATIONS in the AVERAGE PRICE of WHEAT.



BRITISH SEEDS.

Mustard, per bushel, brown 13s. to 15s., white 10s. to 12s.	
Canary, per qr.....	56s. 60s.
Cloversced, new red.....	62s. 64s.
Coriander, per cwt.....	21s. 22s.
Tares, winter, new, per bushel.....	7s. 8s.
Trefoil, new.....	24s. 30s.
Ryegrass, per qr.....	32s. 34s.
Linseed, per qr.....sowing 66s. to 68s., crushing 75s. 64s.	
Linseed Cakes, per ton.....	£11 0s. to £11 10s.
Rapeced, per qr.....	80s. 84s.
Rape Cake, per ton.....	£6 6s. 0d. to £6 10s. 0d.

FOREIGN SEEDS.

Cloversced, red 48s. to 53s.....white 62s. 66s.	
Hempseed, small 41s. to 42s. per qr.....Dutch 45s. 46s.	
Trefoil.....	21s. 23s.
Ryegrass, per qr.....	32s. 34s.
Linseed, per qr..... Baltic 65s. to 62s., Bombay 64s. 64s. 6d.	
Linseed Cakes, per ton.....	£11 0s. 0d. to £11 10s.
Rape Cake, per ton.....	£6 6s. to £6 10s.
Rapeced, Dutch.....	72s. 74s.
Coriander, per cwt.....	21s. to 22s.
Caraway ,, new.....	32s. 33s.

HOP MARKET.

BOROUGH, MONDAY, July 24.—Our market maintains an extremely firm tone, and fine samples have realised extreme values; other descriptions are held firmly at recent quotations. No material improvement can be reported on our plantations; a few sections on the Weald of Kent and Sussex give more promise, but the largest portion of these grounds are unimproved. The blight has progressed in the important districts of Mid and East Kent, which are lapsing into the same state as the worst grounds in other places. More favourable reports have been received from the Continent; but with the best of

weather only a short crop is expected. Latest advices from New York report the market firm, with a fair demand.

Mid and East Kent.....	£3 0.....	£4 4.....	£7 7
Weald of Kent.....	3 0.....	4 0.....	5 5
Sussex.....	3 0.....	3 10.....	5 0
Farnham and Country.....	4 0.....	4 15.....	6 0
Olds.....	1 0.....	1 5.....	1 10

POTATO MARKET.

BOROUGH AND SPITALFIELDS.

LONDON, MONDAY, July 24.—Moderate supplies of Potatoes have been on sale. The trade has been quiet at our quotations. The imports into London last week consisted of 1,360 boxes from Barleux.

English Shaws.....	40s. to 50s. per ton.
Regents.....	60s. to 80s. "
Kidneys.....	80s. to 110s. "
Jerseys.....	60s. to 110s. "

LONDON CHEESE MARKET, (Thursday last).—The

demand for cheese during the past week has been on a very moderate scale, and buyers have been difficult to please, both in quality and price. The bulk of the English cheese in London is more or less defective, and a good deal quite inferior. This especially applies to Cheshire cheese, and consequently few purchasers can be found for it. The warm weather has had some effect on the condition of the American cheese recently received. The cheese lately landed are heated, and only a small proportion show rich-meated and firm. At present the inquiries for cheese are chiefly confined to the very finest qualities, or something low-priced—say at 40s., or less. We consider prices of American cheese 2s. to 3s. per cwt. lower than they were ten days since. The arrivals of American cheese reported during the week are 28,092 boxes.—CORDEROY AND Co.

GLASGOW, (Wednesday last).—Our market is quite overstocked this week, the supply being far in advance of the demand. Sellers, though willing to concede about 2s., cannot effect sales. New Cheddars, fancy quality 60s., do. first class 54s. to 57s., do. fine 48s. to 52s., do. late (secondary) 42s. to 46s. per cwt. Dunlops, fancy quality 56s., ditto first class 50s. to 53s., ditto fine 46s. to 49s., ditto late (secondary) 42s. to 46s. per cwt. Skim milk 21s. to 23s. per cwt.

GLoucester MONTHLY CHEESE MARKET was moderately supplied for the time of year, about 45 tons having been pitched. The sale was slow, at from 50s. to 54s. per cwt., and at the close some cheese remained on hand.

PRICES of BUTTER, CHEESE, HAMS, &c.

BUTTER, per cwt.: s.	s.	CHEESE, per cwt.: s.	s.
Dorset.....12s. to 132		Cheshire.....	64 to 90
Friesland.....11s 120		Dble. Glouc., new 56	72
Jersey.....96 102		Cheddar.....	73 90
FRESH, per doz. ... 14 16		American.....	58 64
BACON, per cwt:		HAMS: York.....	94 102
Wiltshire, green... 72 74		Cumberland.....	94 102
Irish, green, F.O.B. 63 74		Irish.....	86 102

COVENT GARDEN MARKET.

LONDON, FRIDAY, July 21.

The markets generally during the past week have been much more active, and a steady demand has ruled for most of the articles in general consumption. Bush fruit is now at its best. Strawberries still hold out good. Hothouse and West Indian Pines are also very plentiful and good; prices low. The Potato market is thoroughly glutted, inferior samples being the rule.

FRUIT.

Apples, ½ sieve..... s. d.	0 to 3 0	Oranges, ½ hundred s. d.	6 to 10 0
Grapes, ½ lb..... s. d.	2 6 6	Peaches, ½ dozen.....	8 0 3 0
French, ½ bundle..... s. d.	1 0 1 0	Fine Apples, per lb.	9 4 5 0
Nectarines, ½ doz..... s. d.	6 0 12 0	Strawberries, ½ lb.....	0 6 1 6

VEGETABLES.

Asparagus, per bund. 4 0 to 5 0		Lettuces, per score ..	0 9 to 1 6
Beet, per dozen.....	2 0 3 0	French Cos, each ..	0 9 0 0
Cabbages, per dozen.....	1 3 1 9	Do. Cabbage, each ..	0 0 0 0
Carrots, per bunch ..	0 8 1 0	Mushrooms, ½ pottle	2 0 3 0
French, ½ bundle.....	1 0 1 0	Onions, ½ bunch.....	9 4 5 0
Cauliflowers, per doz. ...	2 0 6 0	Parsley, per bunch ..	0 4 0 6
Spring, each.....	0 0 0 0	Peas, ½ quart.....	0 10 1 0
Celery, red, ½ bundle 1 6 2 0		French, ditto.....	0 0 0 0
white, ditto.....	1 0 1 6	Radishes, long, ½ bun.	0 0 0 0
Cucumbers, each.....	0 9 1 0	Round, do.....	0 2 0 0
French Beans, ½ lb ..	1 0 1 6	Rhubarb, ½ bundle ..	0 8 0 6
Gooseberries, ½ quart	0 4 0 6	Shallots, ½ lb.....	0 8 0 0
Herbs, per bunch.....	0 2 0 4	Spinach, per bushel ..	2 6 3 0
Horseradish, ½ bundle	3 0 6 0	Turnips, per bunch ..	0 4 0 9

Potatoes: New Round, 6s. to 10s.; Kidneys, 8s. to 10s. per cwt.

POULTRY, &c., MARKETS.—Turkeys, 5s. to 13s.; Goslings, 5s. to 7s.; Ducks, 2s.; Ducklings, 2s. to 3s.; Surrey Fowls, 3s. to 8s.; Sussex ditto, 2s. to 4s.; Boston and Essex, 2s. to 3s.; Irish, 1s. to 1s. 9d.; Rabbits, tame 9d. to 2s. 6d.; Pigeons, 1s. to 1s. 2d.; Leverets, 4s. to 6s. Eggs, 6s. to 7s. 6d. per 120.

CHICORY.

LONDON, SATURDAY, July 22.

Sales have been effected quietly, and prices generally have been easier.

DELIVERABLE FROM WHARF IN BAGS, EXCLUSIVE OF DUTY.
 Harlingen ... £10 15 to £12 0 | Antwerp ... £ 0 0 to £0 0
 Bruges 12 5 13 0 | Hamburg .. 0 0 0 0

HAY MARKETS.

LONDON, SATURDAY, July 22.

SMITHFIELD.—There were much better supplies of hay and clover on sale here to-day. Transactions were restricted and prices had a downward tendency. Prime old hay, 140s. to 155s.; inferior ditto, 100s. to 120s.; prime new hay, 100s. to 115s.; inferior ditto, 96s. to 80s.; prime old clover, 160s. to 167s. 6d.; inferior ditto, 130s. to 140s.; prime new clover, 120s. to 130s.; inferior ditto, 60s. to 80s.; new mixtures, 50s. to 100s.; and straw, 4s. to 50s. per load.

BICESTER, (Friday last.)—Hay, old, £7 to £7 10s.; new, £4 to £5; Straw, £3 to £3 5s. per ton.

BIRMINGHAM, MONDAY, July 17.—Hay, 125s. to 147s. 6d. per ton. Straw, 6s. to 5s. 3d. per cwt.

DERBY, (Tuesday last.)—Hay, £6 10s. to £7 5s.; Straw, £3 10s. to £4 per ton.

WORCESTER, (Wednesday last.)—Hay, new, 115s. to 120s.; ditto, old, 125s. to 130s.; Straw, 7s. 6d. to 7s. 5s.

IRISH HAY MARKETS.

BELFAST.....	£2 13 ½	to	£4 3 4	per ton.
CARLOW.....	2 6 8	to	2 10 0	„
CORK.....	2 10 0	to	3 5 0	„
DUBLIN.....	4 10 0	to	6 0 0	„
LURGAN.....	2 10 0	to	3 0 0	„

BARK AND TANNING MATERIALS.

LONDON, SATURDAY, July 22.

Not much business has been doing, but prices have been without material change.

	£ s. £ s.	£ s. £ s.	
English, per load of 45 cwt. delivered in London.....	13 10 to 14 0	Cork Tree, Barbary.....	6 0 to 7 0
Coppice.....	0 0 0 0	Do. Sardinian.....	9 0 10 0
Dutch, per ton.....	5 0 5 10	Valonia, Smyrna.....	13 0 17 0
Hambro'.....	5 0 5 10	Do. Canata.....	13 0 14 10
Antwerp Tree.....	5 0 5 10	Do. Morea.....	9 0 11 0
Do. Coppice.....	5 0 5 0	Terra Japonica.....	15 17 0
French.....	0 0 0 0	Gambier in bales.....	19 0 21 0
Mimosa Chopped.....	8 0 8 17	Ditto free cubes.....	24 0 24 10
Do. Ground.....	7 15 9 0	Cutch, best Pegu.....	11 0 13 10
Do. Long.....	7 0 7 10	Divi Divi.....	10 0 17 0
		Myrabolans.....	20 0 21 0
		Samach, Sicily, p. cwt.....	20 0 21 0

FLAX, &c.

LONDON, SATURDAY, July 22.

The market for Russian hemp has been dull, but for Manilla slightly higher prices have been paid.

	£ s. £ s.	£ s. £ s.	
Hemp, Petersburg clean, per ton.....	33 0 to 33 10	Coir yarn.....	21 0 64 0
Outshot.....	31 10 0 0	Junk.....	0 0 0 0
Half-clean.....	23 10 0 0	Fibre.....	12 0 33 0
Riga, Rhine.....	36 0 0 0	Flax, Riga.....	49 0 50 0
Manilla.....	41 0 53 0	St. Petersburg, 12 head.....	28 0 0
East Indian, Sunn.....	15 0 21 0	3 head.....	29 0 0
Jute.....	18 10 26 0	Egyptian.....	0 0 0 0

HIDE AND SKIN MARKETS.

LONDON, SATURDAY, July 22.

	£ s. d.	£ s. d.	
MARKET HIDES.....	0 3 ¼ to 0 4	Horse hides, each.....	12 0 to 14 0
56 to 64lbs.....	0 4 0 4 ¼	Calf skins, light.....	2 0 4 0
64 to 72lbs.....	0 4 0 4 ¼	Full.....	8 0 8 6
72 to 80lbs.....	0 4 0 4 ¼	Polled sheep.....	0 0 0 0
80 to 88lbs.....	0 4 ½ to 0 5 ¼	Half-breds.....	0 0 0 0
88 to 96lbs.....	0 4 ½ to 0 5 ¼	Downs.....	0 0 0 0
96 to 104lbs.....	0 0 0 0	Shearlings.....	2 6 3 0
104 to 112lbs.....	0 0 0 0	Lembs.....	3 2 4 2

OIL MARKET.

OILS.		RESIN.	
Olive, Florence, ½ chests.....	£0 0 0 to £0 0 0	French.....	£0 6 9 0 12 0
Lucas.....	0 0 0 0 to 0 0 0 0	American.....	0 7 6 0 14 0
Gallipoli, per 252 gallons.....	49 10 0 0	PITCH.	
Spanish.....	47 0 0 0	British, per cwt.....	£0 6 6 to 0 0 0
Linseed, per cwt.....	1 12 9 0 0	Archangel.....	0 8 0 0 0 0
Rape, pale.....	2 4 0 0	Stockholm.....	0 10 0 0 12 0
Brown.....	2 1 0 0 0 0	TAR.	
Cod, per ton.....	23 10 0 0	American.....	£0 0 0 0 0 0
Seal, pale.....	23 10 0 0	Archangel.....	0 15 0 0 0 0
Brown, yel., &c.....	0 0 0 0	Stockholm.....	0 16 0 0 19 0
Sperm.....	82 0 0 0 0 0	TURPENTINE.	
Head Matter.....	0 0 0 0	French.....	£2 5 0 0 0 0
Southern.....	30 0 0 0	American.....	2 5 0 0 0 0
Cocoa Nut, per cwt.....	1 13 0 0	Rough.....	0 0 0 0 0 0
Falm.....	1 17 0 0 0 0		

ENGLISH WOOL MARKET.

LONDON, MONDAY, July 24.—The tone of the Wool market has continued firm. In all descriptions a healthy business has been transacted, and full quotations have been realized.

	per lb.	s. d.	s. d.
CURRENT PRICES OF ENGLISH WOOL.			
FLEECES—Southdown hogs.....	1 5 ½ to 1 6		
Half-bred ditto.....	1 5 ½ 1 6		
Kent fleeces.....	1 5 ½ 1 6 ½		
Southdown ewes and wethers.....	1 5 1 5 ½		
Leicester ditto.....	1 5 1 6		
SORTS—Clothing, picklock.....	1 5 1 6		
Prime.....	1 3 1 3 ½		
Choice.....	1 2 1 2 ½		
Super.....	1 1 1 1 ½		
Combing, wether mat.....	1 6 ½ 1 7 ½		
Picklock.....	1 4 1 4 ½		
Common.....	1 1 ½ 1 2 ½		
Hog matching.....	1 7 ½ 1 8 ½		
Picklock matching.....	1 4 ½ 1 5 ½		
Super ditto.....	1 1 ½ 1 2 ½		

LEEDS (ENGLISH AND FOREIGN) WOOL MARKETS, (Friday last.)—There is less animation in the demand for English wool; but it arises from the fact that manufacturers and others have got well supplied. The consumption is unabated, and prices are very firm. There is an increased consumption of clothing wool, and prices are well maintained. The probability of the abandonment of the import duty into France will make manufacturers there less anxious to secure an increase of stocks from the present sales.

BRESLAU WOOL REPORT, July 20.

Business continues quiet, and the demand is only slowly returning, yet a very confident feeling is generally prevailing, and greater activity is looked for in the course of the next month. In the meanwhile there has been effected some sales in the inferior descriptions of combing and clothing wools at from 45 to 53 thalers, home manufacturers and combers being the buyers. Foreign concurrence has been generally wanting, and only a few flocks of slipes and skin wool in bundles have been acquired for Austrian and French account, prices ruling at from 45 to 53 thalers. The whole amount of transactions has not been beyond 800 cwts., and fresh conveyances arose to about the same figure.—GUNSBERG BROTHERS.

AGRICULTURAL MEETINGS IN 1871.

- AUGUST 1.**—Angus Agricultural Society.—Meeting at Brechin.
- AUGUST 1, 2, 3, and 4.**—Royal Agricultural Society of Ireland.—Meeting on Stephen's Green, Dublin. Entries closed. President, H. R. H. the Prince of Wales. Secretary, Captain Thornhill, Upper Sackville-street, Dublin.
- AUGUST 2, 3, and 4.**—Yorkshire Agricultural Society.—Meeting at York. Entries for Stock and Implements closed; for Farms, August 1. President, Lord Wenlock. Secretary, Mr. T. Parrington, Croft, Darlington.
- AUGUST 8.**—Badminton Farmers' Club.—Meeting at Badminton. President, the Duke of Beaufort. Secretary, Mr. R. W. Lloyd, Badminton, Chippenham.
- AUGUST 9.**—Leicestershire Agricultural Society.—Meeting at Leicester. Entries closed. Secretary, Mr. T. Sheppard, Leicester.
- AUGUST 10.**—Northumberland Agricultural Society.—Meeting at Alhwick. Entries closed. President, Earl Grey, K.G. Secretary, Mr. J. Wilson, Woodhorn Manor, Morpeth.
- AUGUST 10.**—Ryedale and Pickering Agricultural Society.—Meeting at Pickering. President, The Earl of Feversham. Secretary, Mr. G. Frank.
- AUGUST 15, 16, 17, and 18.**—Birmingham and Midland Counties Horse Show in Bingley Hall. Entries closed. President, Earl Beauchamp. Secretary, Mr. J. B. Lythall, New Street, Birmingham.
- AUGUST 16.**—Preston Agricultural Society.—Meeting at Preston. Entries closed. Secretary, Mr. J. Croft, Lune Street, Preston.
- AUGUST 18.**—Keighley Agricultural Society.—Meeting at Keighley. Entries close August 9. President, W. Laycock, Esq. Secretary, Mr. R. Fawcett, Keighley.

- AUGUST 22, 23, and 24.**—Worcestershire Agricultural Society.—Meeting at Malvern. Entries close August 1st. President, Sir E. A. H. Lechmere, Bart. Secretary, Mr. A. Buck, Worcester.
- AUGUST 24.**—Penistone Agricultural Society.—Meeting at Penistone. Entries close August 14. President, J. S. Stanhope, Esq. Secretary, Mr. J. N. Dransfield, Penistone.
- AUGUST 26.**—Halifax and Calder Vale Agricultural Society.—Meeting at Halifax. Entries close August 12. President, Colonel Stansfeld. Secretary, Mr. W. Irvine, Cheapside, Halifax.
- AUGUST 29, 30, and 31.**—Gloucestershire Agricultural Society.—Meeting at Cheltenham. Entries closed. Secretary, Mr. E. W. Trinder, Cirencester.
- AUGUST 30.**—Wirral Agricultural Society.—Meeting at Birkenhead.—Entries close August 5th. President, John Laird, Esq., M.P. Secretary, Mr. W. Henderson, jun., Market Cross, Birkenhead.
- AUGUST 30.**—Whitby Agricultural Society.—Meeting at Whitby. Entries close August 16. President, Hon. O. Duncombe, M.P. Secretary, Mr. J. Wilkinson, Whitby.
- AUGUST 30.**—Wirral Agricultural Society.—Meeting at Birkenhead. Secretary, Mr. W. Henderson, Junr., 2, Market Cross, Birkenhead.
- SEPTEMBER 4.**—Leominster Agricultural Society.—Meeting at Leominster. Secretary, Mr. E. Gregg, Leominster.
- SEPTEMBER 5.**—Carlow Agricultural Society.—Meeting at Tullow. Entries close September 1. Secretaries, Mr. P. S. Newton and Sir T. P. Butler, Bart., Carlow, Ireland.
- SEPTEMBER 5, 6, and 7.**—Manchester and Liverpool Agricultural Society.—Meeting at Liverpool. Entries close August 1. President, The Earl of Derby. Secretary, Mr. T. Rigby, Winsford, Cheshire.
- SEPTEMBER 7.**—Richmondshire Agricultural Society.—Meeting at Bedale. Entries close August 15. President, James Pulleine, Esq. Secretary, Mr. J. Wetherell, Richmond, Yorkshire.
- SEPTEMBER 8.**—Cleveland Agricultural Society.—Meeting at South Stockton. Entries close August 23rd. President, Joseph Dodds, Esq., M.P. Secretary, Mr. H. J. Curry, Stockton-on-Tees.
- SEPTEMBER 12.**—North Lonsdale Agricultural Society.—Meeting at Ulverstone. Secretary, Mr. T. Postlethwaite, Ulverstone.
- SEPTEMBER 13.**—Wayland Agricultural Association.—Meeting at Wayland. President, Lord Walsingham. Secretary, Mr. R. Robinson.
- SEPTEMBER 13.**—Lancaster Agricultural Society.—Meeting at Lancaster. Entries close September 2. President, The Hon. F. A. Stanley, M.P. Secretary, Mr. S. Thompson, Lancaster.
- SEPTEMBER 13.**—Royal and Central Bucks Agricultural Society.—Meeting at Aylesbury. Entries close August 23. President, Captain Fitzgerald, R.N. Secretary, Mr. G. Fell, Aylesbury.
- SEPTEMBER 14.**—Vale of Conway Agricultural Society.—Meeting at Llanrwst. President, Charles Wynne Finch, Esq. Secretary, Mr. Hugh Pierce, Llanrwst.
- SEPTEMBER 14.**—Waterford Agricultural Society.—Meeting at Waterford. Entries close Sept. 7. President, The Marquis of Waterford. Secretary, Mr. R. S. Blee, Waterford.
- SEPTEMBER 15.**—Carmarthenshire Agricultural Society.—Meeting at Carmarthen. Entries close Sept. 2. President, E. J. Sartoris, Esq., M.P. Secretary, Mr. D. Prosser, White House, Carmarthen.
- SEPTEMBER 15.**—Cheshire Agricultural Society.—Meeting at Northwich. Entries close September 1. President, Arthur Smith Barry, Esq. Secretary, Mr. J. Beckett, Pool Cottage, Oulton, Tarporley.
- SEPTEMBER 19.**—Oxford and Banbury Agricultural Society.—Meeting at Banbury. Entries close for Stock August 1; for Implements August 24. Secretary, Mr. B. W. Aplin, Banbury.
- SEPTEMBER 20.**—Denbighshire and Flintshire Agricultural Society.—Meeting at Mold. Entries close for Stock September 7, and for Root Crops September 30. President, J. Scott Bankes, Esq. Secretary, Mr. W. Gregg, Mold.
- SEPTEMBER 20 and 21.**—Glamorganshire General Agricultural Society.—Meeting at Merthyr Tydfil. Entries close August 22. President, The Marquis of Bute. Secretary, Mr. W. V. Huntley, Welsh St. Donat's, Cowbridge.
- SEPTEMBER 20 and 21.**—Northamptonshire Agricultural Society.—Meeting at Peterborough. Entries close August 12. President, The Hon. G. Wentworth Fitzwilliam. Secretary, Mr. J. M. Lovell, Harpole, Weedon. [The Meeting of the Peterborough Society merges this year into that of the Northamptonshire Society.]
- SEPTEMBER 20.**—Derbyshire Agricultural Society.—Meeting at Derby. Entries close for Stock, August 13; for Implements, September 13. President, the Duke of Devonshire. Secretary, Mr. J. C. Smith, 15, St. Mary's Gate, Derby.
- SEPTEMBER 21.**—Tarporley Agricultural Society.—Meeting at Tarporley. Entries close September 11. President, The Earl of Haddington. Secretary, Mr. W. Vernon, Tarporley.
- SEPTEMBER 22.**—North Shropshire Agricultural Society.—Meeting at Market Drayton. Secretary, Mr. W. D. Green.
- SEPTEMBER 27.**—Huntingdonshire Agricultural Society.—Meeting at St. Ives. Entries close September 12. President, Arthur Sperling, Esq. Secretary, Mr. J. Dilly, Huntingdon.
- SEPTEMBER 27.**—Norton Farmers' Club.—Meeting in Meersbrook Park. Secretary, Mr. F. G. Godwin, Chesterfield.
- SEPTEMBER 28.**—Herts Agricultural Society.—Meeting at Hertford. Entries close September 18. Chairman, Abel Smith, Esq., M.P. Secretary, Mr. G. Passingham, Ware.
- SEPTEMBER 30.**—Lauderdale Agricultural Society.—Meeting at Lander. Entries close September 25. President, The Earl of Lauderdale. Secretary, Mr. T. Broomfield, Lander.
- OCTOBER 9.**—Ludlow Agricultural Society.—Meeting at Ludlow. Entries close September 25. President, William Blakeway, Esq. Secretary, Mr. T. Weyman, Ludlow.
- OCTOBER 17 and 18.**—Herefordshire Agricultural Society.—Meeting at Hereford. Entries close September 13. President, M. Clive, Esq. Secretary, Mr. J. T. O. Fowler, Hereford.
- OCTOBER 17.**—Ayrshire Agricultural Society.—Meeting at Kilmarnock. President, The Earl of Glasgow. Secretary, Mr. J. M. Murrie, Ayr.
- NOVEMBER 1.**—Framlingham Farmers' Club.—Meeting at Framlingham. Entries close November 1. President, F. S. Corrance, Esq., M.P. Secretary, Mr. W. B. Kent, Earl Soham, Wickham Market.
- NOVEMBER 15.**—Royal Berks Root Show at Reading. Entries close November 15. Secretaries, Sutton and Sons, Reading.
- NOVEMBER 22 and 23.**—Rutland Agricultural Society.—Meeting at Oakham. Entries close November 6. President, Charles Winston Eaton, Esq. Secretary, Mr. E. Wortley, Ridlington, Uppingham.
- NOVEMBER 23 and 24.**—Chippenhams Agricultural Society.—Meeting at Chippenhams. Entries close November 17. President, Sir John Neild, Bart. Secretary, Mr. E. Little, Lanhill, Chippenhams.
- NOVEMBER 24.**—Carter & Co.'s Root Show.—At 237, High Holborn. Entries close November 15.
- NOVEMBER, 25, 27, 28, 29, and 30.**—Birmingham and Midland Counties Cattle and Poultry Show in Bingley Hall, Birmingham. Entries close October 23. President, Earl Beauchamp. Secretary, Mr. T. B. Lythall, Newstreet, Birmingham.
- DECEMBER 4, 5, 6, 7, and 8.**—Smithfield Club Fat Cattle Show, in the Agricultural Hall, Islington.—Entries close for Implements October 2; for Stock, November 1. President, The Marquis of Exeter. Secretaries, Mr. Brandreth Gibbs and Mr. D. Pullen, Half-moon Street, Piccadilly.
- DECEMBER 5, 6, and 7.**—Yorkshire Fat Stock Show, at York.—Entries close November 16. President, The Earl of Zetland. Secretary, Mr. J. Watson, Lendal Bridge, York.
- DECEMBER 6, 7, 8, and 9.**—Royal Dublin Society.—Christmas Fat Stock Show in Dublin. President, The Lord-Lieutenant of Ireland. Superintendent, Mr. A. Corrigan, Dublin.
- DECEMBER 7.**—Rugby and Dunchurch Fat Stock Show, at Rugby.—Entries close November 22. President, The Earl of Dalkeith. Secretary, Mr. E. Harris, Rugby.
- DECEMBER 12 and 13.**—Tredegar Agricultural Show.—Meeting at Newport, Monmouthshire. Entries close November 15. President, Lord Tredegar. Secretary, Mr. J. G. Palling, Newport.
- DECEMBER 12, 13, and 14.**—West of England Fat Stock Show. Meeting at Plymouth. Entries close Nov. 1. President, the Earl of Morley. Secretary, Mr. J. Moon, Athenæum-lane, Plymouth.
- DECEMBER 13.**—Rye Fat Cattle Show.—Meeting at Rye. Entries close November 29. President, Alex. B. Vidler, Esq. Secretary, Mr. H. E. Paine, Rye.
- DECEMBER 15.**—Carmarthen Cattle and Poultry Show.—Meeting at Carmarthen. Entries close Dec. 2. President, E. J. Sartoris, Esq., M.P. Secretary, Mr. D. Prosser, White House, Carmarthen.

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"Manhood.—This is truly a valuable work, and should be in the hands of young and old."—*Sunday Times*, 23rd March, 1858.

"The book under review is one calculated to warn and instruct the erring, without imparting one idea that can vitiate the mind not already tutored by the vices of which it treats."—*Naval and Military Gazette*, 1st February, 1856.

"We feel no hesitation in saying that there is no member of society by whom the book will not be found useful, whether such person hold the relation of a PARENT, PRECEPTOR, or CLERGYMAN."—*Sun*, Evening Paper.

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THOMAS BIGG, Agricultural and Veterinary Chemist, by Appointment to His late Royal Highness The Prince Consort, K.G., Leicester House, Great Dover Street, Borough, London, begs to call the attention of Farmers and Graziers to his valuable SHEEP and LAMB DIPPING COMPOSITION, which requires no Boiling, and may be used with Warm or Cold Water, for effectually destroying the Tick, Lice, and all other insects injurious to the Flock, preventing the alarming attacks of Fly and Shab, and cleansing and purifying the Skin, thereby greatly improving the Wool, both in quantity and quality, and highly contributing to the general health of the animal.

Prepared only by Thomas Bigg, Chemist, &c., at his Manufactory as above, and sold as follows, although any other quantity may be had, if required:—

4 lb. for 20 sheep, price, jar included.....	£0 2 0
6 lb. 30 ,, ,, ,, ,,	0 3 0
8 lb. 40 ,, ,, ,, ,,	0 4 0
10 lb. 50 ,, ,, ,, ,,	0 5 0
20 lb. 100 ,, ,, (cask and measure	0 10 0
30 lb. 150 ,, ,, included)	0 15 0
40 lb. 200 ,, ,, ,,	1 0 0
50 lb. 250 ,, ,, ,,	1 3 6
60 lb. 300 ,, ,, ,,	1 7 6
80 lb. 400 ,, ,, ,,	1 17 6
100 lb. 500 ,, ,, ,,	2 5 0

Should any Flockmaster prefer boiling the Composition, it will be equally effective.

MOST IMPORTANT CERTIFICATE.

From Mr. HEREPATH, the celebrated Analytical Chemist:—
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Sir,—I have submitted your Sheep Dipping Composition to analysis, and find that the ingredients are well blended, and the mixture neutral. If it is used according to the directions given, I feel satisfied, that while it effectually destroys vermin, it will not injure the hair roots (or "vulk") in the skin, the fleece, or the carcase. I think it deserves the numerous testimonials published. I am, Sir, yours respectfully,

WILLIAM HEREPATH, Sen., F.C.S., &c., &c.,
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Leicester House, Great Dover-street, Borough, London.

He would also especially call attention to his SPECIFIC, or LOTION, for the SCAB or SHAB, which will be found a certain remedy for eradicating that loathsome and ruinous disorder in Sheep, and which may be safely used in all climates, and at all seasons of the year, and to all descriptions of sheep, even ewes in lamb. Price FIVE SHILLINGS per gallon—sufficient on an average for thirty Sheep (according to the virulence of the disease); also in wine quart bottles, 1s. 3d. each.

IMPORTANT TESTIMONIAL.

"Scouton, near Hingham, Norfolk, April 16th, 1855.
"Dear Sir,—In answer to yours of the 4th inst., which would have been replied to before this had I been at home, I have much pleasure in bearing testimony to the efficacy of your invaluable 'Specific for the cure of Scab in Sheep.' The 600 sheep were all dressed in August last with 84 gallons of the 'Non-poisonous Specific,' that was so highly recommended at the Lincoln Show, and by their own dresser, the best attention being paid to the flock by my shepherd after dressing according to instructions left; but notwithstanding the Scab continued getting worse. Being determined to have the Scab cured if possible, I wrote to you for a supply of your Specific, which I received the following day; and although the weather was most severe in February during the dressing, your SPECIFIC proved itself an invaluable remedy, for in three weeks the Sheep were quite cured; and I am happy to say the young lambs are doing remarkably well at present. In conclusion, I believe it to be the safest and best remedy now in use.

"I remain, dear Sir,

"For JOHN TINGEY, Esq.,

"R. RENNEY.

"To Mr. Thomas Bigg."

"ES" Flockmasters would be well to beware of such preparations as "Non-poisonous Compositions;" it is only necessary to appeal to their good common sense and judgment to be thoroughly convinced that no "Non-poisonous" article can poison or destroy insect vermin, particularly such as the Tick, Lice, and Scab Parasites—creatures so tenacious of life. Such advertised preparations must be wholly useless, or they are not what they are represented to be.

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CHLORODYNE is the only palliative in Neuralgia, Rheumatism, Gout, Cancer, Toothache, Meningitis, &c.

From LORD FRANCIS CONYNGHAM, Mount Charles, Donegal, 11th December, 1863.
"Lord Francis Conyngnam, who this time last year bought some of Dr. J. Collis Browne's Chlorodyne from Mr. Davenport, and has found it a most wonderful medicine, would be glad to have half-a-dozen bottles sent at once to the above address."

Earl Russell communicated to the College of Physicians that he received a dispatch from Her Majesty's Consul at Manilla to the effect that Cholera has been raging fearfully, and that the ONLY remedy of any service was CHLORODYNE."
—See *Lancet*, 1st December, 1864.

CAUTION.—BEWARE OF PIRACY and IMITATIONS.

CAUTION.—Vice-Chancellor Sir W. PAGE WOOD stated that Dr. J. COLLIS BROWNE was, undoubtedly, the Inventor of CHLORODYNE; that the story of the Defendant, FREEMAN, was deliberately untrue, which, he regretted to say, had been sworn to.—See *Times*, 13th July, 1864.

Sold in Bottles at 1s. 1½d., 2s. 9d., 4s. 6d., and 11s. each. None is genuine without the words, "Dr. J. COLLIS BROWNE'S CHLORODYNE" on the Government Stamp. Overwhelming Medical Testimony accompanies each bottle.

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No. 3 Vol. XL.]

SEPTEMBER, 1871.

THIRD SERIES.

THE
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AND

MONTHLY JOURNAL

OF

THE AGRICULTURAL INTEREST.

Dedicated

TO THE

FARMERS OF THE UNITED KINGDOM.

LONDON :

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PRICE TWO SHILLINGS.





The Bull's Head

Engraved by J. G. Thompson



My Family Party

THE FARMER'S MAGAZINE.

SEPTEMBER, 1871.

PLATE I.

THE BULL'S HEAD.

The head of a Shorthorn bull should be broad and moderately lengthy, with a full open countenance, a large prominent eye, and plenty of width between the horns, where there should be a good covering of hair. The horns themselves must be strong and slightly backward, with a very gentle inclination upwards, positively upright horns being the worst of all kinds. From being broad above, the head should taper gradually towards the nose, but not too decisively, as nothing is worse than a bull with an "egg-sucking" frontispiece, as a houndsman would say; and the muzzle itself should be of a clear cream or flesh-colour. Writing a quarter of a century

since, Mr. Wright says of the Shorthorn's head, that "some prefer it to be long and lean, whilst others approve of its being thick and short;" but the long and lean head for a Shorthorn would never do in these days. Mr. Day, speaking to the merits of the famous Durham ox, says, "the head was rather long and the muzzle fine, eyes bright and prominent, with the ears long and thin." According to the print, however, the head of the Durham ox, although refined and high-bred, is too weak and delicate even for a steer, that is, to pass muster in these times.—From a Paper in the new number of *The Bath and West of England Society's Journal*.

PLATE II.

A FAMILY PARTY.

Mr. Dickson, of Nafferton, the owner of this little kennel, says, "the old bitch Nell died a few days since; she was about twelve years old, and was one of the best I ever had, both at grouse and partridges. She was by my dog Rex; and Venus and Juno are her

daughters. Venus, five years old, and very good, is by a dog that belonged to the late Mr. Bradley, of Thorpe Hall, near Burlington. Juno, two years old, and very promising, is by a dog belonging to Mr. J. Harrison, of Brandsburton Hall."

OUR WATER SUPPLY.

BY CUTHBERT W. JOHNSON, F.R.S.

The copious supply of good water is an object of the highest importance to every person. This is of peculiar interest to my readers; it is so, not only as regards the supply of good water for their live stock and their household, but they are largely interested in the supply of water to populous places. If those densely inhabited localities are badly supplied with water their drains and sewers are sure to accumulate masses of decomposing organic matters, which, by imparting to the sewage a bad

smell, renders it disagreeable to those who live near to the irrigated fields in which it is employed. The agriculturist, then, who will sooner or later have to utilize the sewage of almost all populous districts, is much interested in their being well supplied with water, and also that by the proper flushing and the even fall in their drains and sewers there should be no accumulation in them of the sewage. When, then, my reader is engaged in endeavouring to improve the health of those around him, by

giving them a supply of good water, let him first consider the quality of the water he proposes to use. Now, as I have elsewhere remarked, we need hardly remind ourselves that the primary source of all waters is the rainfall. The rain descends upon the earth, not, as was once supposed, entirely pure, but nearly so; it is the purest of all the waters of which we have to inquire, it merely containing a minute proportion of ammonia, nitric acid, and other foreign substances. It is when that rainwater descends upon the earth, and percolates our soils, that it dissolves various soluble substances, and has its purity diminished. Of river water I need hardly remark that its quality varies with the nature of the country in which its springs arise, and through which they flow. Thus the water of the Clyde contains in an imperial gallon about 9 grains of foreign matter; that of other of our rivers as follows :

The Severn	about	4	grains.
The Thames.....	"	23	"
The Ouse at Ely	"	32	"
The Lea	"	24	"
The Colne	"	21	"
The Trent.....	"	50	"
The Dee	"	4	"
The Don	"	9	"

The most general mode of supplying our farm-houses with water is from wells. The use of this kind of water even in irrigation is common in oriental countries, where a large amount of water is thus procured by either manual labour or very simple and laborious modes. That the use for irrigation of the water obtainable from wells might be very beneficially extended in suitable situations I have no reason to doubt. The amount of water thus obtainable is larger than is generally understood. There are two wells at Croydon, each of which supplies 1,000,000 gallons per day to that town; and it is from these, where the water drains from the town as sewage, that the 400 acres of land at Beddington are so well irrigated. From other wells still larger supplies of water are obtained. The reader must remember that the water of the great wells, such as that of Croydon, all contain various saline and earthy substances. Mr. Baldwin Latham has, in his valuable work on "Our Water Supply," in the following table given the results of the analysis of a gallon of five of these well-waters. No. I., London; II., Ely; III., Burton-on-Trent; IV., Croydon; and V., Braintree :

	I.	II.	III.	IV.	V.
Carbonate of lime.....	30.50	25.10	15.51	15.41	2.40
Do. of magnesia	—	—	1.70	.61	11.30
Sulphate of lime	8.20	18.36	18.96	.53	—
Do. of magnesia	—	—	9.95	—	.70
Chloride of ditto	—	.18	—	—	—
Chloride of sodium ...	12.30	10.88	10.12	1.51	44.00
Alkaline sulphates.....	14.70	16.97	7.65	1.03	—
Alkaline nitrates	16.70	28.88	—	—	12.80
Iron alumina.....	1.10	.71	.60	—	traces
Silica	—	.14	.79	.93	1.30
Organic matters... ..	—	.68	—	1.09	—
Total	83.50	101.90	65.28	21.11	72.50

The result, then, of the examinations of the water with which our lands are supplied, is full of interest and instruction. It is so, whether we regard that water as merely for the use of our houses and homesteads, or as applicable for the irrigation of our grass lands.

Secondly, having ascertained the quality of the water

we intend to use, the next important inquiry will be as to the best composition of the pipes by which we propose to distribute it. This question has recently forced itself upon the attention of the Croydon board of health, owing to the corrosion of a portion of the iron pipes in that very extensively supplied water district. In a recent report, Mr. B. Latham, the engineer to that board, has given the result of a series of valuable inquiries and experiments relating to the action of water upon pipes of different kinds. He remarks (p. 17) : " In July, 1870, I communicated with the authorities of towns having waterworks in order to ascertain as far as possible the conditions and circumstances under which water is supplied in their districts. The schedule accompanying this report is compiled from information received, and it contains the particulars of the waterworks and supply of 166 towns. With regard to the points upon which information is sought, specially with a view to our guidance in adopting proper measures for the prevention of the waste of water, the first question that arises is that of materials used in the construction of the service pipes. On an examination of the schedule, it will be found that out of the whole number of towns the answer from 87 is, that wrought-iron service pipes decay, or are not used on that account, while in 25 towns the answer is doubtful, or they have had "no experience." In 11 towns they do not decay, or the decay has not been observed. In the case of 25 towns the use of iron for service pipes is recommended, and from 18 towns no answer is given to this question. The number of towns included in the schedule in which iron service pipes are either partially or entirely used is 68. In 43 towns the decay of wrought-iron service pipes is reported to lead to the waste of water. Of 35 towns, using both iron and lead services, 25 report that iron is condemned and lead preferred. In 7 towns the result is doubtful, and in 3 only is wrought iron recommended for use, and these three are but small places, in which the experience is very limited. With regard to lead pipes, out of 130 towns in which lead service pipes are used, 89 report that no decay takes place. In 24 towns no decay takes place, except when the pipes are laid in ashes, marl, clay, lime rubbish, some clay soils, coal-ash, mortar, lime, cinders, salt refuse, slag, or sulphurous refuse. In 37 towns lead is subject to slight decay from the action of the soil, or other causes. In 39 towns in which the waste of water arises from the decay of lead, 31 show that decay is due to special causes, and the waste is reported to be very slight, and the occasional when it occurs very rare. Where waste of water does take place from lead pipes, it is reported as arising more frequently from the insufficiency of the strength of the pipe to bear the pressure than from any other cause, and which may be easily guarded against if pipes of sufficient weight are used. With regard to the durability of various kinds of pipes, I have made experiments with lead, tin-lined lead, composition, block tin, plain iron, Lavenant enamelled iron tube, enamelled iron, and galvanised iron tubes. For the purpose of these experiments, a portion of soil was taken from a district in Croydon known to have an effect upon pipes when laid in it. A small quantity of the earth was placed in an earthenware jar, and two short lengths of pipes were buried in it, the action taking place in the soil through a long period, being artificially produced by distilled water, containing a small percentage of nitric acid. After 40 days' standing, the order in which the pipes stood the test was as follows : Block tin, lead, enamelled iron tube (Imperial Tube Company's, Birmingham), tin-lined lead, composition, Lavenant enamelled iron tube, plain iron tube, galvanised iron tube. The following table shows the loss of weight of each specimen during the period of trial, which was in all cases 40 days :

Description.	Weight of specimen before treatment.	Loss in grains.
Block-tin pipe	944	nil.
Block-tin pipe	1,412	nil.
Lead pipe	4,125	nil.
Lead pipe	7,036	nil.
Enamelled iron pipe.....	2,469	nil.
Enamelled iron pipe.....	3,395	nil.
Tinned-lined lead pipe	2,913	nil.
Tinned-lined lead pipe	3,778	1
Composition pipe	1,662	1
Composition pipe	2,438	$\frac{1}{2}$
Lavenant enamelled iron pipe	2,096	2
Lavenant enamelled iron pipe	3,092	1
Galvanized iron pipe	2,035	6
Galvanized iron pipe	3,428	8
Plain iron pipe	2,336	5
Plain iron pipe	3,261	4

“From this table it will be seen that block-tin is the best material that can be used, but its great expense would preclude its general use. Next in order stands lead, and third, thickly enamelled iron tube, and last in the order of merit stand iron and galvanized iron tubes. The pipes were also submitted to further test by being allowed to remain in prepared water for 40 days, when the result was conclusively shown that the materials now used in Croydon—viz., plain and galvanized iron tubes—are the most destructible materials that can be used for the purpose.”

Having considered the best composition of the pipes employed to distribute the water, the next question is the probable amount of the supply required. That inquiry divides itself into two portions, viz., first, the amount that is used, but not wasted, and secondly, the amount wasted either wilfully or by leakages. On the first subdivision of our inquiry Mr. Latham reports as follows—and his remarks will be of the highest value to other places):

“In order to test the efficiency of the water waste preventive cistern a district was formed in Croydon, in which this system is imperfectly adopted. This district comprised 241 houses, 63 of which were empty. There were 1,062 inhabitants, and the water was distributed by 246 bibcocks, and to 246 water closets having water waste preventive cisterns. The experiments commenced on the 17th of September, 1870. During the first week 190,500 gallons passed through the meter, the rate of consumption being 25.74 gallons per head per day. After this week the fittings were examined. Between the 17th of September and 16th of October 577,900 gallons were used in 30 days, being at the rate of 18.13 gallons per head per day. Between the 16th of October and 16th of November 426,900 gallons were used, being at the rate of 12.96 gallons per head per day. Between the 13th of November and 16th of December 432,900 gallons were used in 30 days, being at the rate of 13.55 gallons per head per day. In the 91 days of this experiment 1,437,700 gallons passed through the meter, being at the rate of 14.87 gallons per head per day, as against 37.38 gallons per head at the same period in the Old Town district in which the water-waste preventive cisterns are not used. So far as the accuracy of the results is concerned, the experiment was in favour of the Old Town district, where all the fittings were in use by the inhabitants. While in the Linden Road district, the fittings of 63 uninhabited houses might lead to a waste of water, which would be distributed over the inhabitants who actually occupied the district. In order to test the matter still further, I had a short time since meters placed at the house of Mr. Thomas Walker, the Surveyor of the Local Board; also on a service pipe supplying ten houses in St. Peter's Road, and

at my own house in Wellesley Road. Each of these houses was fitted with water-waste preventive cisterns, and the apparatus was in perfect order. Between the 16th of March and the 31st of March, 1871, I found the quantity of water consumed by 59 people in the ten houses in St. Peter's Road was 4,690 gallons, being at the rate of not quite 5 gallons per head per day. In Mr. Walker's house in St. James's Road 410 gallons of water were used, being at the rate of about 3 gallons per head per day of the inhabitants occupying the house. At my own house 730 gallons were used, being at the rate of 5 gallons per head per day of the persons occupying the house. In the autumn of 1869, 13 gallons per head per day were used at my house for domestic purposes, and for watering garden with hose. These results show that, with proper fittings, and with water-waste preventive cisterns, the consumption of water may be reduced to a point far below the present rate of consumption.”

Having thus seen the amount of water legitimately needed for domestic purposes, lastly let us see the amount which, in the case of Croydon, is lost by waste. Here the reader should understand that the water is distributed through iron pipes, is obtained from two wells sunk into the chalk formation, and this supply is nearly constant. On this head let us again hear Mr. Latham. He tells us: “On the 7th April, 1868, I reported that it was expedient that steps should be taken for ascertaining the cause of the waste of water, with a view to take some measures for its suppression. At that period the total quantity of water supplied in the district was at the rate of fifty-six gallons per head per day of the population. I recommended then, as I had previously done in 1864, to introduce, in connection with the water-closets, water waste-preventing cisterns, and since this latter period water waste-preventing cisterns have been used in all new property, but the old property is still supplied with the original fittings. In accordance with the recommendations of that report I was authorised to make an examination of the public water-mains of Croydon, with a view to detect, as far as possible, what amount of leakage (if any) was taking place on the public mains. The result of that examination turned out that in the older parts of the town about one per cent. of the joints of the water-mains was found to be, more or less, defective, but no large quantity of water was found in any one case to escape. Therefore it appeared to me that the quantity of water wasted from leakage of the joints of the water-mains was small, and could not be taken into account as furnishing conclusive evidence that the waste of water was due to the leakage of the public mains. Further inquiries were instituted on the 23rd and 24th May, 1868, with a view to arrive at the quantity of water then wasted, and it was found that between the hours of twelve on Sunday night and three A.M. on Monday 225,000 gallons of water were pumped, yet only 40,150 gallons were stored, showing that in the three quiet hours of Sunday evening, when there could be but little legitimate consumption, 184,850 gallons of water were lost, and as this loss probably represented the waste going on throughout the whole twenty-four hours it showed that 1,478,000, or nearly one-and-a-half million gallons of water were then lost, or illegitimately used. In order to ascertain accurately the waste and the supply during various periods of the day, on Monday, the 24th day of April, 1871, I caused observations to be made during every hour of the day and night, by which the exact consumption of water taking place was accurately ascertained. The following table shows the rate of supply during twenty-four hours, commencing at twelve o'clock at night, and terminating at twelve o'clock the next night, the supply of water being continuously on the district during the whole period:

Time.	Consumption in district.
12 midnight	Gallons.
1 A.M.	101,697
2 "	104,778
3 "	104,613
4 "	104,182
5 "	104,552
6 "	104,642
7 "	107,615
8 "	119,032
9 "	127,359
10 "	145,585
11 "	156,278
12 noon	139,711
1 P.M.	129,576
2 "	133,017
3 "	136,453
4 "	119,349
5 "	131,407
6 "	114,787
7 "	115,536
8 "	115,124
9 "	114,101
10 "	110,038
11 "	109,323
12 midnight	109,189

Total 2,861,244

" N.B.—The total consumption is at the rate of 57·22 gallons per head per day in the whole district."

As clearly indicating the waste of water which takes place in almost all places supplied with water on the constant system, it will be observed by the return that nearly as much water was supplied during some of the dead hours of the night as during a corresponding period in the daytime.

And then as to the expense of supplying water to a populous district or for irrigation—the following table, by Mr. Latham, shows the cost of waterworks in 35 towns, principally supplied from wells by pumping, for each 1,000 gallons of water daily supplied :

No.	Town.	£	No.	Town.	£
1.	Ryde	169	19.	Braintree.....	50
2.	Wolverhampton.....	125	20.	Stourbridge.....	48
3.	Liverpool.....	121	21.	Lincoln.....	47
4.	Tunbridge Wells.....	120	22.	Chelmsford.....	46
5.	Tynemouth.....	113	23.	Bridlington.....	45
6.	Gosport.....	94	24.	Enfield.....	40
7.	Uxbridge.....	91	25.	St. Helen's.....	40
8.	Guildford.....	90	26.	Leominster.....	40
9.	Hastings.....	80	27.	Ormskirk.....	40
10.	Rotherham.....	80	28.	Saffron Walden.....	40
11.	Deal.....	71	29.	Coventry.....	38
12.	New River, London	71	30.	Hartlepool.....	37
13.	Cambridge.....	62	31.	Margate.....	34
14.	Staffordshire Pot- teries.....	61	32.	Hull.....	30
15.	Brighton.....	61	33.	Exeter, St. Thomas	27
16.	Colchester.....	60	34.	Croydon.....	27
17.	Wallasey.....	55	35.	Salisbury.....	23
18.	Ventnor.....	53			
				Average cost.....	£63·68

To the members of other boards of health I recommend those most valuable facts. They are the result of laborious and persevering inquiries, whose importance can hardly be rated too highly. Upon the bad results of an impure, or insufficient supply of water to the farmers' live stock, I need hardly enlarge. Equally needless is it to be reminded of the effect of impure water upon ourselves; for we all know how ague is wont to haunt the dwellers in marshy districts, and how gastric-fever and cholera victimise those who consume the impure water which in some districts have been obtained from wells or streams.

THE FARM LABOURER'S WAGES.

Comparisons have often been drawn between the ascertained wages of certain occupations, and upon such data elaborate calculations have been worked out which have resulted in the accumulated figures that are supposed to represent the nearest approach that can be made, by the most careful statisticians, of the total earnings of the labour classes of the nation. The different pecuniary results of the multifarious callings must always be treated in reference to certain subsidiary advantages or disadvantages attached to such callings, and therefore it is difficult to arrive at any abstract opinion upon the relative merits of any one in particular. This consideration is apparent when we apply the test to money earnings in towns by mechanics, where the cost of living is enhanced; or taking a wider range to embrace the colonies, where climate and the inconveniences attached to the life of a settler must be regarded in the light of a set-off against the higher rates gained. The circumstances of early associations and predilections will always incline men either to the pursuit of agriculture, the closer employment of the factory and workshop, or to the more hazardous engagements of the sea; therefore, whatever may be the relative chances of success, there must always remain a large number of persons who are compelled to follow either one or other of these callings. And when we ascend the social scale, and consider the gains of the merchant or the professional man, we are met with the like considerations, although greatly intensified in degree,

by the wider divergence between the emoluments and the distinctions belonging to the higher vocations.

From the return made to Parliament by Mr. Goschen, we are enabled to take a bird's eye view of the earnings of the agricultural population, as shown during the Lady Day quarter of the past year; and whilst so doing it is necessary to bear in mind that this quarter cannot be considered as giving the most favourable aspect to the subject. The south-eastern division, which lies south of London, between the Thames and the sea, and from Thanet extends westward beyond the Southampton waters, comprises an essentially agricultural district, although the coast swarms with a seafaring population. The soil is rich in fruits, grain, hops, and pasture, and here the labourers earn from 10s. to 15s. per week, the women from 3s. to 7s. 6d., and children 3s. to 5s. During harvest the men earn by task-work from 15s. to 20s., with the addition of a little beer given gratuitously. Shepherds receive from 16s. to 20s., but no harvest money; and these, with carters, generally have a cottage rent free, or 1s. a week additional, but they are never on task-work. In several parts—the Romsey Marsh in particular—labour had been generally in excess of the demand, and much distress had arisen consequent upon the inclemency of the season.

The south-midland division consists of eight fine agricultural and pastoral counties, amongst which are Herts, Bedford, and Cambridge, where the population are

chiefly engaged in agriculture. Here the men earn from 10s. to 14s. per week, the women 4s. to 6s., and children 2s. 6d. to 5s. The season was dull for the agricultural labourer. Some men earn more than the sums stated, at draining, hedging, thrashing, and getting up of root crops; they have, however, to find tools. Horse-keepers, shepherds, and herdsmen have privileges in most instances, which considerably enhance their weekly pay. At Peterborough we are informed the earnings in harvest for a man, wife, and three children averaged £7 10s. during the month, the total for the year £35 16s.; most men living on farms are allowed to set potatoes on the farm, averaging one sack of seed, they finding labour. In the counties of Essex, Suffolk, and Norfolk where the land for centuries has yielded in abundance grain, fruit, and vegetables, the scale was low, wages for men being from 10s. to 12s., for women 3s. 6d. to 6s., and children 2s. to 6s. At task work the men earn from 12s. to 16s.; this does not include harvest wages, which as a rule average £6 for the month, and about 22s. 6d. allowed for beer. Some men, however, when they take their harvest as task work, earn as much as £8 10s. and £9 for it. The wages of children increase according to age and capability, varying from 2s. to 6s., up to the age of 16, when in all cases they are classed as women. The average rent of labourers' cottages at Depwade, in Norfolk, is given at 1s. 6d. per week, and this includes a garden. The pay of the labourer does not appear to be commensurate with the general features of agriculture in the district, which may be accounted for by the absence of the competition of other occupations.

The south-western division, which lies far west of the metropolis, skirting the Welsh counties, and terminating at the Land's End, contains Devon and Cornwall, equally well known for their rich agricultural products as well as their copper and tin mines. There is also an important manufacturing region round Bradford, in Wilts. Here the wages of the men employed in the fields average from 8s. 6d. to 11s.; women, 3s. 6d. to 6s.; and children, 2s. to 6s. In some parts of Wilts we are told that the very light crops of grass have been severely felt by the labouring poor. More young men have been standing idle about the streets than were ever seen at this season of the year. At North Tawton, in Devon, most of the women are employed at the woollen manufactory, and in some of the neighbouring parishes they are also so employed: their wages vary from 6s. to 8s. per week. At Tiverton the children are mostly living in the farmhouses, and are provided with meat, drink, and lodging, while at all places cider is given daily. We are told that it is exceedingly unusual to see a woman working in agriculture, except in the haymaking or turnip-hoeing time; and very few children are thus employed, except when living as indoor servants. Eight hours constitute the day's work.

The west-midland division includes land generally fertile and well watered. It can boast of two breeds of sheep—Cotswold and Shropshire Downs, while in Hereford it can boast of its cattle. The manufactures founded in the Potteries, and, still more, the metal industry of Birmingham, and what is also called the Black Country, enveloped in smoke, offer openings to industry. Here we find in agriculture the men earned from 9s. to 13s.; the women, 4s. to 5s.; and children, 2s. to 6s. In Gloucestershire carters, cowmen, and shepherds generally earn about 12s. per week, with frequently a cottage

and garden at small rent or rent free, with a daily allowance of cider. In Hereford, besides the cottage and garden, there is a gift of about ten stones of bacon at Christmas; and in many districts there are perquisites, such as milk from the farm. The women when tying hops earn considerably more than the average wages, although the amount is not stated, and children earn from 3s. to 5s. In Staffordshire during the two winter quarters it is customary for farmers to give their labourers food: in some parishes it is a practice to give labourers 6s. per week and their maintenance. This is stated to be a bad principle, as the wives and children are very badly off under this arrangement. In some parts of Worcestershire the wages of the labourers are not reduced, yet more and more are every day unemployed. This is attributed to the low price of agricultural produce putting a stop to all improvements. It is not uncommon for many to be out of work in the winter, but at the season when the return was taken there was more employment than hands able to do it. In the smaller division of the north-midlands the average of the men was from 12s. to 14s., women 2s. 8d. to 7s. 6d., children 2s. to 6s. At Melton Mowbray one of the respondents to the questions states that one of his men has considerably more than £40 a year, looking over stock on Sunday, and his second labourer £40 a year, cottage rent free, and a large garden. At Newark the wage of an ordinary labourer is and has been for some time 13s. 6d.; but at task work, such as wheat-hoeing, they have been earning 18s. to 21s. The women as a rule only work about a month in the year, and that is the month of June; pea-pulling 1s. 3d. per day is the rule. Children under 16 are very scarce and fully employed; a boy of 16 would take £9 per year and bed and board.

In the counties of Cheshire and Lancaster, where salt and cheese are the main products, the wages of men were 7s. to 15s.; women, 4s. to 9s.; children, 1s. 6d. to 6s. In the neighbourhood of Crewe, we are told, where the works of the London and North Western Railway are carried on, the agricultural labourer derives advantages in earning high wages, viz., 15s. per week. At Clitheroe, where the wages are only 7s., the same are paid throughout the year, and the engagement is for that time: this includes food and lodging; and at Garstang, we are informed the farmers generally dine with their servants. In the great Ridings of Yorkshire the men earn from 12s. to 17s., women 5s. to 7s., and children 2s. 6d. to 6s.; whilst in the Northern Division, which includes the coal fields of Durham and the lakes of Cumberland, the wages of men are from 9s. to 18s., women 5s. to 7s. 6d., and children 3s. to 6s. At Darlington the agricultural labour is principally performed by "hinds," to whom an allowance of wheat and potatoes is very often made; they also live rent free, and have their coals led free of charge.

The Welsh division depends much upon its pastoral and agricultural industry, the mutton is a well-known product, and the wool of the sheep makes excellent flannels. Here the agricultural labourer receives from 10s. to 16s. 6d., women 4s. to 6s., and children 3s. to 7s. This closes our cursory review of the earnings of the rural population in the Unions of England and Wales, leaving the sources we have mentioned open to any further inquiry for local purposes.

THE EXPERIENCES OF AN AMATEUR FARMER.

In the paper on 'THE WORKING OF THE DAIRY,' in our last number, "The Northern Farmer" described a farm which he had visited at Staleybridge, the proprietor of which has since furnished us with some further particulars of the system here adopted.]

I cannot help saying that but for the fortunate circumstance of having a constant supply of manure in quantity comparatively unlimited, I would have had but little success either in growing roots or feeding cattle. With plenty of dung, he must be a poor farmer indeed who cannot raise crops of all kinds successfully, and have a considerable margin to himself after paying all men 20s. in the pound. Without this it is much better to give up tillage altogether, as the attempt to grow crops without plenty of manure is quite as senseless as to rear young animals on food meagre in quality and insufficient in quantity, a man's whole lifetime being in such a case a continual struggle. I have had this season 1,200 tons of town dung, the most of which I have used for growing cabbages, mangolds, and turnips. So convinced am I of the good qualities of this kind of manure, that on twelve acres of green crop I have not given it the slightest assistance in the way of artificials. As a top-dressing for pastures it is unrivalled, and this for a two-fold reason: First, in its excellent fertilizing properties; and, second, in its being in such a state of comminution, it is brought into contact with the roots of the grasses whenever it gets a shower of rain, the good qualities of the manure coming thus into operation without the slightest delay. I have given up growing corn, finding roots and grasses to pay for the best. I have received over £7 per acre for the seeds on a field, the soil of which is naturally poor and open, the crop cut and carted off early in the season, long before the rye-grass was in flower, thus rendering the after-grass especially valuable. From the continuously high-feeding of the land the grass becomes capable of being fed decidedly earlier every season, and this with climatic disadvantages of no small amount. This season I put my cows on excellent pasture on the 8th of April, a most unusual thing in this district, on which account I had many visitors to judge for themselves whether the cattle really had anything to eat, few people about here ever thinking of doing anything in the way of improving their pastures. On 22 acres I have 20 cows and 7 horses, and they have always plenty to eat. In addition to the grass I give every cow 5lbs. of meal and cake. To vary the diet I would be disposed to give a small feed of grain; but my cows have actually turned against this article of food, probably from continual high feeding. I find rape-cake very difficult to be had of good quality, and in consequence linseed, although dearer by the ton, becomes actually the cheapest of the two in the end, as there is no waste and no accident following its use. Inferior rape-cake is of a very heating quality, inducing swelled legs and other injurious consequences in the cattle partaking of it. I had no less than five cows of one time so lame as to be scarcely able to go out and in, had rape-cake being undoubtedly the cause of the injury, as they recovered immediately on the cake being withdrawn. My stock of dairy-cows is at present 20, their united produce amounting to 210 quarts daily. For high feeding, I find cows on their fourth calf to suit much the best, the profit being considerably over that made by younger cattle, and this for several reasons. They are first of all just in their

prime for milk, and give a large flow for a very long time when the food is succulent, rich, and abundant. Second reason, they finish off for the butcher to much greater weights than younger cows, and yet are not past the age when the price per cwt. would be lessened on account of deterioration of quality. It is astonishing how long a cow will continue to milk profitably if well fed and not permitted to get in calf. I have a cow which I purchased twelve months ago for £21, and her daily produce measured by itself, is still over the average of the whole. My experience of cow-keeping is, that where there is a ready market for the milk at a high price, it does not pay to take the slightest trouble in rearing young cattle, purchasing heavy cows in their prime, however high the figure, being far the most profitable, and moreover, one's labours and energies are concentrated on one object, a great help to success in any business. I may remark further, however, that these will not make much money, either if their feeding is grudging or in any way curtailed; they must be kept constantly full and the appetite even tempted by a change of food. The constant high feeding thickens the flesh so much, that the animals change completely in character and appearance, eventually becoming so weighty that they bring up to £10 more when parted with than they cost when bought in. This goes a long way in helping the profit of cow-keeping, paying a considerable part, if not at times actually the whole of the purchased food. In no case is a loss on the first cost admissible, unless it occurs accidentally, as such management could scarcely fail of turning out a very bad business indeed. The manure made by highly fed cattle is a point in aiding success; which should on no account be overlooked, as by its aid immense crops of roots and cabbages can be grown, and that too on very poor land naturally. On this account the bedding should not be stinted, as however good in quality the droppings of the cattle may be, some bulk is required when applied to the land, and even if straw has to be purchased, its value is so great when soaked with rich urine as to far more than counterbalance the expense of procuring it. With regard to the growth of cabbages on a portion of the green crop break, much depends on the facility for procuring manure, as unless it is given with no sparing hand, those going extensively into it for the first time may experience considerable disappointment in the result. This plant is a very gross feeder, filling the soil with a mass of fibres, and growing with extraordinary vigour, when the land is well worked and filled with manure. Unless therefore these conditions are fulfilled to the very letter, it is better to put in some other crop. I do not think the value of the cabbage as a field-plant is at present appreciated as it ought to be in this country, but still believe its cultivation is extending, and that the time is not far distant when agriculturists of every grade will acknowledge its value, and make its cultivation a source of profit. When liberally treated there is no other plant that I am aware of, capable of giving such a large monetary return, and, if used on the farm, such a large amount of food for stock. Few people like to name the sum this vegetable is capable of making when sold in open market—the amount looks so improbable by comparison; yet the fact remains that it is simply enormous. A neighbour of mine put in 20,000 plants to the acre, and sold them this spring and early summer at 1s. 6d. to 2s. per

dozen in the Manchester market. Assuming a very large margin to be deficient of the original number when brought to market, through defective planting, ravages of slugs, or severity of the weather, there surely ought still to be sufficient left to make over £100 in cash, even if the lowest price be taken as the average. The number named may appear large, but setting them out in rows two feet apart, and one foot distance in the rows, takes about 21,000, and for early cabbages there is no necessity for having them wider. With the large drumheads it is, however, quite different; they must have room, from 26 to 28 inches being a useful distance each way, admitting the drill-grubber both lengthways and across, and giving them a chance of attaining a large size. Encouraged by last season's success, I have planted nine acres with cabbages, putting in 80,000 plants, or about 9,000 to the statute acre as nearly as could be managed, which gives ample room for cultivation. In planting them, I feel no desire to get over the ground all in a hurry, preferring to

take a little time and secure as regular a plant as possible. The spade is a very safe implement, making a slit, inserting the plant, and finishing off with pressure of the foot. When the land is moderately free from stones, and in moist condition, the operation can be very successfully performed with the setting-pin, a smart and careful man accustomed to the work doing them both speedily and well. The great plenty of valuable food which is obtainable from a few acres of cabbages must be seen to be properly understood or even believed, all the domestic animals, not excepting the horse, eating them with the greatest avidity, either in a raw or boiled state, and thriving proportionately. For the feeding of sheep and dairy stock they are especially applicable, the butter made in the depth of winter, when this food is largely used, being sweet and good, and quite free from the unpleasant taste which makes turnip butter almost worthless.

J. W.

THE GROWTH OF TOBACCO.

Amongst the many resources that India contains may be reckoned the cultivation of the tobacco plant, and it seems strange, with the varieties of soils and climates well suited to so many kinds of vegetable productions, that she has not hitherto supplied us with a better description of tobacco. The example of France, Germany, and Austria, where the acclimatisation of American varieties having been carried out successfully on a large scale proves that, provided the trials be made in the same systematic and persevering manner, a similar process will succeed in India, where more favourable conditions of climate frequently prevail. The attention of the Government having been engaged in effecting a reform in this branch of agriculture, there has recently been published a report by Dr. Forbes Watson, of the Product Department, accompanied with extracts from a treatise by Mr. J. Mandis, inspector for the purchase of tobacco in Austria. The latter contain a minute description of the method of cultivating and preparing, which has been found to yield the most satisfactory results. Mr. Mandis speaks from a long personal acquaintance with and experience of the cultivation of tobacco in Holland, and in the various provinces of Austria, where tobacco is grown very extensively, about 160,000 acres being devoted to the purpose, and yielding a yearly crop of about 40,000 tons. The conditions and circumstances attending the industry of Austria present some points of resemblance to those occurring in India. The districts devoted to the growth of tobacco in Austria are situated principally in Hungary and Galicia, where the soil is similar in many respects to that of large districts in India, and the climate very continental and dry. Although the mode is still to a great extent in a very backward state, the quality and quantity of the produce satisfy the internal wants: there, as in India, the improved and extended cultivation is principally insisted on with a view to an export into foreign countries. In both cases a large share in the reform to be brought about must devolve on the action of the Government, and the principal obstacle is the ignorance and want of agricultural skill and of capital among the tobacco planters.

What are considered favourable conditions for the culture of tobacco by the native farmer in India, are in no way an indication of the conditions necessary for ensuring the successful culture of varieties for the European market;

and therefore, the new trials ought to be made without too much deference to Indian experience. The characteristics of the best known sorts are so directly in opposition to those most esteemed by the natives, that in all experiments with new seeds it is not sufficient to choose what are considered by the ryot good tobacco soils, proper cultivation, &c., but rather to use other soils and a different culture. Even in India, however, the mode of culture is far from being uniform; although, according to testimony, the tobacco is usually grown on the richest and heaviest soil. In some districts, as Rungpore, as also in Java, sandy tracts and rich sandy soils are especially selected for the cultivation; and in Arracan, where one of the best Indian tobaccos is grown, the too rich soils are avoided, as, probably owing to the excessive formation of albuminous compounds, the tobacco grown on them is not considered good, and will not burn properly. In Europe the climate is such as not to allow of the full attainment of the original aroma, although in this respect the plant raised in Austria is favourably distinguished; but the diversity of climate in India ought to enable the acclimatised plant to be put under conditions similar to those existing in the country where it is indigenous. The Havannah sorts require, in their latter stage of growth, the full effect of sunlight, in order to develop the aromatic substance. At the same time, a plant so leafy and bulky as tobacco will always want a considerable amount of moisture. In order to bring out these qualities, much importance is attached to the choice of a district which presents the greatest similarity to that of Cuba.

The rotation of crops and careful manuring are indispensable, whilst the gathering and cutting of the tobacco ought to be done at several successive periods, selecting each time only the perfectly ripe leaves. Carelessness in this respect is one of the greatest defects in the cultivation of tobacco as practised in India. Throughout Europe, in the United States, in Cuba, and in the districts where the best Turkish is grown, the gathering does not take place at once, but extends over a long period, the leaves being taken one by one as each gets ripe. The consequences are almost equally fatal if one portion is gathered while yet unripe, such having a disposition to decompose, or another portion when over-ripe, which present the appearance of an unpleasant light colour. The most delicate and difficult process consists in the

curing, when certain chemical changes take place. The conditions which must be fulfilled in order to ensure good curing are distinctly stated in the manual for the guidance of the Indian ryot, as well as the proper manner of sorting, packing, and arrangement for the market. These latter operations, which are performed at various periods during the curing of the tobacco, and usually terminate at the end of the drying, cannot of course influence the essential quality of the produce, although they may be requisite to ensure commercial success. The cultivator must ultimately rely for success upon a commodity in all respects technically faultless, and that will satisfy the exigencies of the European markets. The production of prime quality must, however, be the end kept in view, and in this manner it will be possible, not only to produce acclimatised varieties of tobacco fit for European markets, but, by force of example, the whole native cultivation will be brought to a high degree of excellence. This involves nothing less than the reform of a considerable branch of agriculture—a reform not only profitable from an agricultural point of view, by raising the value of one of the Indian staples, but of substituting the more aromatic varieties for those which at present exercise a deleterious influence upon the system. The possibility of growing superior varieties must be demonstrated practically, and this not only in a few garden experiments, but on the same scale and in the same manner

as it is to be conducted by the producer. This can only be accomplished by means of farms under the charge of practical agriculturists who can give the subject the full care it requires.

The similarity between the proposed culture of tobacco and that which has been successfully carried out in the case of tea, is very great. In both instances the object aimed at is the production of a leaf containing certain active principles and combining certain conditions as regards strength and aroma; and even the processes in the final preparation of the leaves are in some measure analogous, and certainly require as much nicety of manipulation in the one case as in the other. More than this, the conditions under which the experiments in the tobacco will have to be conducted are far more favourable to their success and to their economical importance than was the case in the parallel instance of tea. Tea was an entirely new culture—the popular interest in it had to be created; whereas thousands of acres are already devoted to the cultivation of tobacco, and a vast mass of people are already interested in everything which affects the commerce in one of their chief articles of production. There is little doubt that if once the more enterprising agriculturists adopt improvements in order to produce an article of export, their example will spread, and that the whole cultivation will, in time, be put upon a new footing.

THE LAND LAWS OF ENGLAND.

"Much of the land of England," says Mr. Caird, writing just after the conclusion of his survey through the agricultural districts in 1851—"a far greater proportion of it than is generally believed—" (before the evidence of Mr. Pusey's committee the estates under settlement were estimated as exceeding two thirds of the kingdom) "is in the possession of tenants for life so heavily burthened with settlement encumbrances that they have not the means of improving the land which they are obliged to hold. It would be a waste of space to dilate on the public and private disadvantages thus occasioned; for they are acknowledged by all who have studied the subject, and seriously felt by those who are affected by it. A neglected property in this country, the *nominal owner* of which is incapable from his embarrassments of improving it, will not be looked at by tenants of capital; and tenants of limited means on such a property must be overborne in unrestricted competition with farmers of capital, cultivating land where every convenience and accommodation which an unencumbered landlord finds it his interest to give has been supplied." The reactive and life-like nature of the soil makes it a tell-tale, in the long run, of the laws under which it is placed, and by which it is governed. And it cannot be made the subject of unwise legislation in the hands of the Owner, any more than bad husbandry in those of the Tenant, without developing results which reach, unhappily, beyond these classes, to the injury of all connected with or employed upon it, though innocent (as in the case of the labourer) and even ignorant of the originating cause of the mischief. The trust which its ownership brings, as well as its occupation (if these are divided), is enforced by penalties as inexorable as those of natural law. The pressure of the responsibility increases with every step in agricultural advancement, till the rights of one age become the wrongs of another. Modes of settlement, carving out the proprietary interest into a series of limited estates "for life," and "in remainder," each in succession barren of power and of motive to meet the wants, the improvements, the discoveries of the time, present a very different aspect to the same thing before the rivalry of the farm was a world struggle. The increased energy and activity of the tenant demand the outlay of capital by the landlord before his own can be safely thrown into the partnership; for such the relation practically is in England,

and such it must become wherever the English system prevails. The "expenses" of land are the familiar theme of every man of business. Nothing is more common than to hear the wealthy and unfettered fee-simple owner complain of the voracious demands of his *landed* property, for buildings, draining, cottages, and other necessary improvements exacted by the time; and those who give most attention to the debtor and creditor history of their estates are best alive to the fact that landed property has become more like a business than a mere income. It is so; and, in a certain sense, it ought to be so. The soil was not meant for idle enjoyment even by its unoccupying owner. The dilemma of land without the capital to meet its claims exactly opposes "the Settlement" to its original object, for it harnesses the fettered with the free, and endangers a catastrophe by the very links that were forged to prevent it. Yet this must inevitably be the case under a system where entail, extending to the unborn, permits, and may even be said to encourage, the inconsistent practice of at once burthening the estate with all the charges of "the family," "the creditor" and its own expenses, and tying-up the hand of the heir upon whom the whole administration must devolve. It is difficult under such circumstances to resist the conclusion which declares itself against that part of the practice of entail which launches the "daring creation of an impossible foresight" upon a cruise into futurity in search of *the unborn*. "Any number of lives *in being*" is a phrase that suggests the obvious limit of human prudence; and, in the settlement of land, has the advantage of presenting the principle of a natural term, where the responsibility, and with it the right of each generation ends.

That the practice of Entail should be reconciled with the best principles of estate management is of the utmost importance, if only because it constitutes the modern substitute for the feudal rule which devolved the inheritance of land upon the eldest male. This law has survived the system to which it owed its introduction into this country; operating, indeed, only in cases of intestacy or disputed claim, but exercising a far more mischievous influence in propping up the barrier which the great innovator Time renders every day more artificial and absurd between a "real" and "personal" estate, and dishonouring an old and favoured national custom by the retention of an

exclusive and invidious law in the case of land, in the face of equal division in every other form of property.

So long as land, in its feudal relations, was a thing out of commerce altogether, when Commerce itself had scarcely an existence, no special inconvenience resulted from laws restricting its alienation or its succession; but when, in the progress of national wealth, it has lost its speciality as the only "property," and has become simply one of the forms of invested wealth, the incoherence of two principles of succession, one of which recognises no difference of sex or order of birth, like our law of personal intestacy, while the other devolves the whole inheritance upon the first-born male, produces endless litigation, intricacy of legal distinction, and even uncertainty of decision, that will hereafter be looked upon as one of the most curious episodes in the juridical history of this country. "No human laws," says Blackstone, "are of any validity if contrary to the law of nature; and such of them as are valid derive all their authority mediately or immediately from this original." But next to a law based on no principle at all, the worst conceivable is one that attempts to embody two conflicting principles into one code, confusing the public sense of right; for, what is law if it be not a Rule of Right, its index-finger clear for all to read, and not pointing two ways?

Volumes have been written, the highest authorities in political economy appealed to, proposals made Session after Session in the House of Commons, the practice of every civilised country in the world cited (with one or two exceptions, which fortify the rule they seem to infringe), in order to remove this straggling waif of an extinct system from our law. The prevailing influence which has deferred its removal has been the fear of the subdivision of the land, by the breaking-up of estates. As things suggest their extreme opposites by a well-known natural law, this fear has been intensified by that portion of the Code Napoleon which, on the other side of the English Channel, has parcelled out French soil by a law which subjects the testamentary power of the parent to the number of his children, dividing his estate accordingly. This arbitrary *morcellament* is pictured as the inevitable alternative; as though the interspace of freedom and true principle which lies, broad as the channel itself, between the two, were lost to sight, or had no existence. Hasty and unfounded assumptions of evil results from "peasant proprietaries" are readily accepted, which if true would be immaterial to the question of the removal of a law which, anomalous itself, can only come into operation by intestacies, which its abrogation would render still more rare; a law which, when it does operate, "makes a will for a man which anyone of its supporters would deem it an insult to be accused of making for himself." They who really value the *Custom of primogeniture*—a practice in this country centuries older than that law, and likely long to survive it—should, in true consistency, banish from public view its hideous effigy, which presents the hard lineaments of exclusive heredity in the most revolting form—that of disinheriting to all but one, leaving the widow, the helpless daughters, and the other sons destitute. Its condemnation is pronounced by nothing more strikingly than by the practice of the primogenitary class, for no well-known settlement ever omits to make provision for the widow, and the younger children.

It is the unfortunate peculiarity of laws governing the distribution of land, that their effect upon the life and welfare of the community, unlike those causes which directly touch the personal freedom or convenience of individuals, is often obscure, lying remote from their consequences; like that class of poisons which, received into the circulation, enter the tissues of the body without detection, to be recognised only in the concrete form of diseased structure. The evils are slow of cure that reach men thus indirectly, and have to wait upon opinion. Such is the character of this law. It passes innocuously through the upper stratum of large proprietors, where the absence of family entail—its almost universal substitute—is extremely rare; where it alights, when it does so, is generally upon those small and unpretending acreages, whose owners have found it possible to marry without a settlement and die without a will, a class of proprietors upon whose surviving families it works the greatest hardship, who are often as ignorant of its existence as they are innocent of primogenitary intention. The instances of singular hardship among such intestates cited by Mr. Locke King in his repeated introduction of the Bill to the House of Commons have been sometimes met by the trite reply that "extreme cases make bad law." The converse

is the truth here; it is the bad law; and only the law, that makes the extreme cases; and its extinction would obviate a scandal to our landed system which rarely, if ever, arises under the operation of the custom of primogeniture as arising by deed or will. It may be hoped that the majority obtained in the House of Commons during the last session in favour of the Bill which Mr. Locke King has so consistently kept before the legislature indicates a change of view not confined to the mere narrow issue involved in the clauses of the Bill. The popular arguments which enter into its debate have often obscured the far more important question that it governs, forming, as it does, the basis of the obsolete distinction expressed in English law by the words "real" and "personal," a distinction more expressively indicated by the terms movable and immovable, which have passed from the Roman law into other European systems.

But if the limited ownership resulting from our system of entail be unfavourable to the investment of capital by the proprietor, it is yet commonly thought that under the security of a lease there is nothing to prevent it on the part of the occupying tenant. Most well-drawn settlements contain leasing powers extending to twenty-one years; and it is often said that the freedom of contract between the owner and occupier leaves the parties at liberty to make what arrangements they please. But even here one of the worst vestiges of feudal law meets us again. By the statute of Gloucester (6 Edw. I.) the maxim was established *Quicquid plantatur solo, solo cedit*, which took away all claim of the tenant over every addition he had annexed to or incorporated with the land the moment that his interest, whether yearly or by lease, expired. Under the misapplied name of "Waste," he was even forbidden to erect any building upon land where there was none before, or to convert one kind of edifice into another, even of improved value to the estate. Exceptions were soon made, after the passing of the statute, in favour of Trade; and Lord Holt is reported to have said that trade fixtures were even recoverable by Common Law. But the statute has always operated with full severity against the tenant in agriculture, whose property is thus confiscated in any engine or machine annexed to the soil, though for the express purposes of the farm, and without which it could not be profitably occupied. It would be difficult to conceive a law more injurious to the very party in whose favour it was made; and probably there is none in the whole range of land legislation by which the proprietor has suffered more loss than by this. The temptation to outlay upon land by the occupier even under short leases is always disproportionately great—far beyond what the tenure seems to justify; and, generally speaking, no one knows so well as himself what is required. A law the very opposite to that above referred to, and encouraging a regular system of valuation for addition and improvement by the tenant, would be the most salutary for the interests of all parties, and would have added millions sterling to the landed wealth of the country. It would hardly be too much to say of this law that it has lain like a cankerworm at the root of the whole question of landlord and tenant, wherever that question indicates adverse instead of united interests. It is obvious almost to a truism that, next to the occupation of the owner himself, the occupation that most resembles ownership must, by the imperative laws equally of the soil and of human instinct, be the most profitable to both parties by the *uninterrupted* progress of improvement and addition to the land. The expense of keeping up a high state of cultivation is small, compared with that of *restoring* it; and the national loss is almost incalculable which the "beggarly out" of farms has occasioned under the influence of the motives brought into action by this law. No tenant ever under lease would lay out money in improvements which he must leave behind him, on the estate of another, unless he felt sure of such increased profits during his term as would repay him; and therefore it is that under short leases and yearly tenancies the land is rarely cultivated to its full extent. Moderation of charge in case of actual change of tenancy would be generally ensured by the fact that every addition made by the occupier is far more valuable *in situ* than after removal. The recommendation of the Real-Property Committee of the Law Amendment Society was strongly in favour of an alteration of the law in this particular. The words of their Report on this point state:

"That the law with respect to things affixed to the freehold is different and more beneficial to the tenant as regards the an-

nexations made for the purposes of *trade* than those made for the purposes of *agriculture*; an outgoing tenant being permitted in many cases to remove the former when erected by himself, but not the latter."

The practical effect of what may be called the feudal law of Fixtures as still subsisting, is that the parties to the supposed contract meet each other scarcely upon fair and equal terms. A lease even for twenty-one years, underlain by a law that confiscates to the lessor whatever is left unremoved or *unexhausted* (to adopt the infelicitous expression of common use) upon the land by the lessee, is somewhat deceptive in operation, because it includes in the term those years near its effluxion during which productive outlay has to be withdrawn, and the "mill works half time;" and of necessity restricts all investment to that which can be withdrawn within the term. The evidence of one of the witnesses (Mr. Owen, a Berkshire land agent) given before Mr. Pusey's committee on Agricultural Customs, put this matter in a true light:

"I am convinced of this, that were landlords cannot make improvements, there are so many cases where the tenant has the means of making them, that he could make them very much to his advantage, and very much to the landlord's advantage; because I consider that, under the present system in our country of letting farms, farms are what we call 'beggared out.' There is not a farm that I have re-let, but every tenant who has quitted has taken everything out of the farm that he possibly could. If a system could be laid down where that never could be allowed to be done, and any outlay that the tenant had made upon that property, whether they were improvements by building or manure, he should have the certainty of being repaid for them, I think the benefit would be immense, both to the landlord, and the tenant, and the public."

Under the existing system operating over the greater part of the land in this kingdom, it is a difficult matter to say who there really is possessing such an interest in the soil as to enable or even justify the full amount of profitable investment. The ostensible owner, usually a tenant for life, cannot make it for the reasons before noticed; the remainder-man cannot make it, because he is not in possession. The "tenant-farmer" cannot do it, because he, at best, is only a holder for a term of years, which every year brings nearer to its conclusion. The whole system of landed settlement is founded upon laws and habits unconnected with the needs of modern agriculture.

To an *occupier*, whether of lands or tenements, life-tenure is the one which offers the highest inducement to make every necessary outlay and improvement. The uncertainty of life is one which each individual construes favourably to himself, under the influence of that useful feeling, which has been said, with as much truth as poetry, to make "all men think all men mortal but themselves." But to the owner who is *not* the occupier, the case is exactly reversed: here the calculation of life operates for the avoidance of all that diminishes the *annual return*; and even necessary repairs are apt to be postponed. On the other hand, a lease for years, even though the term may exceed the probable duration of the life of the lessee, is always looked upon in reference to its effluxion; the average "expectation" (to use a technical expression) of a 21 years' lease is only 10½ years. Now, by the system pursued in agricultural tenure both these principles of action are violated. The occupier, holding for a period which the law recognises only as a chattel interest, is dissociated from that desire of improvement common in the case of a life interest; and the *life-owner*, uninterested in the occupation, funds his account to lie in a direction equally negative to permanent investment. Such is the formal position of the parties. The varieties of circumstance and locality modify it greatly; and the ordinary amount of capital employed in farming, where drainage and other improvements are not required, enables the system to work smoothly enough to hide the defects of the machinery. But where heavy outlay is required, as where embankments, arterial and other drainage, inclosure, expensive irrigation, road-making, and other permanent additions are needed, the want of a capitalist soon discloses itself. It would be impossible, under such circumstance, to undertake any work of heavy and protracted outlay where the annual returns did not, as in a farm, meet, if not far exceed, the current outlay. Government drainage-grants and land-improvement companies thus rose up, in evidence, that life-tenure forbade the employment of capital upon settled estates. The immediate benefit

conferred by the machinery of these grants is no proof of the political wisdom of the system. The work is done; but the relief, like that known to medical science under the name of local remedy, is followed by a recurring "local liability." The power to follow up the enlarged business growing out of the loaned investment will, in most cases, devolve upon the tenant. That a public company, itself borrowing public money, should have to be invoked to help a landowner to carry on the business of his own estate, would offer a singular commentary upon the state of the English land-laws, to a person unformed of the cause. And of this we may be sure, that wherever a series of supplementary devices manifests itself, in order to meet a state of things at variance with the progress of the time, it indicates the undercurrent of a law struggling against worn-out barriers that will not long be able to withstand it.

In no other country is there known to exist any parallel to the system of land tenancy prevailing so commonly in England, by which the relations between the owner and occupier are comprehended in the expressive phrase, "a good understanding." It has been construed severely by some as a compact of selfish interests; politics, and game, on one side, undisturbed tenure and rent on the other, and stigmatised as a sorry substitute for leases. More favourable critics have seen and eulogised in it the evidence of a mutual trust rarely exemplified, and equally honourable to both parties in the unwritten contract. It scarcely merits either the blame or the praise. Leases were common upon most English estates down to the period of the war at the close of the last century, when the extraordinary and rapid rise in the prices of produce and value of land took place, and continued to advance throughout the war, causing a complete disruption of all previous calculations. The collapse that occurred at the close of the war in 1815, followed by the extreme uncertainty which marked the Corn Law period of the next thirty years, sustained the interruption, though from an opposite cause. Yearly tenancy thus became for more than half a century the almost inevitable alternative of a period when agricultural prices, and political apprehensions, alike uncertain, scarcely allowed of any but provisional terms; and tenants as well as owners were willing to stand loose from permanent engagements, not knowing what a year might bring forth; believing that no skill or foresight could reduce future prospects to calculation, for the fixed and unelastic terms of a lease. The Corn-law question is gone; but the "good understanding" survives the causes that gave it origin. It has, however, this defect, that as it offers no banking security, it increases the dependence of the English as compared with the Scotch tenant, and the analogy which in this respect exists between his own holding and that of the owner who has to play the banker's part. In both, the nature of the tenure discourages the outlay of private capital by those who possess it, and prevents the employment of loaned capital by those who would borrow it. The effect of this upon the condition of the labourer will be presently noticed.

In Scotland, the predominance of leases, though not of earlier date, has been more systematic, and was preserved with less interruption during the period affected by the circumstances above named, than in England. Several distinct causes have conduced to this: the difference resulting from a climate less favourable to speculative excess in the growth of grain, and less influenced therefore by a system of legislation based on the market value of that produce; a more diffused education giving clearer views of the practical value of leases, coupled with their available use, and recognition by bankers, as security for advances of capital to the leaseholder; the power to heirs of entail (under the Montgomery Act) to charge the estates for their own improvement—all these causes combined have produced a very characteristic difference in the land system of our northern neighbours, and a more commercial and business-like independence in the general economy of landed and farm management.

In Ireland the land question has a history of its own, a history that presents the most deplorable and in some respects the strangest issues that ever in any country have darkened the problem of the vicarial occupation of land.

It is too much forgotten that this relation of man with man is one for which Nature has made no provision. No appeal lies to any innate sense, as in that of the parental, filial, or fraternal instinct, in aid of the tie, conjunctive or disjunctive, as the case may prove, that unites—or confronts—the interests

of men under the factitious relation of proprietor and occupier. It is one that bows to no sentiment, nor tolerates even the un-sound ring of a faulty metaphor. "We pull in the same boat," said the English landlord to his tenant, when rents hung quivering upon the Corn-law Debates. "Yes, but in opposite directions," was the humorous retort. There was a vein of truth in the reply, that is ever at hand, to show itself on the surface when occasion calls. "The land laws of Ireland," it is often remarked, "are the same as those of England;" where large estates have made large farms, and large farms have in their turn produced a gigantic manufacture of machines and labour-saving implements, unknown to former times or other countries, itself reacting upon a system whose broad-scale cultivation is finally quoted, perhaps too exclusively, as the perfection of agriculture.

It is true that the laws are the same. But there is an old adage of authority, that "different laws well administered are better than good laws badly administered." If England has exemplified the first category, in the sister island has been seen the worst of both.

By the presence of the wealthy English proprietor amongst his tenants, by the example—sometimes the warning—of his own experimental farm, by the introduction of the last "new and improved" machine, and the best blood, by the intelligent and kindly intercourse (not confined to the "stumpy courtesies of mules") pervading the estate as from a central focus, by his heavy bills for farm repairs, constantly occasioning some visitation of his own, by the mason and carpenter never so alert, or the steward never so ubiquitous; by these more commonplaces of an English landlord's life, what laws, however awkward and rusty, could fail to move lightly on well-oiled hinges? What does the tenant, in such a case, think or care about the "land laws?" What are they to him more than the night-wind that whistles through the keyhole of his well-warmed dwelling, erected—like everything else upon the farm except the very corn-ricks—by his landlord, and at a cost whose yearly *interest*, exclusive of repairs, is a running item "written off" by the hand of Time, in the silent partnership that meets his own investment in the soil.

Now take away all this; substitute, one cannot say its "opposite"—the picture of its mere *absence*—in every particular; open the Pandora's box, and let out all the ills that

follow the "curse of absenteeism," the rack-rent, the often unfurnished farm, with its lean kine, and fossil implements, the dismal dirty cabin; and let the same wind blow upon the scene, upon "this picture and on that." Would it be possible, out of the same bare elements, to create a greater contrast? under the "same laws" to produce more opposite effects?

But a contrast no less striking lies in this, that whilst in England the aggregation of land under the influence of entails has tended to create large farms; on the other hand it has been under these very laws that the worst evils that have ever been associated with small holdings of land, as seen in the cottier system of Ireland, have grown up, and led to results that reached their climax in the Encumbered Estates Court, and the Potato famine; whilst no such results have been ever exemplified or heard of in those countries, and they are many, whose laws are favourable instead of adverse to the distribution of land (in the sense understood by political economy). Yet that which looks so like a paradox, is as due to the simple laws of cause and effect as anything can be which the history of land teaches. The solution lies in the well-known fact that men treat what is their own in one way, and what is another man's in another way; that what is a man's own teaches him *care* and *economy*, while in dealing with that which is another's he learns indifference and waste.

Let Ireland on the one hand, and Belgium (or Prussia, since the introduction of Stein's system), on the other, be taken as illustrations. In the former were to be seen immense estates held, and let at second hand, by "middle men;" and let and sublet again, like a sporadic growth generating its kind, till it reached, if it *did* reach, its unit in the potato-patch. In the latter, the law which facilitates and cheapens purchase, to the small equally with the large buyer, beginning, *at the small end*, so to speak, sets at work the self-interest, and care, and prudence, of every individual who can buy, no matter what the quantity. The result shows itself in the conduct and character of a whole people. In each case the land reflects like a mirror the motives set to work upon it. Take away the individual sense of property, and the opposite result is seen. Arthur Young's often-quoted words underlie the whole question. —From a Paper by Mr. C. Wren Hoskyns, M.P., in *Systems of Land Tenure in Various Countries*.

SEWAGE FARMING.

During the sittings of the British Association Mr. Grantham, chairman of the Committee on the Treatment and Utilization of Sewage, gave in a report of the proceedings. The committee was originally appointed at Norwich in 1865, and was reappointed at Exeter in 1869, and again at Liverpool in 1870. Upon its reappointment at Liverpool last September the committee proceeded at once to consider the subjects which seemed to demand immediate attention, in furtherance of the investigations which had been entrusted to it. The first steps taken were to endeavour to procure information from the towns where works have been constructed for the application of sewage to land by irrigation, and from the places where the dry earth, or Moule's system, was in operation. In order to commence the inquiry a list of towns was prepared, to which a printed form of queries was sent, but only eight places had answered the circular on irrigation, and only one that related to the dry earth process. During the construction of the present tanks at Breton's farm, in the winter, very accurate observations could not be made; but, nevertheless, during the extreme frost, samples were taken of the sewage, and of the effluent water. The temperature of both, and also the atmosphere, were observed. Similar observations were made at Croydon and Norwood. The observations as to the quantity and quality of the sewage and effluent water had been taken at Breton's farm, with slight interruptions as stated above, from the meeting of the British Association at Liverpool down to the present time. The times of sowing and planting the several crops had also been recorded. The committee had visited several sewage farms, and examined the various methods that were pursued at them,

with a view to determining the practical conditions upon which the success of sewage farming depended. They had had samples of sewage and of effluent water collected, and had had analyses made of them. The phosphate process of Messrs. Forbes and Price had been also examined by a member of the committee. Analyses of the soil which had passed once and twice through earth closets had been furnished by another member. An ox which had been fed for the previous twenty-two months entirely on sewage-grown produce was slaughtered on July 15th, at Breton's farm, and the carcass examined by Dr. Cobbold and Professors Marshall and Corfield, in the presence of several members of the committee, with a view to ascertain the presence or absence of entozoa in any stage of their existence. The carriers at the Earlswood sewage farm had also been examined.

Mr. HOPE gave in a report on the experiments made at Breton's farm. In the 373 days from June 12th, 1870, to July 15th, 1871, the amount of town sewage received was 85,999,445 gallons, giving an average of 230,562 gallons. The effluent water discharged on to the farm in the same period amounted to 39,440,178 gallons, giving an average of 115,013 gallons. The diluted sewage pumped on to the farm was 96,944,653 gallons, giving an average of 264,876. The temperature of the sewage and effluent water was found to be very uniform as compared with that of the air, being lower during extreme heat and higher during extreme cold. This was very noticeable during the severe frost of last winter.

A report was read on the sewage of farms at Tunbridge. Four points required to be noticed in connexion with the sewage from Tunbridge Wells; firstly, in the selection of the

land to be irrigated, it had been made a *sine qua non* condition that it should be at such a level that the sewage should reach it by gravitation, and to this end two farms had been laid out, one to the north and the other to the south of the town, and an outfall sewer made to each; secondly, the total absence of underground drainage from a large portion of the land, and the adoption of peculiar arrangements where underground drainage previously existed; thirdly, the distribution of the sewage by what is known as the catch-water system, which is necessarily accompanied by an overflow, in preference to its distribution in smaller quantities, sufficient to satisfy the demand of vegetation, and to wet the land thoroughly without any overflow; and, fourthly, the absence of certain reservoirs which necessitates the continuous application of the sewage to some parts of the land by night as by day. The soil of nearly the whole of the northern farm was of a clayey character, manifestly requiring an under drainage. The land of the southern farm was not generally of quite as heavy a description as that of the northern, though parts of it contained much clay. Some parts were peaty, and naturally very poor. The results of the operations that had been carried out elicited the necessity of combining with the services of the chemist and engineer that of the agriculturist. The striking features in these cases were, first, that instead of concentrating the sewage at one farm under one management, it had been divided into two parts; second, that the main conduits and carriers had been expensively constructed; third, the character of the under drainage necessarily prevented the deep working of the soil, and was unfavourable to the complete and uniform aeration of the soil, which ensure the oxidation of the organic matters contained in the sewage; and, fourth, the distribution of the sewage was unequal, both in quantity and quality. Dr. Corfield gave in a report in reference to the sewage and effluent water used on the Tunbridge farms. In regard to the northern farm, he stated that it appeared that the sewage from the main, while containing a comparatively small amount of solid matter in solution, contained a very large proportion of actual ammonia, and also of albumenoid ammonia, when both the suspended and the dissolved matters were taken into account. It was a rich sewage, whether the proportion of nitrogenous matters to the total solids or to the bulk of the sewage itself was considered. The absence of nitrates and nitrites in the effluent water showed the want of continuous oxidation, so that the purification of the sewage on this farm, although considerable, was not so satisfactory as could be wished, or as might be effected by making filtration through the soil an essential feature in the process. The results arrived at the southern farm were very unsatisfactory, but at the same time very reliable. The analyses showed distinctly that as these two farms were at present managed, more sewage was applied than could be purified. The temperature of the effluent water of the northern farm was only slightly below that of the sewage, while the effluent water of the southern farm was actually half a degree warmer than the sewage, which clearly showed that the sewage had not been subjected to that clarifying which percolating through soil entailed.

A report was read on the phosphate process of Messrs. Forbes and Price, in operation at Tottenham. The sewage, after passing through some depositing tanks, which had been constructed for the lime process, was pumped up at the rate of 800 or 1,000 gallons per minute, along a carrier into a tank 100 yards long, and of gradually increasing breadth. This tank took three hours to fill. As the sewage passed along the carrier, the chemicals were mixed with it thus: Two boxes were placed over the carrier—one a few yards farther along it than the other; the first contained the phosphate mixture, and the second milk of lime; men were continually stirring the contents of each box, which were allowed to run continuously into the sewage as it passed beneath the boxes. The amount of preparation added was not ascertained, but it was stated to be certainly much less than the proportion indicated by previous experiments (1 ton to 500,000 gallons of sewage). The result of this preparation was to deodorize the sewage to a very considerable extent indeed, and when some of it was placed in a precipitating glass and allowed to stand, a speedy separation of the suspended matters took place. The milk of lime was added to precipitate the excess of phosphate added, and just sufficient milk of lime was allowed to flow in to neutralize the sewage, the reaction of which to test paper was obtained from time to time after the addition of the milk of lime. During the passage

of the sewage thus treated through the large tank, the suspended matters were very completely deposited, and the supernatant body ran over the sloping edge of the tank at its extreme end, bright and clear, and almost odourless. Some of this water was collected, and was kept sealed up in a stone jar until July 24, when it was analyzed by Dr. Russel. It was found, after the interval of four months, quite sweet and without smell. The suspended matter was in very small quantity, and consisted merely of a little whitish flocculent matter—doubtless lime, due to the slight excess used on the day when the sample was collected. The water was quite clear, and only on looking through a considerable depth could a brownish tint be detected. The analysis of it showed that it contained as much actual ammonia as ordinary dilute London sewage, and also a certain amount of albumenoid ammonia. It contained the merest trace of phosphoric acid, as indicated by the molybdate of ammonia test, and no sulphurate hydrogen, nor any nitrates or nitrites. Some of the deposit had been taken out of the tank, and was drying in a shed, the water which separated from it forming little pools on the surface of the moss. Both this water and the precipitate itself were free from all offensive smell. It appears, then, that the suspended matters were entirely removed by this process, but the actual ammonia, and, to a certain extent, the soluble organic matters, were entirely removed from the sewage when oxidized; but an odourless precipitate was produced, which contained all the phosphate added, and contained it, doubtless, in the form of flocculent phosphate of alumina, the value of which as a manure was somewhat doubtful, being certainly not as great as the value of corresponding quantities of flocculent phosphate of lime. The valuable constituents of sewage, with the exception of the suspended matter and the phosphate acid, were not precipitated by this process, and could not be utilized unless the effluent were afterwards used for irrigation, in which case the milk of lime would not be added, and the clarified sewage would still contain a quantity of phosphoric acid. The advantages of its use, if it were found to answer from an economical point of view, would be the deodorisation of the deposit in the tanks and of the sewage itself, which was certainly at present a great desideratum, especially as regarded the tank.

Mr. HOPE read a report in regard to the irrigation works carried on at Earlswood farm. It appeared to the committee that as the sub-soil was kept in a saturated condition, by the want of under-drainage, certain atmospheric conditions must exist which might be attended by malarias more or less provocative of disease. On the 15th July, 1871, it was found that more leakage passed off the land at the outfall, than there was sewage delivered to it. A quantity of the sewage was delivered to Mr. Cooke, for the purpose of analysing it and the result showed that there was a great many animal organisms present in the mud; but there was nothing found likely to prove detrimental to life.

Professor CORFIELD stated that the examination of an ox referred to above as having been killed on Breton's farm, proved the perfect freedom of that animal from internal parasites of any kind. He attributed this result to the fact that the beast had not grazed on the farm, but was fed on vegetables carried from the land; and to the porous nature of the soil and the remarkable absence of insect forms of life in the soil. In Lancaster, the only town where the dry system was in operation, it had not been found possible to carry it out in the way intended, and consequently the result had not been very satisfactory. Some of the manure was applied to soil at the rate of 6 tons to an acre, and it yielded 2 tons of hay to an acre—a result not very remarkable.

Mr. WANKLYN called attention to the dirtiness of the effluent waters, as shown by the figures submitted by Dr. Corfield, observing that it was as dirty as Thames water taken at London Bridge. He condemned the omission from the report of all notice of the excess in which nitrogen gas escaped, and further, to the generally unsatisfactory nature of the analyses.

Mr. LEIGHTON pointed out a grave defect in the report—viz., that no mention was made of what is known as Weare's process, in use at Newcastle-under-Lyne, and which may be distinguished from the plans of irrigation and precipitation as that of filtration. The principal article there used as a filtering medium is charcoal, which every chemist knows to be the best deodoriser which can be applied. The question of the treatment of sewage requires, for its satisfactory solution, two

results—first, that the effluent water shall be pure; and second, that this shall be done economically. Now, as to the first point, the effluent water, according to Weare's process, is far purer than that of the best that has been named as resulting from irrigation; and as regards the second, the process can be carried out at a large profit. It is obvious that irrigation, in its most perfect form, can be applied only where the neighbouring land is exceptionally suitable. For general application it is entirely unsuitable. Even under the best circumstances it gives a surplus of manure to a small area of land, and leaves the rest of the country starved of necessary fructifying elements. By Weare's process, on the contrary, the whole of the valuable properties of the sewage is arrested and manufactured into a form capable of distribution over the whole country in a perfectly innocuous form. By it, in fact, the circle is completed, the elements withdrawn from the country in the form of food are again returned to it in the form of manure—and the value of the manure has been deter-

mined by practical experience. The farmers who used it the previous year were so satisfied with its results that the applications for it were this year far greater than could be met. The company could have sold six times the quantity their works were able to produce. And when it is mentioned that the cost of the materials used, and of their manipulation, does not exceed £2 per ton, while the manure sells readily for £4 per ton, the economy of the process becomes manifest. Moreover, it is capable of universal application. It is a mere question of the multiplication of works. The results are in all respects superior to any which have been exhibited in the reports we have just heard, and as the object of the appointment of a committee of the British Association was to obtain information on the best methods of the utilization of sewage, he hoped that next year the omission he had now pointed out would be supplied.

In course of further discussion it was alleged that the dry earth system had not received a fair trial.

THE SHORTHORN IN AMERICA.

The United States and Canada have been mutually benefited by imported cattle. Before the civil war broke out the Canadians gave great prices at the Southern Shows, and encouraged American breeders. During the war prices declined, and breeders in the troubled districts were not only glad to realise at low figures, but many sent their cattle away for safety into the quieter States. When peace was restored the demand for good cattle arose, and a duty of twenty per cent. on the declared value was charged on all animals going from Canada to the States; yet Mr. Cochrane's great importations, in the teeth of this restriction, commenced soon after; and the celebrity of the cattle was so great that the public in great numbers came many miles, during the summer and autumn, to see them. Many drove long distances, brought provisions, and after inspecting the stock, begged hot water and picniced beneath the plane and maple trees that encircle the homestead at Hillhurst. Notwithstanding the duty a large trade was done with the Americans, and the high prices given by them have, doubtless, had a great influence during the last three years on prices in this country. This duty was withdrawn during the present spring, and all cattle for breeding purposes are now imported into America free. In the New England States great attention is paid to the dairy properties of Shorthorns, though the barren nature of much of the soil, and the exhaustion that even that has undergone, renders breeding a difficult and uphill course. Mr. Augustus Whitman of Fitchburg, Massachusetts, has a large herd of pedigree Shorthorns kept especially for milk. Some are of the Knightley Rosy tribe, and others of the Sockburn and Princess families, which have been much esteemed in the district on account of their dairy properties, though they have become somewhat light fleshed. They are nearly all heavy milkers. Sixth Duke of Thorndale, a fine light roan bull, was here. The food is steamed, and a mixture of chaff and shorts, with corn and oil meals, are given daily with 5lbs. of long hay; it is all carefully weighed before being served out, the quantity of milk given by each cow measured, and every animal is weighed the first of each month. The calves get new milk for three or four weeks, and afterwards porridge of meals and milk. The milk is sent into Boston, and sold at three halfpence a quart in summer and twopence halfpenny in winter. The Herd Book is published by Mr. Lewis F. Allen of Buffalo, and the tenth volume has just appeared. It is prepared very nearly on the same plan as the English book, but more profusely illustrated. The first volume, with which is given a history of the breed, was brought out, partially through the instigation of Mr. Clay, in 1846, but there was little support on account of the low prices and general depression in agriculture, and the second volume did not appear until nine years afterwards. In 1857, the third volume was issued, in which several errors that had inadvertently crept into the previous volumes were corrected. The volumes during the war were small and the sixth contains the least number of pedigrees. Since then the trade increased, and the entries were returned so fast that the volumes are now issued almost annually; Vol. ix. is in two

parts, and contains over five thousand pedigrees, but unlike the English book, many of the contributors are not subscribers, and the work is not pecuniarily successful, although about four shillings are charged for each pedigree and two guineas for the volume. Continuous numbers are given to the bulls, but the English volumes are necessary to thoroughly investigate a pedigree. Breeders in America, like those in this country, are greatly indebted to those who undertake a laborious, tedious work, requiring the utmost vigilance and care. A stranger, accustomed to the "roast beef of old England," will possibly notice in the States the absence of fat and flavour in the beef, and often it is both lean and tough. There are several causes for this. An Australian, having large herds in New South Wales, remarked that the large droves of cattle which he saw travelling on the roads in the Western States to market were not near so fat as those on the runs in his native country. The natural prairie grasses being somewhat long and coarse, have, probably, not great fattening properties; and the leanness of the buffalo meat, which when young is uncommonly good, in a degree corroborates this. The "quality" or "handle," so greatly considered by our old-established breeders here, is not so closely studied on the other side, where many of the animals are thin handlers. Moreover, the great distances that many cattle travel before they are slaughtered somewhat affects both the quantity and the quality of the meat. Beef and pork are chiefly eaten, and fetch almost the same market value, namely, from sevenpence to ninepence per pound, and they are generally under the English price. Mutton is not so much consumed, and Americans when in England frequently remark that our lamb and mutton are fuller of flavour than their own. Many bulls are now being sold to cross the Texas cattle, which are brought up from that immense State to graze in the better districts of Kansas, whence they are sent off at five to six years old. These cattle are mostly yellow in colour, with black noses and long horns; they are deep in the body but rather narrow, and not large in size; the crops are good, loins broad, and quarters rough and uneven; one bull calf is saved to every ten heifers, and they are generally marked on the ear, and branded. The best cows weigh about 800 to 1,000lbs., and fetch from three halfpence to twopence per lb. live weight, in Chicago market. From their appearance a good thick Shorthorn bull, with fine quality would make a wonderful improvement among them, and a few of the more enlightened are beginning this plan; if pursued, it will open out a wonderful bull trade among the breeders in the Western States, where two or three good herds, Mr. Pickereil, Mr. Isles', and others are already established. The railway truck system is not good, and this was borne in forcibly upon me by a ride of several hours in a cattle train in the entire absence of any other conveyance. After travelling about one hundred and fifty miles, or about every twenty-four hours, the cattle are unloaded at certain stations, fed, watered, and rested, but they usually lose 100lbs. or more in weight before reaching their destination. A "cattle palace car" has been invented, like the improved trucks recently exhibited at the Highland Society's

Dumfries Meeting, but as yet neither have come into general use. The stock yards at Chicago are of immense size and laid out in large square wooden pens, where the cattle are placed untied. Thirteen railway companies have sidings into them. In 1869, 403,000 head of cattle was received, and 5,246 was the largest number in one day. Mr. Griffiths publishes an annual report of the live-stock trade of Chicago. It is now the great emporium for the packing of beef and pork, and about 2,000 pigs are killed and dressed daily, and by a great division of labour, in a very quick time. The market price of beef generally rules the prices of Shorthorns, which have been very variable in America. From 1833 to 1838 prices were high and colour not so much considered, even whites would sell well, but during the next ten years they declined, and good heifers could be bought at 12 to 15 gs. each. In 1853 prices rose, and at one of the Kentucky importation sales Lord Feversham's bull Diamond (11357) sold for 6,001 dollars (about 1,200 guineas); another bull Challenger went for 4,850 dollars (about 970 gs.), and the celebrated cow Mazurka realised 3,050 dollars or about 610 gs. 1857 was a year of commercial disasters; prices fell, and the war breaking out soon afterwards they were as low as in 1850. Since 1867 they have greatly risen, and a young bull the Eleventh Duke of Geneva has just been sold to two Kentuckian breeders, from the New York Mills herd for 6,000 dollars (1,200 gs.). Mr. Cochrane of Canada has also paid and received large sums. A fine red

bull calf, the produce of Duchess 97th, for which he gave Capt. Gunter 1,000 gs., has been sold to Col. Kingscote, an English breeder, for 800 gs., and two heifers calves, the produce of Duchesses 101st and 103rd, for which 2,500 gs. were paid, have been sold to the Earl of Dunmore to come back to England for the same sums that the dams cost; with them are also purchased two heifers of the Oxford tribe, and two of the Red Rose tribe at equally high prices. Mr. Cheney, of Gaddesby, also imported in 1869 two Duchess heifers and a bull calf for 2,500 gs., and has recently completed the purchase of three Oxford heifers from Messrs. Wallcot and Campbell. These prices indicate the demand there is both in England and America for animals of fashionable blood; though they doubtless stimulate and encourage Shorthorn breeding as well as show the abundant wealth and great interest taken in good cattle by some of the leading men in each country, yet they have a tendency, by their extreme value, to hinder selection and prevent that fine judgment, by which the earlier breeders brought the best tribes to such great excellence. It is likewise thought that the taste of rich Americans is now tending more to country life and farming as in England, and that consequently for some time to come the demand for Shorthorn and other cattle is likely to be great, especially, too, as the railway system is bringing into direct communication immense grazing districts in the Western States, and vast tracts of country are coming daily into cultivation.—*Thornton's Circular.*

THE MOUNTING OF CAVALRY.

Count Rumford attempted some years since an experiment to improve the breed of horses in Bavaria, of which the following is his account: A number of fine mares were purchased with money taken from the military chest, and being marked with an M (the initial of *Military*), in a circle upon the left hip, with a hot iron, they were given to such of the peasants, owning or leasing farms proper for breeding good horses, as applied for them. The conditions upon which these brood mares were given away were as follows: They were, in the first place, given away *gratis*, and the person who received one of these mares is allowed to consider her as his own property, and use her in any kind of work he thinks proper; he is, however, obliged not only to keep her, and not to sell her, or give her away, but he is also under obligations to keep her as a *brood mare*, and to have her regularly covered every season by a stallion pointed out to him by the commissioners, who are put at the head of this establishment. If she dies, he must replace her with another *brood mare*, which must be approved by the commissioners, and then marked. If one of these mares should be found not to bring good colts, or to have any blemish, or essential fault or imperfection, she may be changed for another. The stallions which are provided for these mares, and which are under the care of the commissioners, are provided *gratis*, and the foals are the sole property of those who keep the mares, and they may sell them, or dispose of them, when and where, and in any way they may think proper, in the same manner as they dispose of any other foal, brought by any other mare. In case the army should be obliged to take the field, *and in no other case whatever*, those who are in possession of these mares are obliged either to return them, or to furnish, for the use of the army, another horse fit for the service of the artillery. The advantages of this arrangement to the army are obvious. In the case of an emergency, horses are always at hand, and these horses, being bought in time of peace, cost much less than it would be necessary to pay for them, were they to be purchased in a hurry upon the breaking out of a war, upon which occasions they are always dear, and sometimes not to be had for money. It may, perhaps, be objected, that the money being laid out so long before the horses are wanted, the loss of the interest of the purchase-money ought to be taken into the account; but as large sums of money must always be kept in readiness in the military chest, to enable the army to take the field suddenly, in case it should be necessary, and as a part of this

money must be employed in the purchase of horses, it may as well be laid out beforehand, as to lie dead in the military chest till the horses are actually wanted, consequently the objection is not well founded. I wish I could say that this measure had been completely successful; but I am obliged to own that it has not answered my expectations. Six hundred mares only were at first ordered to be purchased and distributed; but I had hopes of seeing that number augmented soon to as many thousands; and I had even flattered myself with an idea of the possibility of placing in this manner among the peasants, and consequently having constantly in readiness, without any expense, a sufficient number of horses for the whole army—for the cavalry as well as for the artillery and baggage; and I had formed a plan for collecting together and exercising, every year, such of these horses as were destined for the service of the cavalry, and for permitting their riders to go on furlough with their horses; in short, my views went to the forming of an arrangement, very economical, and in many respects similar to that of the ancient feudal military system; but the obstinacy of the peasantry prevented these measures being carried into execution. Very few of them could be prevailed upon to accept of these horses; and in proportion as the terms upon which they were offered to them were apparently advantageous, their suspicions were increased, and they never would be persuaded that there was not some trick at the bottom of the scheme to overreach them. It is possible that their suspicions were not a little increased by the malicious insinuations of persons, who, from motives too obvious to require any explanation, took great pains at that time to render abortive every public undertaking in which I was engaged. But be that as it may, the fact is, I could never find means to remove these suspicions entirely, and I met with so much difficulty in carrying the measure into execution, that I was induced at last to abandon it, or rather to postpone its execution to a more favourable moment. Some few mares (two or three hundred) were placed in different parts of the country, and some very fine colts have been produced from them during the six years that have elapsed since this institution was formed; but these slow advances do not satisfy the ardour of my zeal for improvement; and if means are not found to accelerate them, Bavaria, with all her natural advantages for breeding fine horses, must be obliged, for many years to come, to continue to import horses from foreign countries.

SETTING MILK FOR CREAM.

I have something to say about the newly-recommended method of setting milk for cream in very deep vessels. The result is so manifest that it does not seem worth while to wait longer before stating it. Taking it all in all, I regard it as the most important improvement in butter-making that has come up in my time. I have just completed the plans and specifications for building an elaborate milk-house for a client in Massachusetts, with water-piping for shelves, having a flow of warm water through them in winter, and cold water in summer; and I have advised that the plan be abandoned, and that a much cheaper one be adopted, suitable for the new or Swedish system. I was brought up on the shallow-pan system, and rarely set my milk more than an inch deep. Having confidence in the source from which I obtained the information, I had a half-dozen cans made of three sheets of 12-inch by 17½-inch tin, measuring, when finished, about 17 inches deep and 11½ inches in diameter. I then moved into my summer milk-room (underground) an unused horse-trough, about 18 inches deep, and large enough to hold five of the cans. Three cans hold most of the milk of each milking, but we are obliged to set some of the milk in shallow pans yet, and this affords an opportunity for comparison. In the morning we set three of the cans, filled to within an inch of the top, in the trough. At evening only two cans can be put in, the third being put on the floor outside of the trough. My self-regulating windmill, which works in the lightest winds and is rarely still, keeps an almost constant flow of water, from a deep well nearly a quarter of a mile away, pouring into the trough, and flowing out at its other end. This keeps the temperature at about 53 or 59 deg. I have not ice enough to keep it colder. Neither do I skim until the milk has stood nearly 24 hours (just before the second milking), and I have not even tried to see whether it would do as well to skim at the end of twelve hours. At five o'clock on the second morning, the three cans of the previous morning are skimmed. The two of the evening before are moved up to the head of the trough; and the third, which has stood outside, is put in the water. Then two of the morning cans are put in, and the third is set outside. Thus at each milking two cans are put at once in the water, and one is left outside for twelve hours, and is then taken inside. The following are the results:

1. In ordinary weather the milk that is set in the old-fashioned pans yields all its cream, but turns a little sour within the twenty-four hours.

2. The two cans that are put at once in the water remain entirely sweet, and they yield, as nearly as I can judge without accurate measurement, at least as much cream as we would get from the same amount of milk in shallow pans—possibly a little more.

3. The milk in the can that passes its first 12 hours out of the water—probably because it cools off much more slowly—gets more sour than the milk in the shallow pans, turning quite thick. I think it thickens before it gives up all its cream, as we seem to get rather less cream from this can than from the other two.

4. We make quite as much money from a given quantity of milk as we did when using shallow pans.

5. The skimming is done with a dipper, and is done much more expeditiously than under the old system, occupying the same time for one can that it did for one pan.

6. We use 6 cans in place of from 90 to 110 pans.

7. The cream is of a uniform consistency, and much more liquid than when so much of its surface is exposed to the air. The cream on a pan of Jersey milk that has stood 24 hours is so tough as to seem almost leathery, and can be taken off in a mass—almost rolled off. The cream on one of my cans—two inches thick—is liquid, and can not be taken up with a punctured strainer. I am thus far disposed to attribute to this the fact that the “marbling” of the colour of the butter, which we scarcely ever avoided before, has entirely disappeared under the new method; the “O. F.” butter being now a pure, solid gold colour throughout. It is not unlikely that the exposure of so much of the cream to the air affected the colours of part of the butter. Then, again, the cream now mixes thoroughly, and at once, in the cream-pail, while that which was taken from the old pans was always more or less clotted. One of the old-fashioned preventives of “marbling” was to stir the cream thoroughly together whenever a new skimming was added. If hitherto, however thoroughly this was done, the cream was always quite lumpy when it was turned into the churn; it now pours like a smooth syrup.

8. This can not be called a *result*; it is, as yet, only a suggestion, and one that it will be difficult to prove. My butter, from the same cows and the same food, has never been so good as it is now. May not the present improved quality be due in part to the fact that so little of the cream is exposed to the air? Does not such exposure allow an oxidation or evaporation, or other action that destroys or wastes the aroma?

A month is not long to study the operation of any improvement, but I have studied this one closely, and I am satisfied that my conclusion, as described under the foregoing heads, is a sound one, and I shall do away with all of my old utensils, have a permanent trough made large enough to hold the necessary cans for all my milk, and follow the example of Mr. Swartz, until I find some better way. I advise all who are so situated that they can keep up a supply of cold water, either with ice or by the aid of naturally or artificially running spring water, and who care for the least work and best results, to do likewise.—From the Ogden Papers in *American Agriculturist*.

THE SWEDISH AGRICULTURAL SHOW.

At Gothenburg, the Swedes follow, as far as they can, the example set to them by the successful agriculturists of England. This aim has not been confined to the appreciation and adoption of the implements of an improved kind now so generally brought into use in England from the well-known establishments of Messrs. Howard, Ransome, Sims, and Head, Clayton and Shuttleworth, Samuelson and Co., and others, but has rather extended to the introduction of those superior breeds of cattle and animals of various descriptions which have proved to be so advantageous to British farmers. This was made most evident in the catalogues of the show; for although there were numerous examples of the different indigenous races, some of which were of good quality, there were also many Shorthorns with the most authentic pedigrees, as well as a very considerable number of Ayrshires, which are of the greatest value in

those farms in which the produce of the dairy is one of the chief sources of profit. It was the same also as to sheep, as the numbers shown of South Downs, of Hampshire Downs, of Oxford Downs, of Cotswolds, Leicesters, Cheviots, and Lincolns, with their various crosses, were very great, and not a few exhibited here would have stood a good chance of gaining premiums at some of the English meetings. The show of horses was likewise good, and although there were some animals of Arab blood, there was a decided preference given to those in which the best English blood predominated. Such a preference was strongly enforced by Count C. S. Wrangles in excellent addresses, which were so pointed and convincing that he succeeded in forming an association even in this commercial town which has for its object the importation of horses of the best breeds from England, from which great improvements in the breed of horses here is confi-

dently anticipated. The Count is about to visit England to carry out the views of the association. Even among the pigs exhibited there were both Berkshires and Yorkshires, and in the pens of poultry there were Game-fowls, Aylesbury ducks, and many other varieties well known in England, while not a few of the exhibitors, and a fair proportion of the successful competitors, although long resident in Sweden, prove by their names that they, too, have English blood in their veins, for among them there were Fleetwoods, Hamiltons, Dicksons, Simsons, Thornes, Winslows, and Loneys, and it may be thought

extraordinary that though the Ramsays have long been established in Sweden, there is one of them among the exhibitors of cattle who still bears the old and familiar name of Allan Ramsay. During the whole of the exhibition the weather has been most favourable, and as the authorities, from the King down to the lowest officials, exerted themselves to give satisfaction to all, it need scarcely be added that the 13th Swedish Agricultural Show will long be remembered as one that has been decidedly successful.

INTELLECT IN AGRICULTURE.

If a man whose capital consists of the clothes on his back, 5 dollars in his pocket, and an axe over his right shoulder undertakes to hew for himself a farm out of the primitive forest, he must of course devote some years to rugged manual labour, or he will fail of success. It is indeed possible that he should find others, even on the rude outposts of civilization, who will hire them to teach school, or serve as county-clerk, or survey lands, or do something else of like nature—thus enabling him to do his chopping trees, and rolling logs, and breaking-up his stumpy acres, by proxy; but the fair presumption is that he will have to chop and log, and burn-off and fence, and break-up, by the use of his own proper muscle—and he must be energetic and frugal, as well as fortunate, if he gets a comfortable house over his head, with forty arable acres about him, at the end of fifteen years' hard work. If he has brains, and has been well educated, he may possibly shorten this ordeal to ten years; but, should he begin by fancying hard work beneath him, or his abilities too great to be squandered in bushwhacking, he is very likely to come out at the little end of the horn, and, straggling back to some populous settlement, more needy and seedy than when he set forth to wrest a farm from the wilderness, declare the pioneer's life one of such dreary, hopeless privation that no one who can read or cypher ought ever to attempt it.

A poor man who undertakes to live by his wits on a farm that he has bought on credit, is not likely to achieve a brilliant success; but the farmer whose hand and brain work in concert will never find nor fancy his intellect or his education too good for his calling. He may very often discover that he wasted months of his schooldays on what was ill-adapted to his needs, and of little use in fighting the actual battle of life; but he will at the same time have ample reason to lament the meagreness and the deficiency of his knowledge.

I hold our average Common Schools defective, in that they fail to teach geology and chemistry, which in my view are the natural bases of a sound, practical knowledge of things—knowledge which the farmer, of all men, can least afford to miss. However it may be with others, he vitally needs to understand the character and constitution of the soil he must cultivate, the elements of which it is composed, and the laws which govern their relations to each other. Instruct him in the higher mathematics if you will, in logic, in meteorology, in ever so many languages; but not till he shall have been thoroughly grounded in the sciences which unlock for him the arcana of Nature—for these are intimately related to all he must do, and devise, and direct, throughout the whole course of his active career. Whatever he may learn or dispense with, a knowledge of these sciences is among the most urgent of his life-long needs.

Hence, I would suggest that a simple, lucid, lively, accurate digest of the leading principles and facts in geology and chemistry, and their application to the practical management of a farm, ought to constitute the Reader of the highest class in every Common School, especially in rural districts. Leave out details and recipes, with directions when to plant or sow, &c.; for these must vary with climates, circumstances, and the progress of knowledge—but let the body and bones, so to speak, of a primary agricultural education be taught in every school, in such terms and with such clearness as to commend them to the understanding of every pupil. I never yet visited a school in which something was not taught which might be omitted or postponed in favour of this,

Out of school and after school, let the young farmer delight in the literature illustrative of his calling—I mean the very best of it. Let him have few agricultural books; but let these treat of principles and laws rather than of methods and applications. Let him learn from these how to ascertain by experiment what are the actual and pressing needs of his soil, and he will readily determine by reflection and inquiry how those needs may be most readily and cheaply satisfied.

All the books in the world never of themselves made one good farmer; but, on the other hand, no man in this age can be a thoroughly good farmer without the knowledge which is more easily and rapidly acquired from books than otherwise. Books are no substitute for open-eyed observation and practical experience; but they enable one familiar with their contents to observe with an accuracy, and experiment with an intelligence, that are unattainable without them. The very farmer who tells you that he never opened a book which treats of agriculture, and never wants to see one, will ask his neighbour how to grow or cure tobacco, or hops, or sorgho, or any crop with which he is yet unacquainted, when the chances are a hundred to one that this particular neighbour cannot advise him so well as the volume which embodies the experience of a thousand cultivators of this very plant instead of barely one. A good book treating practically of agriculture, or of some department therein, is simply a compendium of the experience of past ages combined with such knowledge as the present generation have been enabled to add thereto. It may be faulty or defective on some points; it is not to be blindly confided in, nor slavishly followed—it is to be mastered, discussed, criticised, and followed so far as its teachings coincide with the dictates of science, experience, and common sense. Its true office is suggestion; the good farmer will lean upon and trust it as an oracle only where his own proper knowledge proves entirely deficient.

By-and-by, it will be generally realized that few men live or have lived who cannot find scope and profitable employment for all their intellect on a two-hundred-acre farm. And then the farmer will select the brightest of his sons to follow him in the management and cultivation of the paternal acres, leaving those of inferior ability to seek fortune in pursuits for which a limited and special capacity will serve, if not suffice. And then we shall have an agriculture worthy of our country and the age.

Meantime, let us make the most of what we have, by diffusing, studying, discussing, criticising, Liebig's "Agricultural Chemistry," Dana's "Muck Manual," Warring's "Elements," and the books that each treat more especially of some department of the farmer's art, and so making ourselves familiar, first, with the principles, then with the methods, of scientific, efficient, successful husbandry. Let us, who love it, treat agriculture as the elevated, ennobling pursuit it might and should be, and thus exalt it in the estimation of the entire community.

We may, at all events, be sure of this: Just so fast and so far as farming is rendered an intellectual pursuit, it will attract and retain the strongest minds, the best abilities, of the human race. It has been widely slunned and escaped from, mainly because it has seemed a calling in which only inferior capacities were required, or would be rewarded. Let this error give place to the truth, and agriculture will win votaries from among the brightest intellects of the race.—*Horace Greeley in "What I Know of Farming."*

STEAM CULTIVATION FOR 300 ACRES.

SIR,—The best thanks of English farmers are due to the Royal Agricultural Society for the able reports of its Commissioners in 1867, and for the exhaustive trials with steam-cultivating machinery carried on in the neighbourhood of Wolverhampton during the past few weeks. It should be the part of practical men to study carefully those reports, and to watch attentively the results of those trials. As the experiments range over a wide field, so too the lessons are numerous, and address themselves to many different classes of agriculturists. My present purpose is to consider them with reference to the ordinary English tenant-farmer of average means, and for this purpose I speak of the tenant who holds about 300 acres of arable land, because this appears to me to include a class numerically strong, which ought to derive very great pecuniary benefit from steam cultivation. I take it for granted that the importance and advantage of cultivating by steam are admitted, and that the farmer is really anxious to obtain a good serviceable, economical, and suitable set of tackle, if such can be found. If he is willing to risk the chances of hiring, he will probably see at once that the powerful double engine tackle will satisfy his requirements, but if he realizes and appreciates the danger, the difficulty, and the costliness of this course, and the great importance of having a set of machinery constantly at his command, he will also see at once that this grand apparatus is totally unsuited to his *purpose*, however well it might suit his purpose otherwise. It is all very well to argue that the double-engine system is the most economical and efficient; but without going further into this question now, we may remark that practically the 300-acre man declines to invest £1,500 in a system, the merits of which have been allowed for years.

Setting this aside, we naturally turn to the Wolverhampton competition in Class 3, in which the condition laid down was the use of an ordinary agricultural engine; and to that for Lord Vernon's Cup, where the conditions required that the cost should not exceed £700. In the former class we find the first prize awarded to Fowler's roundabout tackle, worked by a twelve-horse power traction engine; and the second prize to Howard's roundabout tackle, worked by an engine of similar power. In the latter class the Cup is awarded to Fowler working on the direct system with an eight-horse power traction engine with double-drum attached and with a disc anchor.

Let us consider these authoritative replies to the question before us a little carefully.

Cost of Fowler's roundabout tackle, including four-furrow plough, digger, and cultivator	£ 280
Twelve-horse power traction engine	475
Total	£755

Cost of Howard's roundabout tackle, including five-tine cultivator	£ 250
Twelve-horse power traction engine	475
Total	£725

Cost of Fowler's eight-horse power traction engine with double-drum, disc anchor, and seven-tined cultivator, working on the direct system	£ 695
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With respect to the last-named apparatus, in order to comply with the condition imposed by Lord Vernon that

the price should not exceed £700, an eight-horse power engine was entered, whilst both Fowler and Howard, in Class 3, where no such condition was imposed, used engines of twelve-horse power. In instituting a comparison between the systems, and in arriving at practical conclusions, we must bear in mind that the great majority of roundabout steam cultivators employ ordinary ten-horse power engines, which cost £270, and that with these engines the work done is thoroughly satisfactory. I have now for ten years worked my farm with Messrs. Howards' roundabout apparatus and one of Clayton and Shuttleworth's ten-horse power double cylinder engines, and am well satisfied with the result. The calculation then stands thus: We can purchase a ten-horse power engine for £270 (or make use of our thrashing engine, if we have a good one), and for the extra outlay of £250 or £270, we can purchase a set of tackle fully competent to deal satisfactorily and efficiently with our cultivators. If we wish to adopt the direct system, the best eight-horse power set we know of will cost £698, and a similar twelve-horse power set with six-furrow plough with scarifier and digging breasts will cost £913.

This brings the question within very narrow limits: the decision lies between the roundabout system with separate windlass and (say) a ten-horse power engine, and the direct system with eight, ten, and twelve-horse power engine, double drum, and disc anchor.

I fully allow the advantages of the direct system, in its economy of power and labour, and therefore of time and money, under favourable circumstances; but we must not forget that it has also many disadvantages. The water-cart must follow the engine to all parts of the headland, however distant or difficult of access. The engine must, of necessity, be self-propelling, and also cary with it many cumbersome appendages even when employed at other ordinary work, such as thrashing, &c.; nor is its disadvantage in first cost likely to be forgotten by the three-hundred-acre tenant-farmer. Contrast this with the roundabout system, in which the common farm-engine is available at all times for thrashing, chaff-cutting, root-cutting, grinding, &c., without any extra weight or complex appendages, in which the water has only to be carted to some conveniently-selected spot, or may sometimes be pumped from an adjoining ditch or tank, in which the rope can be laid to suit any irregularities of surface or boundary, and in which the first cost is at all events no small point in its favour.

There is in this, as in most matters of dispute, much to be said on both sides; but the two systems are quite distinct. We cannot choose any golden mean, but must either choose one or other or reject both; and therefore I can come but to this conclusion, that the results of the great trials of 1871 have fully confirmed the opinion that, although for very large farms, and for working on hire the double engine direct system is unrivalled, it is also true that for the ordinary English farmer, holding about three hundred acres, the roundabout system is the simplest, the most economical, and the best; and further, that steam cultivation, under ordinary circumstances, and with the roundabout tackle, presents such advantages that farms of three hundred acres cultivated by a full staff of horses, instead of by a greatly diminished staff and this valuable and powerful auxiliary, ought to be the exception instead of, as now, the rule.—I remain, sir, your obedient servant,

W. BULSTRODE.

Mount Farm, Cookham Dean, Maidenhead.

THE GAME LAWS OF EUROPE.

The state of the laws affecting game and trespass in some of the leading countries of Europe has been very clearly placed before us by Her Majesty's representatives abroad, to whom we are indebted in their second report for information which may hereafter lead to a reconsideration of our own dealings in regard to game, although the circumstances vary so much that no particular example may be considered especially applicable to ourselves. We learn that in the Grand Duchy of Baden, where there is a good supply of game, and the produce of the valley of the Rhine goes to supply the Paris market, the distinction is drawn between property in wild and domesticated animals. The former, being in a state of freedom, is said to have no owner, and therefore belongs to the State. The State, however, concedes to the landowners, under certain conditions, the right of preserving and killing on their estates, and declares by the Game Laws that all game killed or found dead on their land is to be regarded as their property. Game, on the other hand, which is enclosed, is exclusively the property of the landowner, or of any one duly qualified to occupy his place, whether that be the State, or a private individual. Certain regulations are in force with respect to the time of killing, and gradations in the punishment for poaching, according to the nature of the offence. The laws appear to work well; and although the country is generally fertile there are few complaints, owing to the prevailing feeling that the authorities are at liberty to interfere and do interfere, whenever in any district the game is found to have increased to an excessive degree. In Württemberg the land is much broken up into small freeholds, so, unless a man owns at least fifty acres, or that his bit of ground, if smaller, is properly fenced off, the parish, which is usually a corporation, and owns some of the woodlands, has the letting of the shootings of the smaller proprietors for their benefit, with that belonging to the parish *en bloc*. The shooting is not considered so good as in the neighbouring countries, the chief cause of this being attributed to the fact that parishes usually let for a term of three years, the consequence being that the lessee, not having any certainty about securing another lease, shoots very hard the last season, and there is no time to get up a head of game between the different shootings.

In Bavaria, down to 1848, the right to kill game had been practically vested in the hands of the nobles, either in respect of the proprietorship of their freeholds or of their manorial rights over the peasant lands, the peasant occupier being in all cases absolutely excluded, in principle, from any right to the game found on his land. By the legislation of 1848 manorial rights of every kind were abolished, and as a natural consequence a new order of things had to be created: this did not take place till early in 1870, after an interval of nearly two years of absolute lawlessness in the matter, during which period the game was recklessly destroyed by the peasants throughout the State, and in many districts almost exterminated. The leading provisions lay down the principle that the right to kill game shall be founded exclusively on the right of proprietorship in the land: that all seigniorial rights shall cease at once and for ever. The exercise of this right is however limited to properties of not less than 240 Bavarian acres in the plain, or of 400 acres if situated in the mountains, and only in the case where the lands lie together so as to form one entire plot. As regards all smaller plots the law vests the power

of disposing of the rights of the chase over them in the authorities of the commune, and directs that these rights shall be let by public auction, and the sum realized be applied to the general benefit of the whole commune, in the same manner as its ordinary public revenue. The majority of the proprietors being small, practically therefore the rights of the chase are enjoyed by persons who hire them from the commune. The minor provisions provide against the pursuit of game without a licence, or at unseasonable times. Owing to the very different conditions under which the land is almost universally held as compared with those which exist in England, the question of compensation for damage done by game rests upon an almost totally different basis. Where a class of tenant-farmers may be said scarcely to exist, and the landed proprietors, great or small, all have under the laws a direct right to, or an indirect interest in, whatever game there may be on the land they cultivate, the question of compensation is not one which can cause much ill-feeling or frequently give rise to litigation.

In Austria all the privileges of the grand proprietors and the relations which had subsisted between them and the common peasants were abolished in 1848, and a new system had to be adopted with respect to the shooting right; consequently, the great proprietors could no longer claim the right of shooting upon the property of their late dependants, which privilege belonged to them previously in their capacity of feudal *seigneurs*. Moreover, those who were proprietors of land were allowed to shoot upon their own land, subject to the condition that they possessed an enclosed part, or at least 200 acres, in one complex. On all other properties the shooting was to belong to the rural communes, who were not allowed to take any advantage of this right in permitting the members of the commune to shoot. The subsequent regulations merely had for object to determine the formalities to be observed in leasing the shooting-right, and to designate the authorities whose intervention is necessary for the validity of the agreements of the lease. According to the penal code poaching is formally declared to be a theft, and if the value of the poached game exceeds the sum of five florins, is punishable with severe imprisonment, from six to twelve months, and in the event of aggravating circumstances, from one to five years. By the same code the trespasses constitute either an attempt at poaching or public violence by forcibly breaking into the immovable property of another, and are punishable accordingly. Besides, they may be punishable inasmuch as they are committed by persons who have not regularly obtained a licence for carrying fire-arms.

In the kingdom of Italy, where his Majesty the King is one of the keenest sportsmen in Europe, reminding us of our own Norman sovereigns, we learn there has not yet been any uniform legislation on the subject of game, different laws being still in force throughout the provinces. The Italian civil code declares that property in game or fish is acquired by occupancy, and makes the pursuit of game and fishing matters for regulation, with the proviso that it is not lawful to go upon another's ground for the purpose of taking game when forbidden to do so. Every provincial council is empowered to determine the period during which the taking of game is permitted in each year. According to the Piedmontese law of 1836, extended to Lombardy, the Marches, and Umbria, no one may shoot or otherwise take game with-

out licence, which is personal and good for one year. Any person shall be considered as being actually in the pursuit of game who is found in the open country off the high road, or any beaten path, armed with a gun loaded with small shot, or if the gun be not loaded having such shot about him. Offenders are liable to fines and imprisonment; any person trespassing in another land in pursuit of game is further liable for any damage done by him, and he must give up to the owner all the game killed or taken thereon. For the killing of wolves, bears, and such animals, at any time, a reward is given, but they must be hunted by soldiers belonging to the Bersaglieri companies or to other arms, or by persons acting under the guidance of the syndic of the commune. In Tuscany all manner of hunting or fowling is prohibited when the ground is covered with snow, or from one hour after sunset until one hour before sunrise: this prohibition, however, is not applicable to shooting in marshes. From the close of the shooting season until the 16th of March, wood-pigeons may be shot by special permission in places where it is customary to do so; and water-fowl may be shot in like manner until the 14th of April. It is lawful for any person to catch lapwings, plovers, starlings, but the use of traps or nets is forbidden. In the Roman provinces the spoiling of eggs or nests, and the killing of the young of useful animals are prohibited. It is also forbidden to pursue hares, roebucks,

partridges, and other useful birds or quadrupeds in places covered with snow. The use of poisoned grain or paste is vigorously prohibited. Hitherto game has been considered as the property, not of the state, but of the person who takes it in a lawful manner. In places where the right of shooting is reserved the game is the property of the owner of the soil.

This very useful series of reports from our foreign representatives concludes with some observations on the game-laws of Belgium. Here it has been found necessary to reproduce the ancient legislation and the principles of the law of 1790 as to the ownership of the right of pursuit of game. Every kind of right, even in the matter of small birds, is forbidden on the lands of another without the proprietor's consent. The right to game is a right inherent to the property, and the farmer to whom the right of game has not been granted under his lease cannot sport without the permission of his landlord. Much difficulty seems to have been experienced on the game question, and we are informed that poaching prevails largely, especially in the vicinity of manufacturing towns, many of the workmen in which, preferring a life of crime to the pursuit of an honest calling, organise themselves in bands more or less numerous, and systematically endeavour to enrich themselves at the expense of their neighbours.

LEGISLATION ON THE UTILIZATION OF SEWAGE.

Some members of the Essex Chamber of Agriculture paid a visit of inspection to the farm of Mr. W. V. Hope, in the parish of Hornchurch, which is irrigated with the Romford sewage, and, subsequently, held a meeting in the town of Romford, to discuss the subject of legislation affecting the utilization of sewage. As about this time last year we joined a similar party of inspection on Mr. Hope's invitation, we need not again go over the farm beyond taking the subjoined report as to its present appearance from *The Chelmsford Chronicle*:—"With regard to the crops at the Sewage Farm, we are bound to say that the inspection proved disappointing. There were undoubtedly, here and there, some good rye-grass, beans, onions, and potatoes, but as a whole, the crops, alike as to quality and quantity, were indifferent. Several of the purely practical visitors, while acknowledging that the crops at the Sewage Farm last year had excited their envy, shrugged their shoulders at what they saw on Wednesday and did not hesitate to say that they had left much better crops at home."

At the discussion meeting held in Romford, Mr. A. Johnstone, M.P., in the chair,

Mr. HOPE, in introducing the subject of "Legislation affecting the utilization of sewage," proposed to divide it into three parts, and consider, first, why there should be any legislation at all upon it; secondly, what legislation there has been; and thirdly, what legislation there ought to be in future. Whether there should be any legislation at all turned upon the question whether or not the existing state of things all over the country was a desirable one. On this point he read some extracts from a book by his friend Professor Corfield, prepared for a Committee of the British Association appointed three years ago, showing that from 1604 down to quite recently deficient and improper drainage had in various towns produced fevers, cholera, and plagues. This, in fact, was the state of things which existed in almost every town in this country till his friend, Mr. Chadwick, whom he was happy to see among them to-day, took them in hand many years ago. The diseases so produced spread out of the towns into the agricultural districts, and thus affected the whole community. Properly to manage the cleansing of a town was always a most difficult and expensive operation, but it paid in a twofold way when done. Health and strength were the labourers' working capital; but, to the discredit of Government, at present the working classes as a rule were anything but strong and

healthy, and the mortality tables told a fearful tale of fevers and kindred diseases, the product of dirt—that was, matter in the wrong place—and the value of the lives of these unfortunate creatures was not only lost to the community, but each death of the head of a family inflicted a fine upon the surviving population by throwing the family on the parish. He thought, therefore, there was very little doubt that some legislation was imperatively necessary. The introduction of water-closets had been of immense assistance in carrying away all the filth which formerly filled the open cesspools and wide ditches, but to carry away this refuse into a river, to pollute that river, and to spread disease among their neighbours, was only benefiting themselves, without doing the country at large any service at all. Then with respect to the question of infection. These open cesspools, open ditches, and polluted rivers bred diseases, but until lately it had been very much disputed how these diseases were spread. In fact, the medical camp was divided into two parties—one who supported the germ theory of disease, and the other who supported the more empirical idea that the infection was carried in the atmosphere, and yet had no material existence. He read a paper last year to the British Association in Liverpool, describing the experiments he had conducted with the view to test the germ theory of disease; that theory presupposed the existence in the atmosphere, spread by such masses of putrid filth as he had described, of certain organisms, whether vegetable or animal was not known, but these organisms, or germs, or eggs, floated through the air, increased and multiplied, and so produced a fermented state of the blood of the people. His (Mr. Hope's) experiments were to ascertain whether, by treating these imaginary germs, he could prevent the disease and so prove the existence of the germs. Those experiments were, on several occasions, entirely successful, and he ventured to tell the doctors at Liverpool that he considered their treatment of the patient instead of the disease was most unscientific, and that it would be better to kill the disease than the patient. Then, he came to the question what parts of town sewage contained the dangerous germs of disease, and he was afraid that on this point as yet little was known. The Rivers Pollution Commissioners considered a certain standard of nitrogen in the effluent water capable of producing disease. But nitrogen in itself was not unhealthy. On the contrary, when we wanted to nourish ourselves we ate nitrogen, and if a patient had a bad headache the doctor ordered him ammonia, there-

for in ammonia there was nothing *per se* unhealthy. But it would appear that some of the other ingredients that were generally concurrent with ammonia and nitrogen in town sewage contained the pernicious germs, and, in ignorance of what the particular sources of infection really were, it had been found convenient by the Rivers Pollution Commissioners and the Thames Commissioners to take the percentage of nitrogen as the measure of pollution. The measure of pollution was also the measure of production to the agricultural chemist. All manures were sold according to their analysis, and the price was regulated by the per centage of ammonia which they contained. But we did not know quite what ammonia was. We knew that there was no original source of ammonia extant. All the ammonia that was in existence was in a state of circulation, either being given out by animals or taken up by plants, or it might be imprisoned during many centuries in plants. Still we must consider it as in a state of circulation, but we knew so little about it that we did not know the origin of the name. He would now refer to the value of town sewage, which produce all the mischief to which he had referred. A great many chemists had devoted their attention to this subject, and Professor Corfield, in his book, gave a *résumé* of the different analyses that had been made, from which it appeared that the value of the manure created by each person annually was about 3s. per year. He (the speaker) took the trouble some two years ago, in a paper which he read to the Institution of Surveyors in London, to work out the value of this wasted manure in loaves of bread. He calculated that one additional quarter of wheat or two additional quarters of oats over and above the ordinary produce of a farm might be obtained by the application of the sewage of four persons to it each acre. Striking out the scattered population of the rural districts, there was a town population in the United Kingdom of upwards of 15,000,000, whose sewage, therefore, would produce 3,750,000 qrs. of wheat or 7,500,000 additional quarters of oats. From particulars obtained from bakers, who differed very much on the point, he reckoned that a quarter of wheat would produce 108 quarter loaves.

A MEMBER: A quarter of wheat will produce 150 quarter loaves.

MR. HOPE said that was so much the better for his argument. If a quarter of wheat would produce 108 quarter loaves, it followed that by our present sanitary arrangements we wasted 405,000,000 of quarter loaves of bread every year; if a quarter of wheat would produce, as had just been stated, 150 quarter loaves, then something like 700,000,000 loaves were wasted every year, and at the same time the wasted matter was polluting rivers that would otherwise be beautiful, poisoning fish, and spreading disease. Many said it would not pay to utilize sewage. It was this unfounded superstition which sent these millions of loaves of bread down the rivers, which necessitated our sending ships thousands of miles for food which we might produce at home, and which compelled us to ransack foreign parts in search of manures. In ten years, from 1841 to 1850, there were only 3½ millions of people in this country fed exclusively upon foreign wheat, but in the last ten years no fewer than 8,600,000 were so fed. If a quarter of wheat would produce 150 quarter loaves, he could have fed the whole of these people with food grown in this country, if only the sewage had been properly applied. The wheat paid for by these 8,600,000 people must have been worth at least fourteen millions and a half sterling. Next came the question how they were to extract this value from sewage. The precipitation processes had been tried and found wanting. The sewage of Romford last year contained about 4½ parts in 100,000 of ammonia; this year the ammonia was only about 2½ parts, owing to the immense rainfall, and the notion that these could be precipitated, and the value of the manure retained, was quite Utopian. The phosphate process had also been tried, but Royal Commission after Royal Commission, Parliamentary Committee after committee had sat upon this question, and they had all come back to the one idea of irrigation (Hear, hear). But when they had settled that irrigation was the only way of utilising and realising the value of sewage, they still had to determine what irrigation meant. Irrigation by the hose or jet, which carried away his friend Mr. Mechi, was not irrigation properly so called, and could never pay. The only plan was to flow the sewage over the surface of the ground by

gravitation, but here again there were different modes of doing it. There was the catch-water system, a rough and clumsy method, which in some instances, as he had seen at Tunbridge, drowned the plants and certainly did not extract the valuable matter from the sewage. That system, he was satisfied, could not be allowed to continue beyond a few years longer. To pass on, he had brought with him some of the acts of parliament relating to sewage utilisation, but there was mighty little in them. They were the usual sort of permissive measures which we were so fond of in the present day, and whose chief virtue was that they afforded the Home Secretary a convenient means of shelving some subject which perhaps he did not understand. Lord Robert Montague was the author of an act making it permissive to towns to do a great deal which they might equally have done without any act at all. There was, however, one practical clause in the measure, which, he was told, enabled a town to get an act by asking the Secretary of State, for £15, whereas the act he (Mr. Hope) obtained in 1865 for the utilisation of the sewage of London cost £30,000. By that act of 1865 the towns were able to grant leases of their sewage for periods not exceeding 25 years, but in the Sewage Utilisation Act of 1867 there was a clause, under the restriction of which he was suffering at this moment, preventing local boards from granting leases of any lands which they bought for their sewage for more than seven years. [A VOICE: It ought to be repealed.] Then they came to the question what legislation was really required for sewage utilization. At present there practically was no legislation, because he called a permissive act no legislation. It was playing with the subject. Legislation was to compel people to obey the law. He thought the utilization of sewage and the prevention of the pollution of rivers ought to be enforced. The existing acts, too, were defective, inasmuch as they did not even enable the towns to borrow the money for the purchase of the land upon the land itself. Romford only paid £10,000 for a farm of 121 acres, and they had the greatest possible difficulty in borrowing that money at less than 5½ or 6 per cent. One of the last objections raised to the utilization of sewage by irrigation was urged six or seven years ago in a very clever pamphlet by Dr. Cobbold, who said that as vast numbers of the population of every town suffered habitually from various forms of internal parasites, if the sewage were applied to the land, the eggs of those parasites would be eaten by the ox, and so would get spread through the community. To convince Dr. Cobbold that these delicate eggs could hardly be preserved through these various processes, he (Mr. Hope) had an ox fed for 22 months on sewage-produce—grass, mangel-wurzel, cabbage-leaves, and very often the rakings of the grass—and that ox was slaughtered last Saturday week, in the presence of Dr. Cobbold and other scientific men, and after it had been minutely dissected and examined the united talent of all these gentlemen entirely failed to detect any trace of disease whatever, and he was glad to say Dr. Cobbold was entirely converted to sewage irrigation. Nevertheless, it would only be prudent in the existing state of our knowledge that in any future legislation making sewage irrigation compulsory, the towns should be prohibited, at all events for a certain number of years, from allowing grazing on irrigation land. Not only did he think that legislation should be compulsory upon the towns to utilise their sewage, but that it should not be left to the town themselves to choose the process of utilisation: that process ought to be prescribed by Government. We had paid vast sums of money for different commissions and committees. He made a list of thirty-four blue books that had been published upon this subject by parliament ten years ago. Many had been published since, and he really thought the time had come for some practical legislation on the subject, in fact (and with these words he would conclude) he looked upon this as being almost as pressing a question as that of secret voting.

THE PRESIDENT said he was sorry to hear that in Mr. Hope's opinion the present acts of parliament relating to sewage were not the highest embodiments of human wisdom, for he had loudly hoped they were. Mr. Hope, when he spoke of the ox slaughtered in presence of Dr. Cobbold, might also have told those present that they had been eating the ox at the luncheon that day. He (the president) felt rather uncomfortable when Dr. Cobbold's original opinion was stated, and was immediately relieved when he heard that he had changed his views.

The Hon. H. PÉTRE said he had always thought a great mistake was committed originally when towns were compelled to collect all their filth in the shape of sewage and pour it down into one place, and this was the explanation of their resisting, subsequently, the enormous expense of providing for the sewage when collected. He was glad to hear that morning that the large number of acts relating to this question were to be remodelled and consolidated. As to the Barking farm, with which he was connected, he thought it would well repay a visit. He did not wish to contrast it in any way with Mr. Hope's farm. The Barking farm was five years old, and Mr. Hope's was not yet two. Whether from that cause or some other, he could not say, but he thought the Barking farm would in some respects be found in a more satisfactory state than that which they had viewed to-day.

Mr. CHADWICK said he thought Mr. Hope had made a most important advance on this question. The old water meadows of Edinburgh and Turin were enormously expensive, and created marsh surfaces. The Edinburgh meadows cost £30 an acre, while Mr. Hope's system, which was of course the most efficient, and not by any means so dangerous to health, only cost from £8 to £12 per acre. He had seen no working of the surface that appeared to him so complete as Mr. Hope's. He quite expected to see that other towns would adopt this beneficial measure. With respect to legislation he might mention that some years ago in order to drain a settled estate it was necessary to make an application to the Court of Chancery. On that he (Mr. Chadwick) submitted to Sir Robert Peel's Government that there ought to be a cheaper mode of attaining this object, and the result was successful. One serious evil of the present day was the great cost of obtaining local or private acts of Parliament for small towns. In fact, it amounted to a legislative abomination, which certainly ought to be got rid of. He sincerely hoped that the county of Essex would support Mr. Hope in this important agricultural movement.

Mr. ANGEL, engineer to the West Ham Board of Health, agreed with most that Mr. Hope had said, and was perfectly

satisfied that in this movement he would come out successful but he disagreed with some of his remarks about past legislation. The Government had published their experience, which had done good, and power had been given to purchase land at a cheap rate, which was a great concession. It was contrary to the spirit of legislation in this country to drive certain views down the throats of the people, and it would be a serious thing to compel towns to buy so many acres of land or to compel farmers to take the sewage. As to making profit of sewage irrigation, that depended greatly on the geographical position of the town, but he believed in the system, and was convinced it would make its way.

Mr. PERRY WATLINGTON desired to say just one word in reference to future legislation. The sanitary law was at present most confused, and something like a simplified code was most desirable. The commission which sat last year made a report, and the result had been embodied in a bill which was before the House of Commons only on the previous night, when one gentleman stated that the commission had under its consideration no fewer than 45 sanitary acts. Perhaps people in towns could manage, but certainly people in the country found it very difficult indeed to work 45 sanitary acts.

Captain RUSS also insisted upon the necessity of simpler and better legislation, and called particularly for the abrogation of the seven years lease clause, which prevented gentlemen from taking sewage-farms.

The PRESIDENT then proposed the following resolution, of which, he said, Mr. Hope approved: "That in view of the large amount of foreign wheat paid for every year by the population of this country, and the large amount of manure wasted in polluting rivers with town sewage, it is desirable that such pollution should now be prohibited by legislative enactment, and that the forty-five Sanitary Acts in existence should be repealed, and a general and comprehensive law enacted."

The resolution was carried.

The proceedings concluded with votes of thanks to Mr. Hope and the President.

FLOATING CURDS.

(PRIZE ESSAY, by Anson Bartlett, of North Madison, Ohio).

It is a characteristic of human nature, that when we are dealing with the faults of others, we are perfectly unsparring and always penetrate to the very foundation of every mistake and misdeed, and seem entirely unwilling to believe that there are, or can be, extenuating circumstances, or that by any possibility the wrong doer is entitled to the least particle of sympathy at our hands, never for a moment admitting that we ourselves are, or by any possible combination of circumstances can be, for a moment to blame; forgetting seemingly for the time that we too are frail mortals, with like faults, foibles, and shortcomings with the rest of mankind. Then if the persons thus assailed manifest a spirit of resistance, or an inclination to take offence at what they consider the rough treatment we are bestowing on them, how soon our own anger kindles, and we end what was at first supposed to be intended as a mild reproof, in loud vehement denunciation. On the other hand, there are very many people, who, when most clearly in the fault, will not bear to have their shortcomings pointed out to them even in a gentle and candid manner, but will take offence at every insinuation of the possibility of their doing wrong, allowing their passions to rise, and by their rudeness and ill nature repel what was intended to be, and but for their unfortunate tempers would be, a salutary lesson of instruction, or a timely and much needed warning. Although the foregoing is perhaps a singular preface to an essay on floating cheese curds and putrid milk, still when revolving the subject in my mind, and taking in review my own personal experience in this matter, my thoughts were insensibly led away to the contemplation of the different phases and characteristics of the human mind, as I had witnessed their development, in connection with this (to the practical cheese maker) terribly perplexing and intensely an-

noying subject. Frequently, when a taint is detected in the milk as it is being poured from the patron's can, have we been met with the loud and apparently angry declaration, "*I know better.*" Although in mild and studied phrase we simply inform the owner of the condition of his milk, he insults us by a flat contradiction, and winds up by reaffirming, "*I know that milk is perfectly sweet and good.*" "My milk cans and pails are perfectly cleansed, for *my wife* (only think) cleansed them; and *she* is as neat a woman as there is in this country." How natural that the cheese maker, thus snubbed and assailed, should feel a slight choking sensation, or, in other words, his angry passions rise; for his veracity is disputed, his knowledge and skill as a cheese maker called in question, his ability to distinguish good milk from bad denied, and he plainly told that he cannot distinguish filth, dirt, stench and nastiness from cleanliness and purity; the result of this ill-feeling is that a sharp retort frequently escapes him, and, as one angry word begets another, we end in almost or quite a quarrel, each one firmly feeling that he has been very much abused by the other. Very much of this ill-feeling, and perhaps the whole of it, would be obviated if the composition, constituent elements and enormous absorbing power of milk, and its peculiar liability to be influenced by agents of change, were more generally understood and more fully appreciated by those who keep cows, and produce and handle milk. Milk, although it seems to be a simple substance and easily understood, is a compound of a highly complex arrangement of elements, and, in consequence of its complex character, more readily influenced by the agents of change than almost any other substance known; indeed, some of its parts are grasped by the rest by so slight a hold, that a simple state of rest produces a separation more or less complete. This is eminently true of the butter or oily portion,

of which milk seems to be an emulsion, or mere mechanical mixture, its less specific gravity allowing it to rise and float upon the top. In order to present this matter in a clear, concise form, so as to be readily understood, I must ask indulgence while I present, not only an analysis of milk, showing its component parts, but also an analysis of each of those parts, for by giving close attention to these analyses, in connexion with what will be said in these pages, can a fair knowledge of this whole matter be obtained. Different analyses of cow's milk, although differing in the proportion of component parts, are nearly alike in general features, and the proportion of different elements in each component part remains constant so far as is known; I shall therefore present but one general analysis, which is probably a fair average. In 1,000 parts of pure milk are 837.45 of water, 54.04 of butter, 45.54 milk sugar, 46.50 of casein, 7.24 albumen, 6.20 of salts, consisting of chloride of sodium, phosphate of lime, sulphate of lime, and carbonate of lime and magnesia, some potash and sulphur, and about one-thirty-eighth part, when first drawn from the cows, of contained gases, which gases readily pass off by a free exposure to the air. Of the first ten component parts mentioned above, not one is simple or elementary, all being compounds of a more or less complicated character. It is a law of matter, in chemistry as well as in mechanics, that the most highly organized and complex are the most readily disturbed and deranged; a highly complicated and delicate piece of machinery is more readily damaged and broken up than a simple one. Just so in regard to chemical compounds, the more complicated the structure, the weaker the affinity, and the more readily and rapidly will it be decomposed, its elements entering into more simple combinations, and becoming more fixed and stable in character. As an instance of this we will take the sugar of milk. The atomic arrangement of its elements is carbon 24, hydrogen 24, and oxygen 24, the highest combining atomic numbers of any of the sugars, and as is well known, more readily acted upon by a ferment than either of the others (cane sugar being composed of carbon 12, hydrogen 11, and oxygen 11, while grape sugar is carbon 12, hydrogen 12, oxygen 12, and 2 of water); and when changed, by the action of a ferment, to lactic acid, although the elements remain the same, and in the same proportions as in the sugar of milk, their atomic arrangement is more simple, and represented by lower numbers. Therefore in accordance with the law of matter above referred to, it is in no immediate danger of further change. Lactic acid is composed of carbon 6, hydrogen 5, oxygen 5, and water 1; and as water is a chemical compound, composed of hydrogen 1, and oxygen 1, we see that in the change from milk-sugar to lactic acid nothing is lost and nothing added. It is composed of the same elements, and in the same proportion, all the difference being a rearrangement of the atomic structure, the elements having assumed a more simple and permanent form. Every producer of milk is aware of the ease and rapidity with which the lactic acid ferment acts in milk, and one of the first things which led me to a closer investigation of this subject was this: I observed that milk, or the whey from the cheese which contains most of the sugar of milk (the sugar amounting to 12 pounds in a barrel), would become sour much sooner than a solution of either cane or grape sugar of equal strength, but when we observe its high-toned organic structure, we think we have a key to the position. But high-toned as the structure of the sugar of milk is, it is simple when compared with the atomic structure of casein and albumen of the milk. Casein is composed of carbon 288, hydrogen 228, oxygen 90, nitrogen 36, and sulphur 2; and albumen, of carbon 216, hydrogen 169, oxygen 68, nitrogen 39, and sulphur 3. Butter consists of several different fatty substances, the principal of which are, margaric 68 parts, and oleic 30 parts in 100; the remainder butyric, caproic, and caprylic, composed of butyric, caproic, and caprylic acids, united with the common base glycerine; margaric and oleic are severally composed of margaric and oleic acids combined with the base glycerine. The atomic constitution of margaric acid is, carbon 34, hydrogen 34, and oxygen 4; of oleic acid, is carbon 36, hydrogen 8, oxygen 6. What an array of compounds! Here we have high-toned and complex combinations with a vengeance; not only do the combining atomic numbers run high, but in casein and albumen we have five elements—nitrogen, that most fickle and unstable of all elementary substances, being one of them. When

a ferment is present in milk, and its normal combinations being broken up and new ones formed, the elements contained in the salts of the milk—chlorine, sodium, potassium and phosphorous—furnish other and powerful agents of change; and after looking over the whole ground there seems to be little marvel that there should be so much difficulty in preserving milk unchanged; in fact, in ordinary temperatures, change begins the moment it leaves the cow's udder, and with favourable conditions will proceed with troublesome rapidity. It is a well-known fact that during thunder showers milk will change with much greater rapidity than at other times; this is owing to the effect of the peculiar electrical condition of the atmosphere. Chemists tell us that oxygen exists in two different forms, one of which is called by them ozone or allotropic oxygen, it being oxygen in an intensely active form, and when in this form will produce more change in a short time than is produced by it in its other form in a prolonged period; the electric fluid passing through air changes the oxygen from its normal condition to this allotropic form, or ozone, in which form or condition it exists until by combination it becomes inert. This will, I think, explain the reason why milk changes with so much more rapidity during thunder storms than at other times. There are times also when the air seems to be in a similar electrical condition to that during thunder storms, although no thunder and lightning are apparent; ozone is at such times abundant; iron rusts, linen mildews, timber decays and milk *putrefies*; at such times, with lightning-like rapidity, all being seized by this intensely active and insatiate agent of change. Rapid as these changes proceed they can be greatly hastened and accelerated by inoculating the milk with a putrid virus or ferment; and what is of greater importance, by proper care and appliances they may be greatly retarded, their evil effects almost entirely prevented, and in many instances completely arrested even after having made considerable progress. As "an ounce of prevention is worth a pound of cure," we will first consider means of preventing these changes from taking place; but before proceeding to that we may as well inquire what these changes are, how they are produced, and what new compounds are the resultant products. These changes in milk are all included in some of the forms of fermentation, either vinous, acetic, gastric, or putrefactive. The vinous fermentation changes the milk sugar to alcohol, and in some countries it is distilled while in this condition, and produces an alcoholic stimulating beverage, much sought after; the acetic fermentation converts the alcohol to lactic acid, or vinegar of whey, or milk. The gastric fermentation changes the casein from a soluble to an insoluble condition, and produces a coagulation of its substance. At all events, coagulation of the casein seems to be a direct result of gastric fermentation, although when a sample of milk is allowed to remain until acetic fermentation has taken place and lactic acid is formed, the albumen and casein will both coagulate, the acid coagulating the albumen, and the coagulated albumen acting as a gastric ferment on the casein, and in this case the whey or watery residue is clear and colourless, while with the casein only [coagulated, the whey is of a greenish yellow colour. These three forms of fermentation, however, rarely give the skillful, practical cheese-maker serious trouble; it is only when he has to grapple with putrefactive fermentation that his real trials begin. Putrefactive fermentation is so far different from the others, that new compounds are found, the most noted of which a gaseous form, while others retain a solid or liquid state, but ever changing, and, like putrid substances everywhere, are very offensive to taste and smell, and highly poisonous when taken into the human system. Scientists inform us that all these different classes of fermentation proceed from one and the same cause, and are simply the growth and development of living organisms—that the minute spores of the fungi called *Penicillium crustaceum*, or common blue mould, will produce all these different styles of fermentation when placed in contact with suitable substances, and surrounded with favourable conditions. They also tell us that no two kinds of fermentation can be going forward in the same substances at the same time. But in considering the subject of floating curds, we are met by this difficulty: we know by sad experience that in cases of floating curds, we have three kinds of fermentation going forward in one cheese vat, at one and the same time. We may have either the vinous or acetic fermentation in the sugar of the milk, the casein is being coagulated and consolidated by the gastric ferment, and at the

same time putrefactive and fermentation rapidly going forward; volatile gases and foul odours being evolved, and even decay and decomposition producing spontaneous heat. Now let us try to account for this state of things: first, the vinous or acetic fermentation is confined to the *sugar* of the milk; the gastric fermentation to the *casein*; the putrefactive fermentation to the *albumen*; while decomposition and recombination are going forward so rapidly that heat is evolved, frequently raising the temperature of the mass several degrees. That putrefactive fermentation sometimes occurs in the *casein* of the milk is freely admitted, but as the gastric ferment is usually supplied by the rennet in large quantities, its action supercedes that of the putrid ferment, becoming in fact antiseptic to putrefaction in its action on the *casein*; but unfortunately for the peace of cheese makers, the albumen is not affected by the gastric ferment, and it remains in a state of perfect solution, and a free prey to putrefactive fermentation during the entire process of cheese-making. These changes occur spontaneously in milk, at summer temperature, with sufficient time for their development, and they will occur at low temperature, but a longer time is necessary; the process of their development can be infinitely hastened and accelerated by inoculation. By this we mean that a small, even a microscopic, quantity of putrid ferment adhering to the pails, cans, or some other utensil used about the milk, or from any other source coming in contact with the fresh milk. Every one who is acquainted with the changes in milk, knows very well how much sooner it will become sour in consequence of being brought in contact with some already sour substance. Very few, however, are aware, or even willing to admit, when apprised of the fact, of the lightning like rapidity with which putrefaction progresses in milk when the conditions are favourable. It is unknown how small and apparently insignificant an amount of putrid matter incorporated with fresh milk, would work the complete ruin of a large amount; but as a spark will kindle a conflagration which consumes a city, so will the most minute and infinitesimal quantity of putrid matter work a mighty mischief in a vat of milk in a few hours. Hence the necessity of the most thorough, absolute, and immaculate cleanliness of every utensil used for or about the milk, the most scrupulous care that the milk shall not at any time be brought in contact with, or exposed to putrefying substances—a constant unremitting vigilance must be exercised that the air of the milk room, the milking stable, or even the field where the cows range, and the water they have to drink, should be perfectly free from foul odours and putrid ferments. The cows from which the milk is drawn *must be healthy*, or serious mischief ensues. Numerous instances can be cited where large quantities of milk have been ruined by carelessness, or something worse, by putting the milk from a diseased cow in with the mass. The milk from cows in heat will frequently work a similar mischief, and a fevered condition of the cow, whether induced by disease, violent exercise, or undue excitement, is ruinous to the milk drawn from or secreted by her while in this state or condition. From whatever cause derived, milk when once inoculated with a putrid virus soon ceases to be a healthy article of food, and becomes an absolute poison, more or less virulent in its effects as the ferment acts with greater or less rapidity. (Query: Would it not be found upon investigation that "sick milk," "milk sickness," and "poison cheese" all proceed from this cause—"putrid milk?") A low temperature will retard the action of ferments, and freezing destroys them; hence the necessity, now almost universally recognized, of cooling fresh-drawn milk: indeed, it cannot be disputed that, with the exercise of ordinary care and cleanliness, cooling the milk as soon as drawn from the cow to 65 degrees, will effectually guard against and prevent putrefactive fermentation, providing the cows producing it were healthy, and had pure air to breathe and pure water to drink. There is one other point, when using preventive measures, which we must not lose sight of. I allude to the contained gases in fresh-drawn milk, which, as before stated, comprise about 1-38 part of its volume. This is by some considered to be effete or dead animal matter; by others, as a portion of the milk already so far decomposed as to have assumed a gaseous form, and by some others, as a light volatile essential oil, which assumes the gaseous form at low temperatures. This last view appears plausible, from the fact that a temperature of 128 degrees will drive off every particle of it. It is usually

styled "the animal odour" of fresh-drawn milk; and it matters little which of the foregoing views we adopt so long as we recognise this fact, that when fresh-drawn milk at ordinary temperatures is excluded from the air previous to the escape of this "animal odour," putrefactive fermentation is rapidly induced; hence a free exposure to the air to enable this odour to pass off is very essential to the preservation of milk. So much for measures preventive of putrefactive fermentation, of which, if always successful, enough has been said; but, unfortunately, in the present state of information, we, from one cause or another, not unfrequently find ourselves, as practical cheese-makers, with a vat of tainted milk on our hands; and so insidious has been the approach of the enemy that the closest scrutiny has failed to detect its presence until we begin to work the curd and raise the temperature. The first thing discovered is a peculiarly green appearance in the whey, which frequently changes to a more than ordinarily milky appearance; directly a fine lather-like foam makes its appearance. Sometimes before, and sometimes after, a filthy, sickening odour is discovered; heat is spontaneously generated, the curd becomes filled with minute globules of gas, and a *floating curd* is the result. The reason why such a curd floats is readily understood when we consider that we get the necessary conditions to produce it from this putrid fermentation, and in no other way. One of the results of putrefaction is the liberation of hydrogen, and its combination with phosphorus and sulphur, forming phosphide of hydrogen or sulphuretted hydrogen, either of which is an intensely fetid and disgusting odour (the well-known and characteristic odour of decayed eggs is the same), and when inhaled in quantities is poisonous. Hydrogen being the lightest and most expansive gas known, and during its liberation from its compounds entangled with and enveloped by the *casein*, it causes the lumps of curd as they form to expand, and by its levity they are buoyed up and caused to float. The action produced by the rennet or gastric ferment consolidates the *casein*, while the albumen remains in a state of solution in the whey. Where this putrid ferment has free scope to act upon it, the trouble, therefore, will go on and increase until one of two conditions is fulfilled; either the albumen must be coagulated and consolidated, the same as the *casein* is, in which condition it is as easily preserved by salting, pressing and drying, or else we must rid the curd and ourselves of this troublesome customer, and thus avoid the difficulty. Coagulation of the albumen is readily accomplished by the use of an acid, as we previously stated, in the coagulation of milk by the agency of acetic acid. The same result—that is, the coagulation of the albumen—may be accomplished by the following method: Heat a quantity of sweet whey from the cheese vat to the boiling point, and then add an acid, very sour whey will do, and an instant coagulation of the albumen occurs; and one who has never before witnessed the experiment will be astonished at the quantity contained in whey. A similar result, though less in degree, may be obtained by allowing the whey to become quite sour by standing. As soon as lactic acid is formed it will be discovered that the whey assumes a more milky appearance, which is caused by fine particles of coagulated albumen floating in it; this accounts for the fact that a cheese will not huff and swell when made from a floating curd. Whenever we have a sharp acid developed in it before it is put in the press, coagulation has arrested putrefaction and changed the condition of the albumen to the same state as the *casein*, in which condition it is easily preserved, as was before stated. The discovery of this fact—the coagulation of the albumen by action of lactic acid developed in the sour whey, and which the action of the rennet wholly fails to perform—has enabled us to produce a fair style of cheese from material which was considered altogether refractory and perverse under the old treatment; and has been a means of saving a great amount of trouble, vexation, and loss. We have used, and advised the use of sour whey, to be applied with rennet to accomplish this object; but as with playing with edged tools the cleverest will occasionally cut their fingers, so will the most skilful cheese-maker produce a hard, sour cheese from putrid milk by the use of sour whey or other sharp acids with the rennet. A safer as well as a better plan than to use the sour whey is, as soon as the discovery is made that we are to have a floating curd, to raise the heat, if not already done, as soon as may be, and then immediately drain and salt the curd, and then hold it, for the development of the acid, before putting it in the press. In doing this we

have frequently held a curd six hours waiting for the acid, after it was drained and salted, before putting it to press. A still better plan than the last described is to drain the curd, as in the last method, as soon as possible, and then wait for the development of an acid, and as soon as the acid is sufficiently developed, to salt and grind the curd in a acid-mill, and then put to press. This method produces a cheese in which good judges fail to detect anything wrong, although the curd was a bad floating one. Gradually, step by step, we have passed through an educational process in the handling of putrid milk and floating curds, and have successively tried each and all the above described processes, besides many others not necessary to mention here, it having been our fortune, as far as we know and believe, to discover the true cause of floating curds, buffy and porous cheese, and apply the proper remedy. Acting on the knowledge of milk, its constituents, changes, and the other facts herein delineated, we have, as we believe, discovered a method of treating a floating curd as much superior to the foregoing as the best of those is better than the old way of letting them float, and huff and stink and swell, and become worthless and rotten. Our course is sustained by the following statement. The action of the rennet or gastric ferment coagulates the casein, which thus is changed from a state of solution to an *insoluble* condition—at least, it is insoluble in water, which answers our purpose—while the albumen, not being affected by the action of the rennet, remains in perfect solution, in which condition it is ready to be influenced by any agent of change, or from any new combination which may be presented. The watery portion of the milk, or the whey, of course, carries this solution of albumen, in which, as we have already shown, the putrefaction is at work, which has been, or will be, the cause of a floating curd; therefore, if we can remove all the whey, we shall remove this putrifying albumen, and with it be rid of all the trouble which is caused by it. So much for a theoretical solution of the difficulty; now for a practical method of performing the operation, which, after various attempts, different trials, and several partial failures, we have fixed upon the following method as the most in accordance with reason, and producing the most satisfactory results. Proceed as heretofore directed until the whey can mostly be removed, which should be done at as early a stage in the process as possible, and then replace the whey thus removed, or enough to float the curd readily, with water, at a temperature of about 90 degrees, or if it is not practicable to put in warm water use cold, and immediately raise the heat to 90 or 95 deg. This will so far dilute the whey, and extract it from the curd, that a plain difference will be perceived, and the odour will be decidedly less disgusting. Proceed to remove this water, and replace it with fresh, warm if practicable—if not raise the heat without delay. When this has performed its office, repeat the operation again, and then proceed to finish the process precisely as though no such thing as putrid milk or floating curd was ever known or cared for. It is barely possible that a case might be found so bad as to need a fourth dilution, but I have not yet tried a case that the third dose of water was not sufficient to insure a first-class

cheese from putrid milk, or a floating curd. The rationale must be obvious to all: the coagulated casein being insoluble in water, is not injured by this washing process, if performed with care, while the putrefying albumen in solution has been diluted and washed out, leaving the pure casein and butter, which in due course of time will ripen into a perfect cheese. I presume I need not add that the water used must of course be good, pure, well spring water—at all events good, drinkable water. We will now proceed to recapitulate, very briefly a few of the leading ideas, and then proceed to close this article. But first we would address a few words to the factory superintendent, and then, through him, to patrons of factories. Whenever you detect sour or putrid milk, as it is being received by you, consider that your patron, if he had a thorough understanding of the nature of milk, its constituent elements, its great absorbent power, its susceptibility to change and the nature of those changes, how they may be produced, and many times what apparently insignificant causes work serious mischief—we say, if his mind was enlightened and he understood all these things, it is hardly probable that he would ever deliver a can of sour or putrid milk, or milk that would become so if properly treated when received by you. Therefore labour to inform his *mind* first, and no doubt that will be all the labour required; for that person must be low indeed in the scale of morals who would persist in wrong doing when the right and a better way has been shown him and which is more for his interest to pursue. Therefore be prepared to give line upon line and precept upon precept, here a little and there a little and there a great deal. Teach them that, in order to have pure, healthy milk, first a healthy cow is indispensable; second, that she must be supplied with an abundance of good wholesome food; third, an ample supply of pure water; fourth, the air she breathes must be pure, and free from foul odours; fifth, she must be kindly treated and thoughtfully cared for; and sixth, that she must never be worried by lazy men or smart dogs (a dog has no business living on the same farm with a dairy of cows, and whenever attempted is a nuisance that should be summarily abated). In short, teach the farmer that his cows are intended by nature, and should always be, the very picture and personification of quiet contentment. Urge upon the attention of your milk producer the immense importance of cleanliness in every department of the business; that constant, relentless warfare against all forms of filth and nastiness must never be relaxed by a moment's truce; and when they understand and appreciate all these lessons, and their milk comes to your hand alright, qualify yourself to do your whole duty in the premises, always bearing in mind that filth and foul odours, in and around a cheese factory, are just as inexcusable and unnecessary, and just as deleterious to the milk and its product as though occurring anywhere else. You set yourself up as a leader and teacher, and one of the lights of the world—let your light shine, then, so as to be seen. First, educate yourself: learn your own business thoroughly, and then you will be prepared to give needed instruction to others; but, above all things, never treat the lack of information as a fault, nor ignorance as a crime.

EASINGWOLD AGRICULTURAL SOCIETY.

Since last year this meeting has made a rapid advance, as the entries at the show held on Friday numbered nearly 900 against rather more than 700 twelve months since.

JUDGES.

HUNTERS AND ROADSTERS: F. Midgley, Setterington; J. Hall, Selgefield; W. Stephenson, Cottingham.—COACHING AND AGRICULTURAL HORSES: J. Johnson, Brigham; and J. Mewburn, Ingleby Hall, Farm.—CATTLE: H. T. Peacock, York; T. Robinson, Tadcaster.—SHEEP, WOOL, AND PIGS: T. P. Outwaite, Goldsbro; W. Brown, Highgate, Holme.—POULTRY, BUTTER, EGGS, ROOTS, &c.: G. Hutchinson, York; the Rev. T. Hustler, Stillingfleet.—IMPLEMENTS: J. Raines, Acaster.

PRIZE LIST.

SHORTHORNS.

Two-year-old bull and under three years.—First prize, £3,

S. Frank, Brandsby; second, £1, J. and T. Coates, Peep o' Day.

Yearling bull.—First prize, £3, J. Cattley, Stearsby; second, £1, M. Tomlinson, Cowthorpe.

Bull calf, under twelve months.—First prize £2, and also a silver cup for the best animal in the bull classes, Sir G. O. Wombwell, Newburgh Park; second, 10s., T. H. Hutchinson, Catterick.

Cow of any age, in calf or milk.—First prize, £3, J. Cattley; second, £1, T. H. Hutchinson.

Two-year-old heifer.—First prize, £3, T. H. Hutchinson; second, £1, W. Pipes, Thorkorpe.

Yearling heifer.—First prize, £3, Wm. Linton, Sheriff Hutton; second, £1, Earl Faversham.

Heifer calf, under 12 months old.—First prize, £2, T. H. Hutchinson; second, 10s., W. Prest, Ampleforth College.

Cow for dairy purposes, any breed.—First prize, a silver

cream jug, S. Wiley, Brandsby; second, 10s., G. Wray, East Newton.

Cow, the property of a cottager whose rent does not exceed £10.—First prize, £2, J. Kildin, The Lund; second, 10s., P. Batty, Stillington.

Fat beast, any breed.—First prize, £2, G. Robson, Shires House; second, 10s., ditto.

Two-year-old heifer.—A silver cup, value £5, awarded to Mr. Hutchinson, Catterick.

Extra stock.—10s. awarded to C. Johnson, Easingwold, for a roan, one year old, cross-bred.

HORSES.

HUNTERS.

Mare, with foal at foot.—First prize, £3, W. Hornby, Newburgh; second, £1, T. Barnett, Birdforth.

Mare or gelding, any age, the owner residing in the county of York.—First prize, £25, R. Brunton, Middlesborough; second, £10, W. Muzeen, South Holme; third, £5, T. Hare, Lund Cottage; fourth, £3, H. Jewison, Raisthorpe; fifth, £1, C. Gill, Tanfield.

Mare or gelding, five years old and upwards, the property of tenant farmers or tradesmen only.—First prize, a silver cup, T. Hare; second, £3, H. Jewison; third, £1, C. Gill.

Mare or gelding, four years old.—First prize, a silver claret jug, W. Muzeen; second, £3, J. and T. Coates, Peep o' Day; third, £1, J. Batty, Stillington.

Fencers of any age.—First prize, £2, A. J. Brown; second, 10s., E. Peaty, The Lund.

Three-year-old gelding.—First prize, £3, D. Batty, Myton; second, £1, D. Long, Skipwith.

Three-year-old filly.—First prize, £2, J. Welburn, The Lund; second, 10s., Wm. Hornby, Newburgh.

Two-year-old gelding.—First prize, £2, J. Abel, Huby; second, 10s., J. Hoppes, Bedale.

Two-year-old filly.—Prize £2, W. Clark, Asenby.

Yearling gelding.—First prize, £2, J. Appleyard, Wistow; second, 10s., J. Corner, South Holme.

Yearling filly.—First prize, £2, W. Clark, Asenby; second, 10s., J. Greaves, Clotherholme.

FOR COACHING.

Mare, with foal at foot.—First prize, £3, W. L. Robinson, Thormanby; second, £1, L. Manfield, Thirkleby.

Three-year-old gelding.—First prize, £3, Wm. Harrison, Acaster Hill; second, £2, and third, £1, T. Plummer, Birdforth.

Three-year-old filly.—First prize, £2, W. Temple, Raskelfe; second, 10s., R. Allen, Crankley.

Two-year-old gelding.—First prize, £2, H. Pettinger, Hollins Grove; second, 10s., R. D. Batty, Throstle Nest.

Two-year-old filly.—First prize, £2, H. Pettinger; second, 10s., J. May, Crankley.

Yearling gelding.—First prize, £1 10s., L. Mansfield; second, 10s., H. Pettinger.

Yearling filly.—First prize, £1 10s., H. Pettinger; second, 10s., — Myers, Harome.

FOR ROADSTERS.

Mare, with foal at foot.—First prize, £3, J. Binnington, Sheriff Hutton; second, £1, R. Stephenson, Easingwold.

Three-year-old gelding.—First prize, £2, R. Sedgwick, White House; second, 10s., W. Hornsey, Stittenham.

Three-year-old filly.—First prize, £2, G. Robson, Shires House; second, 10s., J. Swales, Bolthby.

Two-year-old gelding.—First prize, £2, T. Barnett, Birdforth; second, 10s., T. Ward, Huby.

Two-year-old filly.—First prize, £2, W. Prest, Ampleforth College; second, 10s., — Walker, Ellenthorpe.

Yearly gelding or filly.—First prize, £1 10s., J. Crossley, Knaresbro'; second, 10s., W. Prest.

HACKNEYS.

Mare or gelding of any age.—First prize, £4, J. Robson, Rose Villa, Old Malton; second, £1, C. Knowlson, Birdforth.

Ladies' Hackney, mare or gelding of any age.—First prize, £2, J. H. Graves, Sutton; second, £1, J. Batty, Stillington.

FOR AGRICULTURAL PURPOSES.

Mare, with foal at foot.—First prize, £3, Mrs. T. Swan, Terrington; second, £1, W. Temple.

Three-year-old gelding or filly.—First prize, £2, and second, £1, Mrs. Heddon, Howfield House.

Two-year-old gelding or filly.—First prize, £2, G. Robson; second, 10s., — Pettinger, Carolina.

Yearling gelding or filly.—First prize, £1 10s., J. Appleyard, Wistow; second, 10s., J. Crossley, Knaresbro'.

Mare or gelding of any age.—First prize, £2, G. W. Appleyard; second, £1, J. Appleyard.

Pair of horses, of either sex, the property of a tenant-farmer.—First prize, £5, H. Pettinger; second, £2, G. Logan, Dudholm Wood.

Pony not exceeding 14 hands.—First prize, £2, W. Snowden and Son, Slingsby; second, 10s., J. Walker, Hawkshills.

Foals by the thoroughbred horse "Valentine."—First prize, £1, Hannah Barker, Huby; second, 15s., W. Gill, The Lund; third, 10s., J. Gilliard, Crayke.

SHEEP.

LEICESTER OR LONG-WOOLS.

Ram, any age, pure Leicester.—First prize, £2, T. H. Hutchinson, Catterick; second, 10s., E. Riley, Beverley.

Shearling ram, pure Leicester.—First prize, £3, T. H. Hutchinson; second, £1, E. Riley.

Ram, any age, not qualified to compete as a Leicester.—First prize, £2, R. Allan, Craukley; second, 10s., C. Sergeant, Hunsingore.

Shearling ram, not qualified as a Leicester.—First prize, £3, J. and T. Coates, Peep o' Day; second, £1, R. D. Batty.

Pen of five ewes, any breed, having suckled lambs up to July 1.—First prize, a silver cup, T. H. Hutchinson; second, £1, E. Riley; third, 10s., J. Cattle, Stearsby.

Pen of five shearling gimmers.—First prize, £2, E. Riley; second, £1, J. Corner, South Holme; third, 10s., T. Plummer, Birdforth.

Pen of five gimmer lambs.—First prize, £2, J. and T. Coates; second, 10s., J. Graves, Clotherholme.

Pen of five wether lambs.—First prize, £2, T. Plummer; second, 10s., W. Pickering, Gilling.

Top lamb.—First prize, £2, and second, £1, T. Hutchinson; third, 10s., J. Graves.

EXTRA STOCK.—Prize, R. Allen, Crankley.

PIGS.

Boar, large or middle breed, upwards of twelve months old.—First prize, £1 10s., J. Smith, Acomb; second, 10s., J. Wilson, Rainton.

Sow, large or middle breed, upwards of twelve months old.—First prize, £1 10s., J. Graves; second, 10s., W. Prest, Ampleforth College.

Boar, large or middle breed, under twelve months old.—First prize, £1 10s., G. Sedgwick, York; second, 10s., Mr. Ellerthorpe.

Sow, large or middle breed, under sixteen months old.—First prize, £1 10s., G. Sedgwick; second, 10s., T. and G. Barron, Huby.

Sow, small breed, upwards of sixteen months old.—First prize, £1 10s., T. Nicholson; second, 10s., J. Haxy.

Boar, small breed, any age.—First prize, £1 10s., F. Peaty, Spring House; second, 10s., H. Abell, jun., Wigginton.

Sow, small breed, under sixteen months old.—Prize, £1 10s., G. Sedgwick.

Three store pigs of same litter.—First prize, £3, F. G. Gruggen, Pocklington; second, £1, W. Plummer; third, 10s., J. Appleyard, Wistow.

Pig, the property of a cottager.—First prize, £1 10s., E. Addison, Easingwold; second, 10s., E. Addison.

EXTRA STOCK.—First prize, 10s., G. Fawcett, Sutton Forest; second, 5s., T. Armin, Easingwold.

AGRICULTURAL PRODUCE.

Twelve round potatoes.—First prize, T. Armin; second, C. Johnson, Easingwold.

Twelve kidney potatoes.—First prize, C. Johnson; second, J. Batty, Stillington Lane.

Three pounds of butter.—First prize, W. Wikeley, Moss Ends; second, T. Balderson, Bielby.

WOOL, three hogg fleeces.—First prize, £2, Mr. Tomlinson; second, £1, J. Gatenby, Helderby.

IMPLEMENTALS.

Prizes were awarded to H. Bushell, York; J. Barker, Dunnington; T. Wentworth, Tollerton; W. Hopperton, Sheriff Hutton; J. Wyrill, Farlington; — Slater, Ilusthwaite; and J. Smith, Easingwold.

THE HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.

MEETING AT PERTH.

On the Monday the Committee made their inspection for the purpose of selecting implements for trial for the Society's medals. The show of agricultural machinery is larger than usual, but there is less variety on several of the stands than has been displayed at previous meetings. There is an unusually large assortment of single-furrow, double-furrow, and drill ploughs. Among the exhibitors of single-furrow ploughs are J. Barrowman; Gray & Co.; Kirkwood; Law, Duncan & Co.; Sellar & Son; Kemp, Murray & Nicholson; Reid & Co.; Craig; Scoular; and others. The Aberdeen broadcast sowing machine, manufactured by Reid & Co., was awarded the first prize at the recent Riga show. Of double-furrow ploughs there is a larger number of exhibitors than of single-furrow ploughs. The principal firms here are Pirie & Co.; Fowler & Co.; Gray & Co.; Hornsby & Son; Murray & Co.; Mitchell & Son; Murray; Mellard's Trent Foundry; Sellar & Son. In the class of drill ploughs, among the exhibitors are—Allan & Sons; Kemp, Murray, & Nicholson; Reid & Co.; Kirkwood; Murray & Co.; and Small. The makers have also on their stands grubbers of various forms, two-horse and single-horse grubbers, the latter description being for green crops. There is a large display of harrows of various kinds, the zig-zag being the most common. In steam cultivating implements there is little shown to indicate that steam-power is now applied to the stirring of the soil. There is a steam drill balance five-furrow plough exhibited by Anderson, Monifeth, which is on a different principle from Fowler & Co.'s balance-plough. Lord Kinnaird also exhibits a large trenching plough, although his name does not appear in the catalogue. Williamson Brothers, Kendaal, exhibit a 6-horse steam engine and other machines, which deserve attention. Geddes, Boghall, Ellon, exhibits a drill-distributor, entered as a new invention. In the class of drill grubbers and hoes there appears to be nothing new. There is a very large display of reaping and mowing machines; besides a considerable number of the English manufacturers, there are also many Scotch manufacturers of these machines. None of the reaping machines have any new principle applied as to the cutting of the grain, although there are some variations in the form of the rakes for laying off the cut grain. Hay-tedders are shown on a few stands, but the use of these is mainly confined to the tedding of meadow grasses, as comparatively little hay is made in Scotland from natural grasses. The show of horse-rakes is very extensive, with steel teeth or teeth made of scrap-iron for gathering the scattered stalks of grass or corn. The display of common horse-carts is very meagre, and those shown apparently did not attract much attention. Potato diggers are shown on several stands. There are a few thrashing machines, and these, with one exception, are being all exhibited by English manufacturers, at the head of whom is the firm of Clayton & Shuttleworth. Among the other exhibitors are Marshall & Sons, Robey & Co., and Williamson Brothers. In the class for traction engines Robey & Co. exhibit. Welah, Southall, exhibits two models of railway cattle trucks, which admit of the feeding and watering during transit. Richmond & Chandler have the most extensive collection of chaff-cutters and corn cutters. Kemp, Murray, & Nicholson, R. Hornsby & Sons, and Piekley, Sims, & Co. are also exhibitors. Troughs for cattle, made of frechay, are shown by Lindsay & Anderson, Dunfermline. There are comparatively few exhibitors of cattle foods. There are, however, several exhibitors of feeding-cakes—composed of linseed, and the pressed refuse of other oleaginous seeds. There are only two stands on which collections of seeds and plants are displayed, by Dickson & Sons, Edinburgh, and Dickson & Turnbull, Perth.

As regards the general and individual excellence of the animals competing, these do not, in many of the sections, come up to the standard of those which competed at previous shows of the Society. This is noticeable in several sections of the cattle classes, but most apparent

in the Shorthorns, where the entries amount to 92. Of aged bulls 15 are entered. The animals are generally of large size, and those placed by the judges are very good specimens, but considerable dissatisfaction was expressed by outlookers at the placing of the animals. There were several very good bulls which were passed over without any notice. The yearling bulls include several animals of merit, and of cows of any age there is a large class. A breeder of Shorthorns, who was at Wolverhampton, states that the cows shown here are greatly superior to those which competed at the Royal English Society's show. Of two-year-old heifers there is a good but small class. The show of Polled Angus or Aberdeen cattle is one of the best that has been seen for many years; the bulls are particularly good, also the cows. The second prize animal, McCombie, was first at Aberdeen, but on the present occasion he is in his right place, as the one placed first is a splendid animal. The two-year-old bulls exhibited were a very good class of animals, and the Galloways are shown to great advantage. There is a comparatively small display of Ayr-shires, the district of this year's show being too far distant from the dairy counties of the south-west of Scotland. Several first-class bulls were shown, some of which were necessarily passed unnoticed. There is a very splendid show of Highlanders, as this was to be expected from the show being held on the borders of the Highlands. Several of the aged bulls are particularly fine specimens of the hardy breed. The fat cattle are generally excellent; the best of these coming from the northern counties, Perthshire taking the lead.

Pigs never appeared in greater numbers at the shows of the Society than on the present occasion. Both the large and small breeds are well represented in point of quality, but the competition is limited.

The horses are not high-classed, but in the Clydesdale sections the three-year-old entire colts and the three-year-old fillies are very superior to the older and younger animals exhibited. The thoroughbred stallions are few in number, and the half breeds are also in limited show. A more numerous and better display of ponies, and also of horses suitable for the field, might have been expected.

The blackfaced sheep have precedence in the catalogue. This is as it ought to be, as they are best suited for the mountainous districts of Scotland. There is, though, but a limited number shown. The Cheviot breed is very well represented. The most successful breeders in the south of Scotland exhibit. The Border Leicesters are a very good show, several of the prize animals combining symmetry, size, and quality with good fleeces. Longwool, other than Border Leicesters, are represented by Cotswold and Lincoln. A few Southdowns are shown, and the Shropshires are moderately represented.

PRIZE LIST.

JUDGES.

SHORTHORNS.—J. Wood, Harewood Hill, Darlington; G. H. Sanday, Holme Pierrepont, Notts; J. Currie, Halkers-ton, Gorebridge. Polled Angus or Aberdeen: W. Fullerton, Mains of Ardstie, Monifeth; C. Lyall, Old Montrose, Montrose; W. Ruxton, Farnell, Brechin. Galloway: J. Graham, of Slaw, Lockerbie; W. Rigg, Banks, Kirkcud-bright. Ayrshires: A. Allan, Munnock, Dalry, Ayr; H. Kirkwood, Killermont, Maryhill, Glasgow; D. Tweedie, Castle Crawford, Abington. Highland: A. Macdonald, Balranald, Lochmaddy; J. Macarthur, Acourrach, Inverary; J. Jardine, Killunan, Fintry, Stirling. Fat Stock: R. Lucas, Bridge of Allan; J. Wilson, George-street, Edinburgh.

DRAUGHT HORSES.—J. Young, Fulwood, Paisley; R. Findlay, Springhill, Bailleston; O. Brown, Shiel, New Galloway. Hunters and Ponies: W. Ford, Hardegreen, Dalkeith; R. Calder, Kelloe, Mains, Edrom.

SHEEP.—Blackfaced: T. Elliot, Hindhope, Jedburgh; J. Craig, Polquhays, New Cumnock; J. Watson, Culterallers, Biggar. Cheviot: W. Grieve, Skelhill, Ilawick; J. Jardine, Arkleton, Langholm; J. Scott, Clebrig, Lairg. Border Leicester: J. Wilson, Woodhorn Manor, Morpeth; R. Hardie, Harriethfield, Kelso; R. H. Harris, Earnhill, Forres. English Leicesters, Southdowns, Shropshires, and other Short-wooled Sheep: R. H. Mansfen, Pendeford, Wolverhampton; C. Randell, Chadbury, Evesham.

Pigs.—T. D. Findlay, Easterhill, Glasgow; G. Graham, Parcelstown, Westlinton, Carlisle.

DAIRY PRODUCE.—J. M'Ewen, Stirling; W. B. Gloag, Athole Street, Perth; C. C. Stewart, Perth.

IMPLEMENTS.—Inspecting Committee: Professor Macquorn Rankine, Consulting Engineer to the Society; J. Gibson, Woolmet, Chairman; A. Slight, Edinburgh, Practical Engineer; Professor Wilson, Edinburgh; J. W. Hunter, Thurston, Dunbar; R. Russell, Pilmuir, Leven; T. Mylne, Niddrie Mains, Liberton; G. Richmond, Balhaldie, Lawhill, Auchterarder; R. Elliot, Lighthood, Dunkeld; T. Ross, Bachilton, Perth; R. Gardiner, Chapelbank, Auchterarder; W. Watson, Seaside, Errol; R. Wilson, Fairmount Villas, Perth.

CATTLE.

SHORTHORNS.

First prize bulls at former shows.—W. S. Marr, Upper Mill, Tarves (Heir of Englishman).

Bulls calved before 1st January, 1869.—First prize, £20, R. Arklay, Ethiebeaton, Dundee (Annan Water); second of £10, J. Fletcher, Rosehaugh, Avoch (Michigan 2nd); third, J. Cochrane, Little Haddo, Newburgh, Aberdeen (Baronet). Commended: J. Cochrane (Lord Henry).

Bulls calved after 1st January, 1869.—First prize, £20, J. Balfour, Balbirnie, Markinch (Keir Dusterly 7th); second of £10, Sir D. Baird, Bart., Newbyth, Prestonkirck (Baron Lawrie 3rd); third, W. Scott, Glendronach, Huntly (Baron Stapleton). Commended: R. Moubray, Cambus, Stirling (Red Rover).

Bulls calved after 1st January, 1870.—First prize, £10, Sir W. Stirling Maxwell, Bart., Keir, Dunblane (Red Duke); second of £5, J. Beattie, Newbie House, Annan (Baron Torr); third, R. Bruce, Newton of Struthers, Forres (Baron Cecil). Commended: J. Lamb, Burrell Green, Penrith (Ignoramus).

Cows of any age.—First prize, £15, Sir W. Stirling Maxwell, Bart. (Henrietta); second of £8, the Duke of Buccleuch, Dalkeith Park, Dalkeith (Young Cherry); third, R. Arklay, Ethiebeaton, Dundee (Flecky Wear). Commended: W. A. Mitchell, Auchuagathle, Whitehouse, Aberdeen (Lady Forbes).

Heifers calved after 1st January, 1869.—First prize, £10, R. Bruce, Newton of Struthers, Forres (Rasperry); second of £5, Lord Kinnaird, Rossie Priory, Inchture (Flower of Hope); third, Lord Kinnaird (Forlorn Hope). Commended: E. Baillie, Dochfour, Inverness (Woodbine).

Heifers calved after 1st January, 1870.—First prize, £8, the Duke of Buccleuch (Queen of the Lothians); second of £4, the Duke of Buccleuch (Lady Cecil); third, Lord Kinnaird (Queen of the Gipsies). Commended: W. Scott, Glendronach, Huntly (Caroline).

POLLED ANGUS OR ABERDEEN.

Bulls calved before 1st January, 1869.—First prize, £20, Sir G. Macpherson Grant, Bart., Ballindalloch; second of £10, W. D. Fordyce, M.P., Brucklay Castle, Aberdeen; third, R. Walker, Portlethen, Aberdeen. Commended: W. J. Taylor, Rothiemay House, Huntly.

Bulls calved after 1st January, 1869.—First prize, £20, G. Brown, Westertown, Fochabers; second of £10, Sir T. Gladstone, Bart., Fasque, Laurencekirk; third, R. Clark, Taybank, Errol. Commended: A. Bowie, Mains of Kelly, Arbroath.

Bulls calved after 1st January, 1870.—First prize, £10, W. McCombie, Easter Skene, Skene, Aberdeen; second of £5, W. J. Taylor, Rothiemay House, Huntly; third, J. Leslie, The Thorn, Blairgowrie. Commended: G. Brown, Westertown, Fochabers.

First prize cows at former shows.—First prize, G. Brown, Westertown, Fochabers; second, Sir G. M. Grant, Bart.

Cows of any age.—First prize, £15, Sir G. M. Grant; second of £8, Sir G. M. Grant; third, Sir G. M. Grant.

Commended: W. J. Taylor, Rothiemay House, Huntly.

Heifers calved after 1st January, 1869.—First prize, £10, Sir G. Macpherson Grant, Ballindalloch; second of £5, A. Bowie, Mains of Kelly, Arbroath; third, G. Brown. Commended: Sir G. Macpherson Grant.

Heifers calved after 1st January, 1870.—First prize, £8, W. J. Taylor; second of £4, G. Brown; third, G. Brown. Commended: J. Leslie.

GALLOWAYS.

First prize bulls at former shows.—J. Fisher, Knells, Carlisle.

Bulls calved before 1st January, 1869.—First prize, £20, J. Graham, Parcelstown, Westlinton, Carlisle; second of £10, J. Cunningham, Tarbrooch, Dalbeattie; third, P. Morton, Laws Hall, Longtown.

Bulls calved after 1st January, 1869.—First prize, £20, J. Cunningham; second of £10, T. Biggar, Chapelton, Dalbeattie.

Bulls calved after 1st January, 1870.—First prize, £10, J. Graham, Braidlee, Newcastle town; second of £5, J. Kerr, Flatts of Cargen, Dumfries.

First prize cows at former shows.—J. Cunningham; T. Biggar.

Cow of any age.—First prize, £15, J. Cunningham; second of £8, T. Biggar, Chapelton, Dalbeattie; third, J. Cunningham. Commended: The Duke of Buccleuch.

Heifers calved after 1st January, 1869.—First prize, £10, T. Biggar; second of £5, J. Cunningham; third, J. Cunningham. Commended: The Duke of Buccleuch.

Heifers calved after 1st January, 1870.—First prize, £8, the Duke of Buccleuch; second of £4, J. Cunningham; third, J. Cunningham.

AYRSHIRES.

First prize bulls at former shows.—Sir Michael R. Shaw Stewart, Bart., Ardgowan, Greenock.

Bulls calved before 1st January, 1869.—First prize, £20, J. Wilson, Boghall, Houston; second of £10, Sir M. R. Shaw Stewart, Bart.; third, J. Fleming, Meadowbank Cottage, Strathaven. Commended: Colonel A. Campbell, Blythwood, Renfrew.

Bulls calved after 1st January, 1869.—First prize, £20, R. Kelso, Flatterton, Greenock; second of £10, Hon. G. R. Vernon; third, J. Fleming. Commended: A. Snodgrass, Mollanhd, Cardross.

Bulls calved after 1st January, 1870.—First prize, £10, W. Carmichael, Pool, Auchingray, Carnwarth; second of £5, J. Fleming; third, D. C. Willison, Parish Holm, Douglas. Commended: J. Fleming.

First prize cow at former shows.—J. Fleming.

Cows in-milk of any age.—First prize, £15, G. Dunlop, Castle Farm, Stewarton; second of £8, J. M. Martin, Auchentro, Cardross; third, M. Wilson, Blackstone House, Paisley. Commended: J. N. Fleming, Knockdon, Maybole.

Cows in-calf of any age.—First prize, J. Stewart; second, J. Fleming; third, G. Dunlop. Commended: The Duchess Dowager of Athole.

Heifers calved after 1st January, 1869.—First prize, £10, G. Pender, Dumbreck, Kilsyth; second of £5, G. Dunlop; third, G. Pender. Commended: J. Stewart. The class commended.

Heifers calved after 1st January, 1870.—First prize, £8, J. Fleming; second of £4, G. Pender; third, J. Fleming. Commended: W. Hunter, Craighead, Abington.

HIGHLAND.

First prize bulls at former shows.—The Earl of Seafield, Castle Grant, Grantown.

Bulls calved before 1st January, 1868.—First prize, £20, J. Stewart, Duntulm, Portree; second of £10, the Duke of Athole; third, J. Grant, Inverlaidan, Carr Bridge. Commended: C. M. Campbell, Ballimore, Tigh-na-Bruaich.

Bulls calved after 1st January, 1868.—First prize, £20, D. Carnegie, Stronvar, Lochearnhead; second of £10, T. L. M. Cartwright, Melville House, Ladybank.

Bulls calved after 1st January, 1869.—First prize, £10, J. Malcolm, Pottalloch, Lochgilphead; second of £5, the Duke of Athole; third, J. Malcolm. Commended: R. Lawrie, Fincharn, Ford, Lochaweside.

First prize cows at former shows.—J. Stewart, Duntulm, Portree; J. Malcolm, Pottalloch, Lochgilphead.

Cows of any age.—First prize, £15, the Duke of Athole; second of £8, D. M'Laren, Corryheone, Callander; third, J. Malcolm. Commended: The Duke of Athole.

Heifers calved after 1st January, 1868.—First prize, £10, J. Malcolm; second of £5, J. Stewart; third, J. Malcolm. Commended: Duke of Athole.

Heifers calved after 1st January, 1869.—First prize, £8, J. Malcolm; second of £4, J. Stewart; third, J. Malcolm. Commended: Trustees of the late R. Peter, Urlar, Aberfeldy.

FAT STOCK.

Polled oxen, calved after 1st January, 1868.—First prize, the Earl of Strathmore; second, P. Dudgeon, Cargen, Dumfries.

Polled oxen, calved after 1st January, 1869.—First prize, R. Bruce, Newton of Struthers, Forres; second, J. Skinner, Drumlin, Ballindalloch.

Highland oxen, calved after 1st January, 1867.—First prize, C. H. D. Moray, Abercainey, Crieff; second, J. J. Dalgleish, West Grange, Culross; third, A. Henderson, Duncanny, Glamis. Commended: C. H. Drummond, Moray, Abercainey, Crieff.

Highland oxen, calved after 1st January, 1868.—First prize, the Dowager Duchess of Athole; second, the Duke of Athole; third, the Earl of Seafield. Commended: The Duke of Athole.

Oxen of any other pure or cross breed, calved after 1st January, 1868.—First prize, T. Roy, Tullylumb, Perth; second, T. Roy; third, T. Roy.

Oxen of any other pure or cross breed, calved after 1st January, 1869.—First prize, R. Heath Harris, Earnhill, Forres; second, J. P. M'Pherson, Muirton, Kinloss, Forres; third, T. M. Tod, West Brackly, Kinross. Commended: R. Husband, Gellat, Dunfermline.

Cross-bred heifers, calved after 1st January, 1869.—First prize, J. Geldes, Orbliston, Fochabers; second, A. Cowie, Crombly Bank, Ellon.

EXTRA CATTLE.

Galloway.—Commended: P. Dudgeon, Cargen, Dumfries. Cross.—Commended: W. Marshall, Lunarty, Perth.

PIGS.

Boars, large breed.—First prize, £8, R. E. Duckering and Son, Northorpe, Kirton Lindsey; second of £4, R. E. Duckering and Son; third, G. Mangles, Great Givendale, Ripon, Yorkshire.

Boars, small breed.—First prize, £8, R. E. Duckering and Son; second of £4, C. A. Murray, Taymount, Stanley; third, G. Mangle.

Boars, Berkshire breed.—First prize, £8, R. E. Duckering and Son; second of £4, R. Lyall, Careary, Brechin; third, Sir David Baird, Newbyth.

Sows, large breed.—First prize, £6, R. E. Duckering and Son; second of £3, R. E. Duckering and Son; third, G. Mangles.

Sows, small breed.—First prize, £6, R. E. Duckering and Son; second of £3, A. Stewart, Bridge of Earn, Perth; third, J. L. Gow, Raith, Kirkealdy.

Sows, Berkshire breed.—First prize, £6, Sir D. Baird, Newbyth; second of £3, A. Stewart; third, Lord Kinnaird, Rossie Priory.

Pens of three pigs, not exceeding 8 months old, large breed.—First prize, £4, R. E. Duckering and Son; second of £2 and third, G. Mangles.

Pens of three pigs, not exceeding 8 months old, small breed.—First prize, £4, R. E. Duckering and Son; second of £2, J. L. Gow, Raith, Kirkealdy.

Pens of three pigs, not exceeding 8 months old, Berkshire breed.—Second prize, £2, Sir David Baird.

HORSES.

FOR AGRICULTURAL PURPOSES.

First prize stallions at former shows (exhibited for medium gold medal), Edinburgh, 1869, when the property of the present exhibitor, M. Bothune, Dreim, Beaully; Dumfries, 1870, when the property of the present exhibitor, P. Crawford, Dungoyack, Strathblane.

Stallions, foaled before 1st January, 1868 (breeder of best stallion, silver medal).—First prize, £30, P. M'Robbie, Sunny-side, Aberdeen; second of £15, W. Wylie, Dyke Farm, Whit-

burn; third, W. Moffat, Shirva, Kirkintilloch. Commended: C. and J. Rankin, Chapelfield, St. Cyrus, Montrose.

Entire colts, foaled after 1st January, 1868.—First prize, R. Brewster, Barnbeth, Bridge of Weir; third, P. M'Robbie. Commended: J. Bulloch, Stonedyke, East Kilpatrick; A. Kerr, Castiehill, Durrisdier; J. Bullock.

Entire colts, foaled after 1st January, 1869.—First prize, Sir W. Stirling-Maxwell, Bart., Keir, Dunblane; second, A. Johnston, Lochburn, Maryhill; third, P. Crawford. Commended: J. Arley, Kingsfield.

Entire colts, foaled after 1st January, 1870.—First prize, A. Weir, Newhouse Mill, East Kilbride; second, J. Love, Greenock; third, J. N. Fleming, Knockdon, Maybole. Commended: M. Bethune, Dreim, Beaully.

First prize mares at former shows.—Edinburgh, 1869, when the property of the present exhibitor, Sir W. Stirling-Maxwell.

Mares (in foal), foaled before 1st January, 1868.—First prize, W. Moffat, Shirva, Kirkintilloch; second, Sir W. Stirling-Maxwell, third, M. Bethune. Commended: G. Duncan, Kinkell, Keith Hall, Inverurie.

Mares, in-foal, foaled before 1st January, 1868.—First prize, Colonel Findlay, Boturch Castle, Dumbarton; second, L. Drew, Merryton, Hamilton; third, A. Buchanan, Garscadden Mains, New Kilpatrick. Commended: L. Drew.

Fillies foaled after 1st January, 1869.—First prize, G. Knox, Polnoon Lodge, Eaglesham; third, R. Walker, Mountbletton, Bamf. Commended: J. Hunter, Strathbungo, Glasgow.

Fillies, foaled after 1st January, 1870.—First and second prizes, J. N. Fleming; third, Sir W. Stirling-Maxwell. Commended: The Earl of Strathmore, Glamis Castle, Glamis.

Draught geldings foaled after 1st January, 1868.—Prize, A. Weir, Newhouse Mill, East Kilbride.

Draught gelding foaled after 1st January, 1869.—First prize, G. Morgan, Hosh Hill, Crieff; second, G. Tod, East Brackly, Kinross; third, T. Landale, Rhynd, Perth.

EXTRA SECTIONS.

Mares or geldings between 12 and 14 hands high.—First prize, Colonel J. W. Ozilvy, Rannagulzion, Blairgowrie; second, T. Bernard, Holme House, Haddington; third, The Duchess Dowager of Athole, Dunkeld. Commended: J. M'Inally and Son, Glasgow.

Mares or geldings 12 hands and under.—First prize, T. Coutts Trotter, Champdenue, Linlithgow; second, Colonel M. Macdonald, St. Martin's, Perth.

EXTRA PONIES.

Highly commended: Colonel M. Macdonald; J. M'Duff, Newmill, Stanley; Miss A. Norton, Rannoeh Lodge, Pitlochrie.

Mares or geldings, foaled before 1st January, 1867, suitable for field.—First prize, C. Lamont, Easbank, Kinross; second, D. R. Williamson, Lawers; third, G. Ronaldson, Linwood, Paisley. Commended: P. L. Gray, Freeland, Ruthie.

Mares or geldings, foaled before 1st January, 1868, suitable for field.—First prize, J. Duncan, Boghall, Kingsburns, St. Andrews; second, R. Gardiner, Chapelbank, Auchterarder.

Mares or geldings, foaled before 1st January, 1868, suitable for carriage.—First prize, G. Anderson, Linlithgow; second, G. H. M. Binning Home, Argaty, Donne.

EXTRA HORSES.

THOROUGH-BRED STALLIONS.

Highly commended: R. Mackay, Dalkeith. Commended: J. Playfair, Islabank, Coupar-Angus; and W. Wilson, Don Cottage, Alford.

HALF-BRED, ETC.

Highly commended: J. Morton, Lambieatham, St. Andrews. Commended: J. Walker, Hillhead, St. Andrews.

SHEEP.

BLACKFACED.

Tups above one shear.—First prize, J. Greenshields, West Town, Lesmahagow; second, J. Archibald, Overshiels, Stow; third, J. Greenshields. Commended: T. Aitken, Listonshiels, Balerno.

Dinnont or shearing tups.—First prize, J. Archibald; second, T. Aitken; third, J. Archibald. Commended: Allan C. Fagan, Innergoldie, Comrie, Crieff.

Ewes above one-shear, with lambs.—First prize, D. Tweedie, Castle Crawford, Abington; second, J. Archibald; third, J.

Malcolm, Pottaloch, Lochgilphead. Commended: The lambs of first and second prizes.

Shearling ewes or gimmers.—First prize, J. Archibald; second, A. C. Pagan; third, J. Archibald. Commended: J. N. Fleming, of Knockdon, Maypole.

CHEVIOTS.

Tups above one shear.—First prize, T. Elliot, Hindhope, Jedburgh; second, H. Brydon, Thirlestanehope, Selkirk; third, J. A. Johnstone, Archbank, Moffat. Commended: J. Brydon, Kinnelhead, Moffat.

Dimont or shearling tups.—First prize, T. Welsh, Ericstane, Moffat; second, Sir G. Graham Montgomery, Stobo; third, J. Johnstone, Capplehill, Moffat. Commended: J. A. Johnstone.

Ewes above one shear, with lambs.—(Best pen of lambs) First prize, J. Brydon; second, J. Archibald; third, T. Elliot. Commended: J. Carruthers, Kirkhill, Moffat; also the lambs of first and third prizes.

Shearling ewes or gimmers.—First prize, J. Archibald; second, J. Brydon; third, J. McGregor, Beltridding. Commended: Sir G. Graham Montgomery.

BORDER LEICESTERS.

Tups above one shear.—First prize, G. Hope, Fenton Barns, Drem; second, T. Ferguson, Kinnochry, Coupar-Angus; third, A. Smith, Stevenson Mains, Haddington. Commended: R. Binnie, Seton Mains, Longuidry.

Dimont or shearling tups.—First prize, J. Clark, Oldhamstocks Mains, Coekburnspath; second, The Earl of Southesk, Kinnaird Castle; third, T. Simson, Blainsie, Laurer. Commended: J. Clark.

Ewes above one shear.—First prize, G. Laing, Wark, Coldstream; second, G. Hope; third, T. Ferguson. Commended: The Marquis of Tweeddale.

Shearling ewes or gimmers.—First prize, J. Lees, Marvingston, Haddington; second, C. Lyall, Old Montrose, Montrose; third, J. Clark. Commended: G. Torrance, Sisterpath, Dunse.

LONG-WOOLLED OTHER THAN BORDER LEICESTER.

Tups of any age.—First prize, T. Wilkin, Thwald Downs, Dumfries; second and third, W. Norman, Hall Bank, Aspatria. Commended: T. Wilkin.

Ewes of any age or gimmers.—First prize, T. Wilkin; second and third, W. Norman. Commended: Lord Kinnaird.

SOUTHDOWNS.

Tups of any age.—First and second prizes, R. Scot Skirving, Camptoun, Drem; third and commended, J. Gordon, Parkhill, Aberdeen.

Ewes of any age or gimmers.—First and second prizes, R. Scot Skirving.

EXTRA.

Commended: R. Scot Skirving.

SHROPSHIRES.

Tups of any age.—First prize, The Earl of Strathmore; second, A. Crawford, Pitlowie, Glencarse, Perth; third and commended, The Earl of Strathmore.

Ewes of any age or gimmers.—First, second, and third prizes, The Earl of Strathmore. Commended: W. Arnot.

SHORT-WOOLLED OTHER THAN SOUTHDOWN AND SHROPSHIRE.

Tups of any age.—First and second prizes, J. P. McPherson, Muirton, Kinloss, Forres.

Ewes of any age or gimmers.—No award.

EXTRA SECTIONS.

Blaekfaced wethers not above three-shear.—First prize, W. Whyte, Spott, Kirriemuir; second, The Earl of Mansfield, Scone, Perth.

Crossbred ewes or wethers not above two-shear.—Prize, D. Dun, Baldinnies, Dunning.

EXTRA SHEEP—BLAEKFACED.

Very highly commended: T. Roy, Tullylumb, Perth. Highly commended: The Earl of Mansfield. Commended: T. Roy.

IMPLEMENTS.

H. J. Bexfield, Maxwell-street, Glasgow—minor medal.
T. Bradford and Co., Fleet-street, London, and Cathedral Steps, Manchester—medium medal.

R. M. Brechin, West Register-street, Edinburgh—medium medal.

J. Donald, Bristo Port-lane, Edinburgh—minor medal.
J. Grieve, County-place, Perth—minor medal.

Moule's Patent Earth Closet Company (Limited), Garrick-street, Covent-garden, London—medium medal.

Pirrie and Anderson, Perth—minor medal.
Singer Sewing Machine Company, Reform-street, Dundee—minor medal.

Springbank Chemical Company, Bellfield, Kirkintilloch—medium medal.

W. Thomson, Canal-street, Perth—medium medal.
The Waverley Machine Manufacturing Company, North Esk Mill, Dalkeith—medium medal.

A. Welch, Southhall—large medal.
C. Wilson, Lawnmarket, Edinburgh—medium medal.

J. and T. Young, Vulcan Foundry, Ayr—medium medal.
J. D. Allan and Sons, Culthill, Dunkeld—medium medal.

T. Halliday, Rosehall, Haddington—medium medal.
J. Hislop, Goatfield, Haddington—medium medal.

Kemp, Murray, and Nicolson, Stirling—medium medal.
Lillie and Elder, Tweedside Implement Works, Berwick-on-Tweed—medium medal.

J. Pickering, Stockton-on-Tees—medium medal.
Picksley, Sims, and Co., Bedford Foundry, Leigh, Lancashire—medium medal.

B. Reid and Co., Aberdeen—medium medal.
J. Richardson, Branton-place, Carlisle—minor medal.
Richmond and Chandler, Salford, Manchester—medium medal.

G. Thomson, Stirling—minor medal.
A. Wilson and Son, Dunfermline—medium medal.

R. Biekeron and Sons, Berwick-on-Tweed—medium medal.
Brigham and Co., Berwick-on-Tweed—medium medal.

J. Doe, Errol—medium medal.
Gibson and Tait, Fountainbridge, Edinburgh—medium medal.

J. Gray and Co., Glasgow—medium medal.
D. Henderson, Gattaway, Abernethy, Perthshire—minor medal.

R. Hornsby and Sons, Grantham—medium medal.
J. Kirkwood, Tranent—medium medal.

A. and J. Main and Co.—medium medal.
R. Mitchell and Son, Peterhead—minor medal.

G. W. Murray and Co., Banff—medium medal.
J. Murray, Kilmarnock—minor medal.

T. Pirie and Co., Longside, Aberdeen—large medal.
G. Sellar and Son, Huntly, Aberdeenshire—medium medal.

T. Wight, South Methven-street, Perth—medium medal.
G. Crystal, Princes-street, Perth—large medal.

Clayton and Shuttleworth, Lincoln—large medal.
J. Fowler and Co., Leeds—large medal.

J. Girdwood, Greenside-place, Edinburgh—medium medal.
Williamson Brothers, Kendal—large medal.

J. and T. Young, Ayr—medium medal.
Mellard's Trent Foundry Company—Revolving Mould-Board Plough and the Potato Diggers shown are recommended for trial.

At the dinner Mr. JACOB WILSON could only say that the weather was charming as compared with Wolverhampton (laughter). He might say the Inch was like a drawing-room as compared with a quagmire. But apart from that, and although they had sixteen or twenty thousand in their show at one time, they lost money by it; but he did think that national associations, like the Royal Agricultural or the Highland Society of Scotland, should not mind a little loss; they should rather consider the progress and improvement of the agriculture of their respective countries. He had no patience with economy in these annual showyard arrangements; and he asked when you have from £20,000 to £40,000 invested in funds, what are you doing for the agriculture of your generation by investing that money? They were living in a time when agricultural progress was advancing with greater and more rapid strides than had been known in times past, and he thought they could not spend their money better than by encouraging the improvements in mechanics as applied to agriculture at the present day. He would instance the case of steam cultivation, and strongly urge that the merits of steam cultivation should be tested regardless of expense; as the Royal Agricultural Society, which did not spare money in this matter. He was himself in favour of Fowler's machine, but he

was not prejudiced; if he could see a better to-morrow, he would buy it. As regarded steam cultivation he was glad to find that they had men of intelligence determined to keep up with the progress of the day, and that a society had been started for steam cultivating the whole of Scotland. Hints had been thrown out that this Society was for the purpose of pushing forward a certain engine, but this he hoped was not the case. He had been a steam cultivator for many years and there was a steam cultivating company which only the other year had got from 20,000 to 30,000 acres to cultivate. Their prices were moderate; they could earn a fair per centage for their money; and, what was far more important, it was a source

of profit and accommodation to the tenant farmers of their district. A matter had come under his notice as a judge in the Border Leicester class of sheep; he had been struck in several instances with the absence of clipping, and with the fact that there was no rule of the Society bearing on the subject. Finding that this was the case, the judges had taken the matter into their own hands; and in every instance of imperfect clipping they set aside the sheep, irrespective of any good quality. But he strongly insisted that this was not a matter for the judges; it should be made perfectly clear that imperfect clipping would not be allowed in connection with the show of the Highland Society.

TYNESIDE AGRICULTURAL SOCIETY.

MEETING AT BLAYDON.

This is the first time the Society has broken new ground, the annual meetings having hitherto been held at Hexham. The change was an experiment, which it was thought would infuse new vigour into the Society, and the results of the proceedings have given the promoters of the movement no reason to regret the course taken. There were 76 entries of cattle; and the Shorthorns deservedly stood in the place of honour. In the aged bulls the entry of Mr. Newton's Ace of Trumps in the regular class was a mistake, as he had won the first prize in the same class last year; and after the judges had awarded him the first prize this error was pointed out, and the honour was transferred to the second bull, and the second to a commended one. Ace of Trumps, however, came into competition again for the cup for the best Shorthorn, male or female, in the yard, and he was there declared the winner. In the cows there were some excellent animals, which was the case also in the yearling heifers. The horses were a capital muster; but the sheep were not of much interest, and the classes for Leicesters and Border Leicesters were not clearly defined, either by the arrangement of the catalogue or by the judges. The pigs, as usual, at a Tyneside show were an insignificant display. The implements were not numerous, but included amongst the exhibitors Coxon, Cockburn and Co.; Colgrave, of Newcastle-upon-Tyne; Gregory, Westoe; Trotter, South Acomb; Saint, Chollerton; Bickerton and Sons, Berwick; Lillie and Elder, Berwick; the South Tyne Implement Works, Blaydon Bridge; Syam, Stocksfield; Jackson, Stocksfield; Archer, Dunston; Archbold, Horsley; and Howe, Hexham.

PRIZE LIST.

JUDGES.

SHORTHORNS AND LEICESTER SHEEP: T. Wetherell, Durham; W. Cattle, Dormont Grange, Lockerbie, N.B.
HORSES FOR THE FIELD: J. Farrington, Brancepeth, Durham; J. Hall, Sedgfield.
HORSES FOR AGRICULTURAL PURPOSES, AND PIGS: M. Howes, Annan, Dumfriesshire; J. Hall, Chester Hill, Belford.
BUTTER: J. Robinson, Newcastle-upon-Tyne.

SHORTHORNS.

Bull of any age, not under two years old.—First prize, £10, J. Newton, Chollerton (Ace of Trumps); second, £4, J. Angus, Beal, Stocksfield (3rd Duke of Wellington); third, G. Angus, Broomley, Stocksfield (Prince Charley).
Yearling bull.—First prize, £6, R. Coulson, Coastley, Hexham; second, £3, Sir W. C. Trevelyan, Bart., Wallington, Newcastle (Lord Claro). Highly commended: R. Laycock, Winton, Bladon (Suez).
Bull calf.—A sweepstakes of 5s. each, with £1 added, J. and G. Atkinson, Bywell Hall Farm, Stocksfield. Highly commended: J. Angus (Prince Imperial).
Cows in calf or in milk.—First prize, £5, W. Lambert, Ellerington Hall, Blaydon Bridge (Splendour); second, £3, J. and G. Atkinson (Ringlet 2nd). Highly commended: J. and G. Atkinson (Elegant 6th); J. Annandale and Sons, Lintzford, Burnopfield (Lady); G. H. Ramsay, Derwent Villa, Gateshead. Commended: J. and G. Atkinson (Duchess Windsor).

Two-year-old heifer.—First prize, £4, W. Lambert (White-socks); second, £2, W. Lambert (Sunshine). Highly commended: G. Angus. Commended: G. Angus.

Yearling heifer.—First prize, £2, G. Angus (Forget-me-not); second, £1, Sir W. C. Trevelyan, Bart. Highly commended: R. Laycock, Winton, Blaydon.

Heifer calf.—A sweepstakes of 5s. each, p. p., with £1 added, J. and G. Atkinson. Highly commended: W. Lambert.

Shorthorn, male or female.—A silver cup, value £10, J. Newton, Chollerton, Hexham; second, Thompson and Sons, Kirkham, Brampton.

Dairy cow, of any age.—First prize, £5, T. Spencer, Ryton Grove, Blaydon; second, £2, R. Brown, Whickham Hall, Gateshead.

LEICESTER SHEEP.

Tup of any age.—First prize, £4, W. Lambert; second, £2, J. Winter, Low House, Haultwhistle.

Shearling tup.—First prize, £4, J. Winter; second, £2, W. Lambert. Commended: Messrs. Dinning, Nilston Ridge, Haydon Bridge.

Pen of tup lambs.—A sweepstakes of 5s. each, with 10s. added, Messrs. Dinning. Highly commended: W. Lambert.

Pen of three ewes.—First prize, £4, W. C. Thompson, Dilston Haugh, Corbridge; second, £2, W. Lambert.

Pen of three gimmers.—First prize, £4, Messrs. Dinning; second, £2, Messrs. Dinning.

Pen of three gimmer lambs.—A sweepstakes, J. H. Wood, Thornbrough, Corbridge. Commended: J. Annandale and Sons, Lintzford, Burnopfield.

Shearling Border Leicester ram.—A silver cup, value £10, T. Forster, jun., Ellingham, Chathill; second, £2, T. Forster, jun.

HORSES.

Three-year-old geldings or fillies for draught.—First prize, £3, C. Charlton, East Denton, Newcastle; second, £2, Rt. Hon. Lord Ravensworth. Commended: R. Laycock, Winton, Blaydon.

Two-year-old gelding or filly for draught.—First prize, £4, G. Browell, Chopwell Hall, Winton; second, £2, R. Laycock.

One-year-old gelding or filly for draught.—First prize, J. Wilkinson, Coeklaw, Hexham; second, £2, R. Laycock.

Draught foal, a sweepstakes of 5s. each, p. p., with £1 added.—First prize, W. C. Carr, Coal Burns, Blaydon; second, B. Lee, Stocksfield Hall.

Mare for breeding draught horses, with foal at foot, or in-foal at the time of show, a silver cup, value 10 guineas.—First prize, B. Spraggon, Nufferton, Stocksfield (Mez); second, £5, A. Annandale, West Chopwell, Ryton. Commended: A. Wood, Brocksbushes (Torie).

Pair of draught mares or geldings of any age.—First prize, £10, B. Spraggon (Borly); second, £5, W. C. Carr (Sandy). Commended: J. and G. Atkinson, Peepy, Stocksfield (Damsel).

Two-year-old gelding or filly for the saddle.—First prize, £4, A. B. Davidson, Hatheridge House, Hexham; second, £2, A. Wood.

Mare for breeding hunters, with foal at foot, or in-foal at the time of show, a silver cup value 10 guineas.—First Prize,

B. Spraggon; second, £3, J. T. Robinson, Leekby Palace, Thirsk (Go-a-head).

Hunter (mare or gelding) four-years-old and upwards, a silver cup, value £15.—First prize, R. Brown, Whickham, Gateshead (Fireaway); second, £5, B. Spraggon (Simon). Commended: Sir W. C. Trevelyan, Bt.

Leaper (mare or gelding), four-years-old and upwards, a premium of £5, added to a sweepstakes.—First prize, J. Dickinson, Chesterwood, Haydon Bridge; second, £1, B. Spraggon (Simon). A silver-mounted riding whip was presented to Mr. C. E. Hunter, Moor Lodge, Newcastle, as the best rider in this class.

Hackney mare or gelding, of any age, and warranted sound, and 15-2 hands high, a silver cup, value £5 5s.—First prize, H. H. Thompson, The Oaks, Sunderland, Newcastle; second, £2, G. R. Monkhouse; third, St. Nicholas' Buildings, Newcastle. Highly commended: W. Colbeck, Newcastle, and R. Forster, White Horse, Gateshead.

Pony.—First prize, £2, R. Brown (Dick); second, £1, G. McColl, Ovington, Prudhoe; third, 10s., H. Stephenson, Throckley. Commended: W. R. Dickinson, Derwent Cote House, Burnopfield.

PIGS.

Boar.—Prize, £3, G. H. Ramsay, Derwent Villa, Gateshead.

Sow.—First prize, £3, R. Brown; second, £1, J. Philipson, Haydon Bridge.

Cottagers' pig.—First prize, £3, Mrs. S. McGuinn, Hexham; second, £2, J. Cherry, Addison Colliery, Blydon; third, £1, J. Philipson.

BUTTER.

3lbs. of butter—2lbs. to be shown in rolls, and the remainder in devices suitable for the table.—First prize, a piece of plate, Mrs. J. Eell, Whittle Dean Cottage, Stocksfield; second, a pair of silver butter knives, Mrs. Millican, Allenheads, Northumberland. Commended: Mrs. Johnson, Mount Pleasant, Folley Lane, Allendale; and Mrs. A. Johnson, Folly House, Allendale.

At the luncheon, Mr. C. G. Grey, the Chairman, said this was the thirty-fourth meeting of the Society, and, therefore, as there were some gentlemen present who had assisted at its foundation, he thought they would be able to testify that much good work in the way of advancement and progress had been done since that time on Tyneside, and that although the general improvement in breed of stock had been very great, in nothing had it been greater than in the breed of sheep. Thirty-four years ago the breed of sheep was not particularly good, and comparatively few were kept; but he firmly believed that the making of the land on the Tyne, next to the draining, had been through the increased number of sheep fed upon it. He thought those who had examined the show that day would agree with him that it was one of the best which the Society had yet held. He was not aware what the sum taken at the gate amounted to; but he anticipated that the change of locality—which was at first an experiment not agreeable to very many of their friends further up the Tyne, but which, nevertheless, was an experiment that it was necessary to make—would prove in point of money a very good and gratifying success. Certainly nothing could exceed the beauty of the situation, and therefore when they compared it with the show ground at Wolverhampton, they could not but be more gratified with its excellence and condition. The land was dry, which the Wolverhampton ground was not, and hence they were able to walk comfortably on the turf, instead of plodding ankle deep in the puddle. Although the Tyneside Society had already done so much good in the improving of stock, it had this year come out very much stronger than they had any reason to expect in its display of horses. Horses, he was glad to say, were becoming better favourites in Northumberland than they had previously been, but still they had not got to that state of perfection which they certainly could arrive at, and which he and so many others had so long desired to see. There were other matters of as much importance to agriculturists as the breeding of stock, and hence it had often occurred to him that a society like the present might do something in the direction of

improving the agriculture and tillage of the county. He did not see his way, neither did the committee, to carry out these views; but he was certain that something of the kind was wanting, and hence he hoped all those gentlemen who travelled south and into Scotland would not forget to pick up what information they could on such subjects. There were one or two points on which they might well direct their attention; the first being the tillage of the soil and the second the manuring of it. The fashion in this county was the four or five-course rotation; and they thought if they gave the ground a good manuring for the fallow crops they had done their duty to it for the next five years. In other places, however, where they manured land very much more heavily than they did in Northumberland, and more than once in five years, it was found to be most successful; while the few northern farmers who manured more liberally than their neighbours could testify to the fact that it paid them much better in the long run than light manuring. Indeed, many of them thought if they put on four or five cwt. an acre they did very fairly. They left their land two or three years to rest in grass, and then expected to get a good crop in oats; but in many instances, as he knew, they would have got better crops if they had given slight assistance with guano. He maintained that any manure put on in the intervals between the turns of the fallow would well repay the outlay. There was another thing connected with tillage that he might mention. They had got very much more into the way of deep cultivation lately, and that was necessarily connected with heavy manuring. They had seen a great deal in Northumberland during the last twelve months of steam cultivation, and it confirmed him in an opinion which he had long held. Prizes were frequently given for the best ploughing, and the takers were those who could turn over the neatest lea furrow for oats; but he had long thought that to be a mistake, as a pretty furrow was by no means the one to give a good crop. His idea was that if they simply grubbed and cross-grubbed the land, harrowed it, and then drilled in the corn, they would get better crops than they ever would by the neatest lea furrow. Under these circumstances he would wait anxiously the result of the trials that were sure to be made during the next few years. Advising farmers to take away their old fences and gutters so as to make space for the use of steam tackle, which they could now secure on very fair terms, he would recommend them to pay more attention to their system of making hay. They invariably allowed it to remain out too long—having it standing out when the sheep were knee-deep in the clover—and hence if they desired to have it worth a pound or two more they should try to avoid all this exposure, and to have it properly stacked and ricked as soon as ever it could be accomplished.

Mr. M. STEPHENSON, jun., the Secretary, said his post was both a pleasure and a source of pride to him—a pleasure because it was always pleasant to be connected with anything that was successful and a pride because he stood in the position of secretary to the Society at that the most successful meeting it had held, both as regarded the quantity and quality of the stock exhibited, and also as concerned the interest manifested in their proceedings by the public.

Mr. EDDISON said there was one point that he must allude to—the exhibition of steam ploughs—for it had afforded him very great pleasure to see the Society take up the question. Up to the present time steam ploughs had been introduced only at the large county shows, but he trusted that the example set by the Tyneside Society at their exhibition—which had its origin in what might be called one of the principal steam-ploughing counties of England—he meant Northumberland, would soon be more extensively taken up in other parts.

Mr. RAMSAY said he was a member of the Society when it held its meeting at Ovingham, in 1804 or 1805, when the old Duke of Northumberland was its president, and even then the quality of the stock exhibited was of the first-class, of sheep particularly. Since that time great progression had been made, but he did not know that there were many better cattle to be found anywhere than in that district. Mr. Grey's father won one of the best prizes in Ireland with a Tyneside-bred bull, and the names of Mr. Bates and others were such as the present members of the Tyneside Agricultural Society might well be proud of.

GREAT DRIFFIELD AGRICULTURAL SHOW.

This popular little gathering, famous for its show of horses, took place on Friday, July 28; for it is all over in a day, many of the nags walking into the yard from their homes in the morning and back again at night, while a few that come from a distance get housed in and about the town, though during the exhibition they all stand the same chance with regard to the scorching rays of the sun or the pelting of the pitiless storms. As a show of horses it was very good, but, of hunters, not up to 1868, when Mr. Hall and Mr. Sykes sent the best of their studs; though it is only right to add that the Holderness horses did not then compete for prizes, and that Mr. Sykes was fairly beaten. As a lot this year, they might be more even than in '68, but there was nothing formidable amongst them, judging by the prize horses, and no one would say this or that animal is sure to win at York. Then, again, as to the management, there is no improvement, for many of the horses had not a number, and of those that had the figures were so fearfully small as to be almost useless, and if you ran the nags to their standing you would find, instead of one horse decorated with the winning colour, there were three or four in one class, so that a stranger, catalogue in hand, was completely abroad. Surely if some one took this up *pro bono publico* they would be doing as much good as giving a silver cup; for what is the use of a show if the public can learn nothing from it? But time flies and we must get to our horses. First, the thorough-bred hunting stallions, Theobald, Orpheus, Temptation, Strathern, and Prince Plausible. Theobald by Stockwell is a favourite in the neighbourhood, and a nice horse, without lumber, but faulty in his forelegs; while the blood-like one-eyed Orpheus, in the twenty-first year of his age, is but a wreck, and now a pitiable reminiscence of Orlando. Then Temptation is like a beer-barrel on tobacco pipes, being an overtopped son of Cathedral; and the long light-girthed hollow-backed Strathern, with all his faults, has something taking about him; while Prince Plausible is all over hunting-like, and the judges did not err and stray in awarding him the prize. Of hunting brood mares there were but three: Hornsea, a blood-like chesnut with good withers and short limbs, and Annie, by Robinson, in her nineteenth year, a rare good sort that has often played first in her younger days. Coast-guard, in the two-year-old hunting geldings or fillies, got first honours for his size; but he is an Angelus, that may prove too big for anything; while the highly commended by Picador, dam by Robinson, is hardy-looking, with some form. A wiry-looking yearling filly by Picador had the prize, with only one to oppose her. The President's silver cup for the best four-year-old hunting mare or gelding, with fourteen in, made a rather nice class, although Shellahoe, the winner, has his hind legs too far away from him; and Dandy, the commended, is a big thick short topped one, by Angelus, that we do not like. Mr. Wright's iron-grey, by Edmund Kean, for action and form we fancied as much as any; while Mr. Johnson's Cutfoss, Mr. Simpson's Archbishop, and a brown gelding, Lord Falconberg, of Mr. Lewison's, having all hunting form, we contrived to make out to whom they belonged. The all ages were not grand, although the Wakefield hero, Loiterer, was in the lot, and got more than he deserved even in the empty honour of a bit of green or commendation riband. Then Marmalade, a winner at Islington and Briggs, had to make room for Pelham, a

brown horse, by Kingfisher, with as plain a forehead as any one would wish to see, but two of the judges, crack horsemen, said he went like a tower under them. The fifteen three-year-old hunting fillies or geldings were a good class, and although The King is rightly named as far as getting the cup, being a strong good-limbed horse, he has not a good head or anything like shoulders for hunting. The commended Hugo, by Strathern, showed plenty of quality and form, as did Portland, by Spoon-stealer, and the rather *hollow-backed* Roll, by Cathedral. For Count Batthyany's cup for mares or geldings not less than four or more than six up to twelve stone, several started, and some rather nice horses, the winner, Sam Weller, being a very taking one, with form and fashion, who, with a little more bone below the knee, would be up to at least a couple of stone more. Mr. Foster's horse Resolute, and some others, whose numbers we could not get, were worthy of notice.

The roadster stallions were well represented by the very gentlemanly bay President, and the promising Young Merrylegs, of Brigg renown, as their first and second; while the neat Favourite was again in favour as a dam, adding another first to her many prizes, although the bouncing Miss Giles, from Sledmere, was in close attendance. There were half-a-dozen capital roadster geldings and mares of any age, but the very neat Countess was handed the colours after a tussle with another big one from Sledmere, the rather coarse weight-carrying Alice. They were all chesnuts.

With several very clever animals amongst the Ladies' Haicks, the judges got smitten with a little lady in blue from Scarborough, that sat her smart companion Onida like an artiste, and received the token of victory from the gallant Captain amidst much clapping of hands. The coaching stallions did not muster in any force, nor the mares, but Mr. Johnson's old lady by Trojan, and Mr. Reader's Bonnie are rare specimens of the sort. The agricultural horses were not grand, but among the stallions were four or five very smart active horses, and in the agricultural pairs some very clever animals.

There was but a handful of Shorthorns, headed by Lord Irwin, a Royal bull, but as several were of the right stuff, no doubt they will turn up again at York. Of sheep there were less, but the little was good, with a few grandees among the grouters, some fine old birds crowing amongst the poultry, and in an adjoining tent gentlemen buttering one another to their hearts' content, amidst cheers, loud cheers, bravos clapping of hands, table thumping, stamping, and other such amusing manifestations of mutual regard.

PRIZE LIST.

JUDGES.

THOROUGH-BRED, HUNTERS AND HAICKS: Captain Percy Williams, Baraby Moor, Retford; Robert G. F. Howard, Temple Bruer, Lincoln; Jacob Smith, Humberston, Borobridge.

COACHING AND AGRICULTURAL HORSES: Charles Seeker, V.S., Kaarborough; Thos. Smith, Grindley, Bawtry; Thos. Hunt, Thoringstone, Coldstream.

SHORTHORNS, SHEEP, AND PIGS: J. P. Outhwaite, Kaarborough; T. H. Hutchinson, Catterick; J. Lynn, Stroxtun, Grantham.

SHORTHORNS.

Bull of any age.—First prize, £7, W. Linton, Sheriff Hutton, York (Lord Irwin); second, £2, T. Stamper, Highfield House, Oswaldkirk (Gundelwald).

Yearling bull.—First prize, £5, M. Thomlinson, Cowthorpe, Wetherby (Flower King); second, £2, T. Franks, Flying-dales, Whithy.

Bull-calf under twelve months.—Prize, £3, Wm. Linton (Leeman).

Cow in calf or milk.—First prize, £5, Wm. Linton; second, £2, John Cattley, Stearshy, York.

Two years old heifer for breeding.—First prize, £4, T. Hornby, Flotmanby, Ganton; second, £2, W. Ransom, Driffield.

Yearling heifer.—First prize, £3, and second £1, H. F. Smith, Lamwath House, Sutton, Hull.

Heifer calf under twelve months old.—Prize, £2, J. S. Jordan, Elmswell Hall.

Fat ox of any age or breed.—Prize, £2, P. Dunn, Siggles-thorpe.

Fat cow or heifer of any age or breed.—Prize, £2, Executors of the late F. Jordan, Eastburn.

Best animal in classes 1, 2, and 3.—Prize, a silver cup, value £10, J. S. Jordan.

SHEEP.

Shearling ram.—First prize, £7, J. Borton, Barton House, Malton; second, £3, Executors of the late F. Jordan.

Three shearling rams.—First prize, £5, Executors of the late F. Jordan; second, £2, E. Riley, Kiplingcotes Farm, Beverley.

Aged ram.—First prize, £5, J. Borton; second, £2, E. Riley.

Five breeding ewes and lambs bred in the Riding, having had lambs in 1871, and suckled them up to the time of showing.—First prize, £5, W. Brown, Highgate, Holme-on-Spalding-Moor; second, £2, E. Riley.

Five shearling wethers bred in the Riding.—No entry.

Pen of ten shearling gimmers (in a proper state for breeding purposes), bred by the exhibitor, open to the East-Riding.—Prize, a silver cup, value £10 10s., E. Riley.

PIGS.

Boar, large breed.—First prize, £2, W. Lister, Armley, Leeds; second, £1, J. and H. Sugden, Leonfield, Beverley.

Sow, large breed.—First prize, £2, W. Lister; second, £1, R. E. Duckering, Northorpe, Kirton Lindsey.

Boar, small breed.—First prize, £2, W. Lister; second, £1, R. E. Duckering.

Sow, small breed.—First prize, £2, W. Lister; second, £1, R. E. Duckering.

Store pig, the property of a labourer or mechanic.—First prize, £2, G. Spink, Hutton Cranswick; second, £1, J. Parker, Hutton Cranswick.

Extra stock.—Prize, 5s., W. Beal, Great Kelk, Lowthorpe, 8 young pigs.

HORSES.

Thoroughbred stallion for hunters.—First prize, £6, H. S. Constable, Wassend, Hull (Prince Plausible); second £2, C. Lamplough, Laughtoft (Orpheus).

Stallion for coach horses.—First prize, £6, J. Reynolds, Carlton, Snaith (Ebor 4th); second, £2, J. Fawcett, Wilberfoss, York (Excelsior).

Stallion for roadsters.—First prize, £6, T. Brown, Butterwick (Bay President); second, £2, J. Smith, Shipton, Market Weighton.

Stallion for agricultural purposes.—First prize, £6, F. Simpkin,

Sutton, Hull (Lord of the Manor); second, £2, R. Marshall, Keyingham, Hull (Simon Purse).

Mare and foal for hunting.—First prize, £5, H. C. Constable (Hornsea); second, £2, G. C. Jarratt, Harpham (Annie).

Two-year-old hunting gelding or filly.—Prize, £3, W. Myas, Ulrome, Lowthorpe.

Yearling gelding or filly.—Prize, £2, B. Johnson, Frodingham Bridge.

Mare and foal for coaching.—Prize, £5, J. Johnson, Brigham.

Coaching mare without a foal.—Prize, £3, R. Lowish, Hais-thorpe, Bridlington (Wild Rose).

Three-year-old coaching gelding.—First prize, £5, W. Johnson, Lowthorpe; second, £2, G. Walker, Carlam-hill, Wawne.

Two-year-old coaching gelding.—Prize, £3, G. Walker.

Yearling coaching gelding or filly.—Prize, £2, G. Berriman, Watton Carr.

Roadster gelding or mare of any age.—Prize, £5, J. H. Smith, Shipton, Market Weighton.

Roadster mare and foal.—Prize, £5, A. Cook, Huggate, Pocklington.

Three-year-old roadster, horse or mare.—Prize, £3, T. Wilson, Folkton.

Mare and foal for agricultural purposes.—Prize, £5, W. Owston, Bishop Burton Lings, Beverley.

Three-year-old gelding or filly for agricultural purposes.—First prize, £4, W. Walker, Scorbrough Decoy, Beverley; second, £2, T. Hornby, Cattleholmes.

Two-year-old gelding or filly for agricultural purposes.—Prize, £3, W. Walker.

Yearling gelding or filly for agricultural purposes.—Prize, £2, J. Crompton, Bridlington.

Pair of horses or mares for agricultural purposes, regularly worked up to the time of showing.—First prize, £4, J. Crompton; second, £2, W. Catterson, Beverley.

Ladies' pony under 14 hands.—Prize, £3, W. Simpkin, Burton Agnes.

Pony not exceeding 12 hands.—First prize, £1, R. Beckett, Tibthorpe; second, a whip value 10s., W. Duggleby, jun., Beswick, Beverley.

The President's silver cup, value £25, for the best four-year-old hunting mare or gelding.—B. Hornby, Flotmanby, Ganton (Shellahoe).

A silver cup, value £25, given by the society, for the best (all ages) hunting mare or gelding.—J. B. Barkworth, Raywell, Brough, Pelham.

Best three-year-old hunting mare or gelding.—Prize, a silver cup or piece of plate, value £10 10s., given by Lord Londesborough, Sir G. Cholmley, Bart., Boynton, Bridlington (The King).

Best hunting horse or mare, not less than four years old, and not more than six years, up to 12 stone.—Prize, £10 10s., given by the Count Bathyany, M. Owston Duggleby, Beswick Hall, Beverley (Sam Weller).

Best ladies' hack of any age, not exceeding 15 hands 2 inches high.—Prize, a silver cup, value £10 10s., W. L. Eyre, Driffield (Onida).

Best mare or gelding of any age, to be shown in single harness.—Prize, a cup or piece of plate, Executors of the late F. Jordan, Eastburn.

Mare or gelding which shall jump the hurdles best to the satisfaction of the judges.—Prize, a piece of plate, W. Duggleby, jun., Beswick (Wildflower).

EXTRA STOCK.—F. Pickering, Driffield.

THIRSK AGRICULTURAL SOCIETY.

This is the second year of the existence of the association, and though the entries were not equal to those of last season, they were numerous. There were not many cattle exhibited, but the foot-and-mouth disease has not become extinct, and the near proximity of the Yorkshire Agricultural Show may have produced some effect. The number of entries was as follows: Cattle, 72; sheep, 64; pigs, 33; horses, 255; poultry, 201; butter, 9; and implements, 81—total, 715. There were

upwards of forty more entries of sheep than last year, and this may be attributed to the circumstance that several of the classes were open to All England, and thereby admitted the animals of some of the best breeders. This show as a whole was excellent. Of cattle, one of the principal features was the dairy cow class.

JUDGES.

HORSES.—Hunters and roadsters: A. L. Maynard, Newton

Hall, Durham; J. Casson, Burgh-by-Sands, Carlisle; G. Bolam, Alwinton, Rothbury. Coaching and agricultural: J. Mewburn, Ingleby Hill, Yarm; W. Hill, North Charlton, Clathill.

CATTLE, SHEEP, AND PIGS.—T. Dodds, Mount Pleasant, Wakefield; J. Culshaw, Towneley Hall, Burnley; H. T. Peacock, The Mount, York.

AWARD OF PRIZES.

CATTLE.

SHORTHORNS.

Bull two years old and upwards.—First prize, £5, J. Knowles, Wetherby; second, S. Frank, Brandsby.

Bull above one and under two years old.—First prize, £5, J. Cattley, Stearsby; second, J. Waind, Ankness.

Bull calf under twelve months old.—First prize, £2, Major Staplyton; second, T. H. Hutchinson, Catterick.

Cow or heifer, in-calf or milk, three years old and upwards.—First prize, £4, J. Cattley; second, H. Pickersgill, Salmon Hall, Thirsk.

Cow or heifer, under three years old.—First prize, £3, R. Tennant, Scarcroft Lodge, Leeds; second, T. H. Hutchinson.

Heifer, one year old and under two.—First prize, £2, Major Staplyton; second, T. F. Imeson, Dalton, Thirsk.

Heifer calf under twelve months old.—Prize, T. H. Hutchinson.

A silver cup, value, £5, to the best female in the above classes, Mr. Tennant's "Daisy."

CATTLE OF ANY BREED OR CROSS.

Cow for dairy purposes.—First prize, £3, and second, G. K. Harland, Sowber Hill, Northallerton.

Cow for dairy purposes, the property of a cottager.—First prize, £2, J. Walker, Thirkleby; second, J. Todd, Sion Hill, Thirsk.

Three dairy cows in-calf or milk, the property of a tenant-farmer, a silver cup, value £10.—First prize, J. Cattley; second, £4, T. H. Hutchinson; third, £2, H. Hutchinson.

SHEEP.

LICESTER OR LONG WOOL.

One shear ram.—First prize, £2, F. Heugh, Broomfield House, Northallerton; second, J. Greaves, Clothholme, Ripon.

Aged ram.—First prize, £2, F. Heugh; second, ditto.

Pen of three gimmer shearlings.—First prize £2, C. and W. Dovener, Sunley, Raines, Ripon; second, J. Heugh, Bedale.

Pen of three ewes, having suckled lambs in 1871.—First prize, J. Heugh; second, W. Hall, Thirsk.

One shear ram.—First prize, £5, T. H. Hutchinson; second, £2, J. Borton, Malton.

Aged ram.—First prize, £5, J. Borton; second, ditto.

Pen of three gimmer shearlings.—First prize, £3, T. H. Hutchinson; second, £2, J. Borton.

Pen of three ewes, having suckled lambs in 1871.—First prize, £3, T. H. Hutchinson; second, ditto.

OTHER BREEDS.—(Limited to the district).

Pen of three Masham ewes, having suckled lambs in 1871.—First prize, £2, W. T. Wells, Kirklington, Ripon.

PIGS.

Boar of the large breed.—First prize, £2, W. Lister, Armley, Leeds.

Boar of the small breed.—First prize, £2, W. Lister; second, 10s., C. Roberts, Wakefield.

Boar of any breed not qualified to compete in the two previous classes.—First prize, £2, S. Appleby, Armley; second, D. Sanderson, Moulton Hall, Richmond.

Sow of the large breed, in pig or milk.—First prize, £2, W. Lister, Armley.

Sow of the small breed, in pig or milk.—First prize, £2, C. Roberts, Wakefield; second, W. Lister, Armley.

Sow of any other breed.—First prize £2, C. Roberts; second, J. C. Taylor, Oatlands.

Three gilt pigs under 12 months old.—First prize, £2, J. Wilson, Rainton.

Pig, the property of a cottager.—First prize, £2, W. Herring, Skelton; second, W. Wise, Low Brewery, Ripon.

A silver cup, C. Roberts, of Wakefield, for the best female pig in the above classes.

HORSES.

Stallion for getting agricultural horses.—Prize, £25, J. Borshow, Burley-in-Wharfedale.

Mare for breeding weight-carrying hunters, with foal at foot.—First prize, silver cup value £50, W. H. Clarke, Hookhouse, Howden; second, J. B. Booth, Killyerby Hall, Catterick; third, J. Brown, Wiggonby, Cumberland.

Brood mare for breeding coach horses, with foal at foot.—First prize, £3, L. Mansfield, Thirsk; second, W. L. Robinson, Thormanby.

Brood mare for breeding roadsters, with foal at foot.—First prize, £3, R. Williamson, Ripon; second, A. Hawxwell, Thirsk.

Brood mare for breeding agricultural horses.—First prize, £3, T. F. Imeson, Dalton, Thirsk; second, W. Dixon, Baldersby, Thirsk.

HUNTERS.

Hunting yearling gelding.—First prize, Viscountess Downe; second, R. H. Gilbert, Thornton-le-Street.

Hunting filly.—First prize, R. Cadman, Broughton; second, Rev. A. T. Atwood, Thirsk.

Two years old gelding.—First prize, £2, G. Carter, Bedale; second, £1, Viscountess Downe.

Two years old filly.—First prize, £2, R. Emmerson, Over Dinsdale, Darlington; second, Viscountess Downe.

Three years old gelding.—First prize, £3, D. Batty, Myton; second, J. Cattley, Barton-le-Street.

Three years old filly.—First prize, £3, Viscountess Downe; second, G. B. Pierson, Baldersby, Thirsk.

Hunting gelding or mare, four years old.—First prize, £7, R. Brunton, Marton, Middlesbro'; second, £3, W. Stephenson, Cottingham.

Hunting gelding or mare, five years old and upwards.—First prize, silver cup, value £10, T. H. D. Bayly, Edwinstowe House, Ollerton; second, £5, J. S. Darrel, West Ayten; third, £2, J. Knowles, Wetherby.

COACHING HORSES.

Yearling gelding.—Prize, L. Mansfield, Thirsk.

Yearling filly.—Prize, J. Curry, Boltby, Thirsk.

Two years old gelding.—First prize, £2, G. Robinson, Marton, Middlesbro'; second, H. Pettinger, Easingwold.

Two years old filly.—Prize, £2, J. Walls, South Kilvington, Thirsk.

Three years old gelding.—First prize, £3, T. Plummer, Birdforth; second, G. W. Appleyard, Easingwold.

Three years old filly for coaching.—First prize, £3, J. Scarth, West Rounton; second, £1, J. Cleasby, Carlton, Miniott.

ROADSTERS.

Two years old gelding.—First prize, T. Barnett, Birdforth; second, W. Small, Sand Hutton.

Two years old filly.—First prize, Major Staplyton, Myton Hall; second, R. Robson, Thornton-le-Moor.

Three years old gelding.—First prize, £2, G. Askwith, Hutton Sessay, Thirsk; second, R. Sedgwick, Easingwold.

Three years old filly.—First prize, £2, W. A. Speck, Thornborough, Thirsk; second, T. Harrison, Wheldrake.

Gentleman's hackney, of any age or of either sex, not exceeding 15 hands high.—First prize, £5, J. Robson, Old Malton; second, £2, C. Knowlson, Birdforth.

AGRICULTURAL HORSES.

Yearling gelding.—First prize, H. Walton and Son, Low Gingerfield, Richmond; second, G. Robinson, Bagby.

Yearling filly.—First prize, C. Watson, Sowerby; second, J. Pinkney, Bagby.

Two years old gelding.—First prize, £2, G. Robson, Easingwold; second, C. Barrowby, Baldersby.

Two years old filly.—First prize, £2, Mrs. Ann Heddon, Baldersby; second, E. and W. Pawson, Burley-in-Wharfedale.

Three years old gelding.—First prize, £2, and second, Mrs. Ann Heddon.

Three years old filly.—Prize, £2, Mrs. Ann Heddon.

Pair of agricultural horses, of either sex.—First prize, £4, T. Upton, Pallathorpe; second, Major Staplyton, Helperby.

Pony, not exceeding 14 hands, any age or of either sex.—First prize, £3, A. Hawxwell, Thirsk; second, £1, W. Snowden and Son, Shlingsby.

EXTRA STOCK.

Animals not shown in any other class.—R. E. Browne, Wass, Oswaldkirk; Major Staplyton; G. Bainbridge, Easingwold; J. Swales, Boltby, Thirsk; T. Kirk, Thirby, Thirsk; M. Imeson, Thirsk.

THE ROYAL NORTH LANCASHIRE AGRICULTURAL SOCIETY.

MEETING AT BLACKBURN.

JUDGES.

CATTLE.—T. Dodds, J. Knowles, and J. Angus.
HORSES, HEAVY.—T. Henderson and J. Robinson.
HORSES, LIGHT.—Major C. Simpson Ballard and A. Turnbull.
SHEEP AND PIGS.—J. Angus and G. Cuerton.
ROOTS, SEEDS, BUTTER AND CHEESE.—R. Whalley and Mr. Gardiner.

Of Shorthorns there were sixteen entries in the aged bull class, Lady Pigot forwarding two of the entries, and Mr. Statter, of Whitefield, Manchester, the same number. Mr. Statter took the first prize of £10 with a roan, Marquis of Wharfedale; and Mr. John Farrer, of Burnley, the second prize with a white, Duke of Thorneyholme. A white bull from Marsden Hall, Burnley (Mr. W. Tillotson's), was highly commended. A silver cup for the best bull, above a year and under two years, went to Mr. Jas. Dickinson, Upholland, Wigan; and the second prize to Mr. R. Parker, Fern Hill, Burnley. The Baron Oxford pedigree was more successful in the next class, Colonel Towneley, who had exhibited a bull of the same sire for the last-mentioned prize, winning the cup for the best bull-calf by an eleven-months' calf of this breed. Mr. Statter, of Whitefield, was second. There were twenty-one entries in this class, among them a nine-months old by the famous prize bull Bolivar, from Mr. Brierley's farm, Middleton. The cows, of which there were twenty-five entries, included some exceedingly fine samples of their class. The Rev. Leonard Charles Wood, Kirkham, took the first award with Miranda X., a four-year-old white, of rare symmetry and point; and Mr. Adam Dugdale, Rose Hill, Burnley, was second. In the class for heifers above two and not exceeding three years, in calf or milk, Mr. Brierley and Mr. Statter again came together, each having two animals entered. Mr. Brierley took the first prize, Mr. Statter the second, with a highly commended. Colonel Towneley received the first prize for the best heifer not exceeding two years, and Mr. B. Baxter, Skipton, the second. Colonel Towneley again secured a first prize in the class for heifer calves, the Rev. R. Edwards Taylor, being second. Other awards were made as follows:

SPECIAL PRIZES.

Best Shorthorn bull for use of tenants.—William Bradburn, Wednesfield, Wolverhampton.

Best male animal.—Thomas Statter, jun., Stand Hill, Whitefield.

Best female.—Colonel Towneley, Burnley.

The best bull, cow, and calf, the latter to be the progeny of one of the two former.—Thomas Statter, jun., Stand Hill, Whitefield.

CATTLE OF ANY BREED.

For competition by owners of land of not more than 100 acres, or tenant farmers residing within the Society's district.

Bull two years old and upwards.—First prize, G. Haworth, Lower Darwen, Blackburn; second, J. Farrer, Thorneyholme, Burnley.

Bull above one and under two years old.—First prize, J. Dickinson, Balcony Farm House, Upholland, Wigan; second, R. Parker, Fern Hill, Burnley.

Bull-calf under twelve months old.—First prize, T. Statter, jun., Stand Hill, Whitefield; second, C. W. Brierley, Rhodes House, Middleton.

Cow in calf or milk, having had a calf, and above three years old.—First prize, Rev. L. C. Wood, Singleton Lodge, Kirkham; second, T. Statter, jun.

Heifer not exceeding three years old, and in calf or milk.—First prize, C. W. Brierley; second, T. Statter, jun.

Heifer not exceeding two years old.—First prize, B. Baxter, Elslack Hall, Skipton, Yorkshire; second, C. W. Brierley.

Heifer calf.—First prize, C. W. Brierley; second, J. Marsland, Ayskhey, Bashall Eaves, near Clitheroe.

Although not numerically an extraordinary show, the horses were generally the most interesting and attractive feature. Heavy draught horses did not approach, in point of numbers, the lighter animals for hunting and road purposes. For the best thorough-bred stallion Mr. Joseph Tate, Pole-street, Preston, won the principal prize, and Major Le Gendu N. Starkie received a commendation. Messrs. Lund and Redman, Preston, received the first award for roadster stallions, with Octavian. Mr. John Houghton took the first prize for draught stallions. Mr. Statter got first and second prizes for brood mares for draught purposes; Mr. Jonathan Peel, Clitheroe, for mares for breeding hunters; and Mr. Thomas H. Miller, Singleton, for harness mares. The first and second awards for pairs of draught horses were given to Mr. Brierley, who also obtained the first place for the best four-year-old and upwards draught mare or gelding. The young horses were an exceedingly promising lot, with the exception of the class for harness purposes. The judges did not think any of the animals, after the first prize, sufficiently commendable to merit a second award. Mr. Statter took a filly first award for three-year-old geldings for agricultural purposes; Mr. W. Armstrong, Kendal, for hunting; and Mr. Edward Croft, Preston, for harness; Mr. James Wright, Preston, took first prize for two-year-olds for draught; Mr. Benjamin Bee, Goosnargh, for hunting; and Mr. Lawrence Hall, Radcliffe, for harness. For yearlings, Mr. E. Jameson, Fleetwood, took the first prize for animals for draught; Mr. Miller, Poulton-le-Fylde, for hunting; and Mr. Nicholson, Lytham, for harness purposes. For the best foal for draught purposes, Mr. Clegg, Garstang, won the first prize; for hunting purposes, Mr. Miller, Poulton-le-Fylde; and for harness, Mr. Nicholson. The hunters were a better turn out. A seven-year-old bay, the property of Mr. W. Coddington, Wy-collar Hall, Blackburn, received the first prize. Mr. C. Patrick, Clough Field, Rossendale, obtained the second place. For hunters carrying 10 stone over a fence four feet six inches high, the last-named gentleman was more successful, as he obtained the first prize with a younger horse. Mr. Thwaites, Blackburn, received the first prize for roadster mares or geldings; Mr. Joseph Holroyd, Rochwood, Burnley, for cobs above 13½ and not exceeding 15 hands high; Mr. Abel Buckley, Ashton-under-Lyne, for cobs above 12 and not exceeding 13½ hands; and Mr. J. C. Rogerson, Cooper-street, Manchester, for ponies under 12 hands.

Many were disappointed with the exhibition of sheep, as in a number of cases the entries failed to appear. The awards were:

SHEEP.

Shearling Leicester ram.—Prize, T. H. Hutchinson, Manor House, Gatterick, Yorkshire.

White-faced, long-woolled shearling ram, not of the Leicester breed.—Prize, J. and R. Earnshaw, Grindleton, near Clitheroe.

Ram of the white-faced long-woolled, not being of the Leicester breed, of any other age than shearling.—Prize, J. and W. Pinder, Waddington, near Clitheroe.

Shearling ram of the Shropshire Down breed.—Prize, W. Baker, Warwickshire.

Ram of the Shropshire Down breed, of any other age than shearling.—Prize, W. Baker, Moor Barus.

Shearling ram of the Lonk breed.—Prize, L. Duckworth, Sheep Hey, Ramsbottom.

Ram of the Lonk breed.—Prize, J. Peel, Knowlmerre Manor, Clitheroe.

Ram of any other breed, adapted to a mountain district.—Prize, R. Parker, Moss End, Burton, Westmoreland.

Pen of three Leicester ewes, not to exceed in age four sheares.—Prize, J. and B. Earnshaw, Grindleton.

Three shearling Leicester ewes.—Prize, W. Clegg, Fairhurst, Goosnargh, Preston.

Three white-faced long-woolled ewes.—Prize, J. and R. Earnshaw.

Three shearling white-faced long-woolled ewes.—Prize, J. and R. Earnshaw.

Three Shropshire Down ewes.—Prize, W. Baker, Moor Barns, Warwickshire.

Three shearling Shropshire Down ewes.—Prize, W. Baker. Three Lonk ewes, not to exceed in age four shears.—Prize, J. Peel.

Three shearling Lonk ewes.—Prize, J. G. Bridge, Edgecoates, near Rawtenstall.

Three ewes best adapted to a mountain district.—Prize, R. Parker, Moss End, Barton, Westmoreland.

Three shearling mountain ewes.—Prize, R. Parker.

PIGS.

Boar of the large breed, any age.—Prize, P. Eden, Cross Lane, Salford.

Boar of the middle breed.—Prize, P. Eden.

Boar of the small breed.—Prize, P. Eden.

Boar of the Berkshire breed.—Prize, J. Whalley, Fisher's Arms, Blackburn.

Breeding sow of the large breed.—Prize, P. Eden.

Breeding sow of the middle breed.—Prize, P. Eden.

Breeding sow of the small breed, in pig or milk.—Prize, C. R. N. Beswicke-Royds, Littleborough.

Breeding sow of the Berkshire breed.—J. and R. Brown, East View, Preston.

The following are the awards for implements: Mowing machine: First prize, Picksley, Sims, and Co., Bedford, Leigh; second, A. C. Bamlett, Thirsk; highly commended, W. A. Fell, Bridge Iron Works, Windermere. Turnip pulpers: Picksley, Sims, and Co.; highly commended, Corbett, Shrewsbury. Chaff-cutter: Picksley, Sims, and Co.; highly commended, Richmond and Chandler, Manchester. Turnip cutter: Corbett, Shrewsbury; highly commended, Picksley, Sims, and Co. Haymaking machine: A tie between Ashby, Jeffery, and Luke, of Stamford, and Nicholson, of Newark; highly commended, J. and F. Howard, Bedford. Hay rake: Picksley, Sims, and Co.; highly commended, J. and F. Howard; commended, Nicholson, Newark. One-horse cart: Richmond and Candler; highly commended, T. Standing, Preston. Liquid manure cart: T. Standing; highly commended, Richmond and Chandler. Churn: Richmond and Chandler. Washing machine: Bradford and Co., London; highly commended, Taylor and Wilson, Accrington. Wringing and mangling machine: Taylor and Wilson, Accrington. Collection of saddlery: A. Wilding, Blackburn. Steam thrashing machine in motion: Standing, Preston. Collection of agricultural implements: First prize, Standing Preston; second, Richmond and Chandler, Manchester; extra silver medal, Picksley, Sims, and Co., Leigh. Extra silver medal for mower with shafts, H. and G. Kearsley, Ripon; highly commended, Stack and Brownlow, Manchester. Vase water filter: Extra silver medal, J. Miller, Blackburn; extra silver medal, Corbett, Shrewsbury; extra silver medal, Carter and Co., London; highly commended, Morrell, Manchester; extra silver medal, Garnett, Lancaster. The judges of implements were Messrs. T. Chambers (Norfolk), and J. Tunstall (Garstang).

THE BATH AND WEST OF ENGLAND SOCIETY, AND SOUTHERN COUNTIES ASSOCIATION.

A meeting of the Council was held on Tuesday, July 25, at the White Lion Hotel, Bristol; Mr. Brembridge, V.P., in the chair. There were also present Messrs. R. G. Badcock, J. Best, J. T. Boseawen, R. Brent, C. Bush, R. H. Bush, R. R. M. Daw, T. Danger, C. Edwards, M. Farrant, H. Fookes, Jonathan Gray, J. D. Hancock, J. E. Knollys, J. F. Lennard, J. Lush, H. A. F. Luttrell, H. St. John Maule, H. Middleton, J. C. Moore, Stevens, R. Neville, R. Neville Grenville, M.P., T. Phillpotts, W. Thompson, E. W. Williams, H. William, W. Smith (accountant), J. Goodwin (Secretary and Editor).

A letter was read from His Grace the Duke of Marlborough accepting the office of president, but regretting his unavoidable absence on the present occasion.

A vacancy in the Council, owing the retirement of Colonel Deedes, was reported by the Secretary. To supply this vacancy members must be nominated at the August meeting, and the election will take place at the next or some subsequent meeting of the Council.

The Finance Committee brought up their statement of accounts, from which it appeared that although the Guildford show was not so successful in a financial point of view as several of its immediate predecessors, yet after the payment of all expenses a balance of £27 10s. remained in favour of the Society.

The committee, stewards, and officers for the ensuing year were appointed. Captain J. Tanner Davy, editor of the "Devon Herd Book," succeeds Mr. J. S. Turner, as one of the stewards of stock; Mr. R. Neville, of Butleigh Court, is appointed a steward of arrangements and of yard implements, as also a member of the implement regulations committee. Mr. T. Duckham, of Baysham Court is added to the list of field implement stewards; Mr. Troyte, of Huntsham Court is added to the arts and implements regulations committees; the Earl of Cork and Mr. Meade King to the railway arrangements committee; and Mr. Moore-Stevens to the judges election committee. Captain Best, R.N., succeeds to the office of steward of arts, vacated by Mr. J. C. Ramsden, who retains office as a member of the finance committee. In

other appointments there is no alteration, excepting that the Rev. T. Phillpotts retires from the office of steward of horticulture.

The stewards of stock having had their attention drawn to certain alleged irregularities committed at the Guildford meeting, reported to the Council that they acquitted Messrs. Duckering and Son of any intentional irregularity, and saw no reason to reverse or disturb the awards of the judges.

A memorial from the Earl of Portsmouth and seven other breeders of pigs in favour of pigs of the small black breed being kept distinct from white ones in the Society's prize-list was referred to the stock prize sheet committee.

A letter from Mr. A. Benjafield, of the Poplars, Stalbridge, recommending the offer of prizes for cheese was ordered to be referred to the Dorchester local committee.

As a preparatory step to the meeting of the several committees, the Council resolved that the amount offered in prizes for stock at Dorchester be limited to £1,500, as against £1,400 last year; poultry, £200, as against £180; and horticulture, £130. The musical arrangements were left to the discretion of Mr. Jonathan Gray.

A proposal that the council meetings of the Society be hereafter held at Taunton, instead of Bristol, was negatived by a majority of 12 to 7.

The secretary was authorised to negotiate for the occupation of an additional office at No. 4, Terrace-walk, Bath, the site of the offices at present occupied by the Society.

The following new members were elected:—Governors: Mr. Montague Bere, Q.C. (recorder of Bristol), Morebath, Bampton; and Mr. Daniel R. Stratton, of Ogwell, Newton Abbot. Life members: W. Brymer, Ilington, Dorchester; and W. H. Tazewell, Moor House, Taunton St. Mary's. Members: T. Banyard, Poplar Hall, Horningsea; W. R. Crabbe, F.S.A., East Wonford, Heavitree; J. Goring, Weston Park, Steyning; A. Stewart, Priory-place, Gloucester; H. Tresawna, Lamellyn, Probus; W. Turner, Chyngton House, Seaford; G. Wood, Thedden Grange, Alton.

THE YORKSHIRE AGRICULTURAL SOCIETY.

MEETING AT YORK.

"Flags were flying, bells were ringing, and beds were rising to a guinea each, when the Prince started for the show." It was thus we wrote some five years since when the Great Yorkshire Society last held its meeting in the capital of the county. And now, alas! with all the proverbial fickleness of Princes, the bells were ringing and the flags were flying at an opposition show across the Channel, to which the heir-apparent was in turn giving his countenance, while All-Yorkshire was left to do the best it could for itself.

And All-Yorkshire, be it understood, is quite capable of doing something for itself. With such entries of Shorthorns, horses, Leicesters, and pigs as would fairly pale the Dublin Meeting, though basking in the beams of Royalty; with such a show-ground and such show-weather as could only conduce to a shuddering comparison with all the horrors of Wolverhampton, and with such a system of management, where the instinct of order was everywhere observable, and the obtrusiveness of office nowhere noticeable, Yorkshire, even if she had not a Prince for a President, still contrived to celebrate another most successful anniversary. And at York, as in Dublin, the occasion is made something more of than a mere cattle show. In Ireland, after he had seen the horses, the Prince of Wales went to see the flowers; whereas in Yorkshire, after he had visited the horse show, he would have gone in turn to the hound show. It is true that at the Great Yorkshire meeting, where, as a rule, we find the best horses of the year, there is no jumping, and the gathering thus becomes only the more legitimate in its character as an assemblage of true sportsmen and British yeomen.

The horse is a noble creature, say the writers of natural history and penny primers, while others, when they see a rosette attached to his bridle, proclaim him to the world as a "magnificent brute," but the 'cute old lexicographer entered him in his little volume as "an animal, or a wooden machine"—a most important distinction this, for all Yorkshiremen adore a mover, and, to show their reverence for the "noble creature," come to view him in their best, from the buck of St. James's and the noble manly form with the serene countenance, crowned by the shortest of hats, down to "Ould Bob," also in his "best," if he ever had any. Then, from the horoscope of colour in the grand stand, got up so gay, so natty, and so trim, one would almost think that Mr. Harry Boulton, like Paris of old, held the apple of discord, and was going to plant in many a bosom a thorn. But Mr. Boulton and his learned brothers have not been instructed to judge of the softest and most delicate of outlines, saucy dimples, gleaming smiles, or tints culled from roses and the lilies of the valley, but to pick out the best horse with symmetry and squareness, bone, muscle, and enduring looks, and, above all, to choose the animal, and not the wooden machine. It is a grand show of horses, even for Yorkshire, but the handful of thorough-bred stallions are not like unto the lot shown on Knavesmire, while amongst the hunters we have not the stamp of horse of many shown at Beverley, nor are the roadster stallions and hacks up to some Yorkshire shows of old, while we have seen the coaching stallions better represented, but never the four year old and upwards agricultural class, to our recollection,

for we write without book. The thoroughbred stallions, headed by Stampedo, with Playmate, Chatsworth, Temptation, Sincerity, Prince Plausible, and Theobald have all been noticed over and over again, with the exception of Chatsworth by Stockwell, who is a horse of no great substance or character, though somewhat muscular, with a round barrel and a little high on the leg. Temptation by Cathedral is a horse that his owner cannot see as other people do, or he would have been satisfied with his Driffield defeat, where Prince Plausible beat Theobald also, as he should have done, taking the latter's ankles into consideration. Then Stampedo, with his curby hocks, but otherwise lengthy round muscular frame and capital fore-leg action, beat Sincerity at Wakefield last year, but at Wolverhampton Sincerity was first and Stampedo nowhere; still we agree with the Wakefield and York verdict, as we would rather risk the curby hocks of Stampedo than the coarseness of Sincerity, who by the side of other thoroughbred horses is as worsted to silk. The hunting brood mares with foals had Mappleton by Volturo, a neat, short-legged mare, the first at Driffield, for third, while the Royal winner, Lady Emily, with no great hunting characteristics, played second to a really nice bloodlike hunting mare, called Chess by Lammas Day; and among the beaten were Mr. Booth's, The Moth by Mandricardo; the well-known Lady Byron, second at Wolverhampton; and Mr. Wray's Daisy by Sir William. The first prize we agree with, but the others might be twisted about *ad infinitum*. Go-ahead looked better than either of her opponents in the hunting brood mares without foals, though Etta by Slane is a compact, strong, brown mare, not quite clean in her shoulders; while Songstress by Daniel O'Rourke, though deep in her girth, is not good in her middle, besides being coarse, more especially about her legs, and large feet. Coastguard in the two-year-olds was first also at Bridlington and Driffield, where we said that size favoured him, but as he was an Angelus he might get too big for anything; he has a good forehead, and is fine grown, but his hind legs look like dropping into a ditch; and the second by Ainderby dam by St. Bennett, with plenty of quality, has shortish quarters, with dropping hind-leg action. Mr. Clarke's Belle, of Asenby, by Ainderby, and Mr. Wray's Kitty by Cathedral pleased us as much or more than some of the others. A good class of three-year-olds was headed by the Wolverhampton Banker, a well-made compact bay, whose moving makes amends for a little deficiency in his fore-legs, while Portland by Spoustealer, if he does not turn out a rogue, with his quality, form, and action, will make a formidable customer some day. He was the first two-year-old at Wakefield, but only got commended at Driffield to the King, a colt of Sir George Cholmely's, whose forehead we did not consider hunting-like.

Now we come to the four-year-olds, a very good lot of twenty-two; but ere we start, a word as to judges riding, and there is nothing we like to see better than a horseman up; but oftentimes one of the bench will get up with neither hands nor seat, and legs more fit for petticoats than tops and leathers, endangering not only his own limbs and those of others, but the exhibitor's chance of a prize. As discretion is the better part of valour we think these gentlemen would show more in coming to a verdict on *terra firma*. Then

again, if a judge who can ride gets on one or two out of half-a-dozen picked ones, is it fair to give the prize to the ridden in preference to the unridden, because he or she went strong and well under the judge? "Ride one ride all," said an exhibitor; "they had better leave riding alone," added another, as judge and horse seemed bent on taking seats in the stand. But let us go back to the four-year-olds, and the fine-grown upstanding Joe Bennett, near upon 16 hands 2 in., with good light head and neck, a deep level top, and for a horse of his size capital symmetry, though in his present show-trim perhaps a little too light in his lower limbs; but he is a great prize taker, and fair in his movements. We only say fair, as he has alongside of him the finest goer in the yard: this is Nobility by Artillery, the second horse at Brigg, but a damaged hock since then puts him out of the hunt. Then we have Spellahoe with his hind legs a trifle too far away from him, but still the chosen four-year-old at Driffield, and the showy easy-going Tancredi, the first in a class at Brigg, where the Wakefield Hero was unnoticed when competing for a tenner. There's Dandy also, a deep short-topped horse that we are not in love with, although there were few better goers in the class, not even the winner, Mischief, a muscular well made horse, with quality, hardy looks, and a very taking head. There was not a grand class for the Bramham Moor Hunt Cup, which was pulled off by Banner Bearer, who has been taking a prize or two since Brigg, where we said had he had more room he would have shown to better advantage. Behind were the thick vulgar-necked Pelham, anything but a gentleman to look at, who at Driffield beat Marmalade and several others, including Loiterer. He is a very good mover when he has room, going oily, well and strong. The third, Sproxton, could also move; and Mr. Borton's Killerby had hunting character, as had Mr. Darby's Gaddy, but he did not act cleverly, while Mr. Horrock's Miller's Belle smacks of harness.

After luncheon came the York and Ainsty Cup; and among those that entered the lists were the well-known Loiterer and Borderer; Sam Weller, a taker of a light-weight cup at Driffield; Marmalade, an Islington and Brigg winner; a fiery little blood mare of Mr. Hornby's; and Mr. C. Simpson's Spartan, by Donateur, a horse that we fancied as much as anything in the class. Loiterer we have always said was in action a gig horse, and no more; but besides this, his neck is all wrong, and though in his ninth year he does not bridle. In fact, when Mr. Paddison sent him round a cracker, with his ears laid, head up, and choppy knee action, and then pulled up short, nearly clearing the pommel, the whole thing reminded one more of a penny ride and manslaughter at Blackheath than crossing a country. The winning ribbon was handed to him amidst a murmur of astonishment and exclamations of "What that brute?" But enough of our own opinion. Captain Skipworth, J. M. Elliott, Towcester, H. Boulton, Beds, E. Paddison, Lincoln, and N. Milne, Melrose, have given this horse 150 guineas first-prize money; while in the last fortnight T. Pain, Tattersall's, and ex M.F., W. Young, Beverley, Col. Luttrell, Badgworth, Captain Percy Williams, and Jacob Smith, Boro-bridge, would not have him at any price; as we believe we are right in stating that Mr. Howard, of Castle Bruer, Lincoln, alone went for him at Driffield. Then Lord Coventry, Col. Kingscote, and Mr. George Lane Fox sent him right out of it at Islington. However, we congratulate the members of the York and Ainsty and Bads-worth Hunts on the sort of horse recommended to their special notice, and feel sure there will be a tremendous rush to get hold of such a "magnificent brute."

The coaching stallions were few, but the winner turned up in Emperor a well-known prize taker, and first at

Wakefield last year, and the second in the Admiral a strong necked tar that had never been on a show-ground before, while Tramp, the third at Wakefield, was out of luck. Several good mares appeared for the prizes, and Mr. Johnson's old mare by Tramp, who has been a great winner, and was first at Driffield, was here nowhere; but her opponent at Driffield, Bonnie, now took first honours. Then there was a good show of two and three-year-olds. We have often seen a better roadster stallion class, for instance at Beverley and Wakefield. The winner here, Lord Derby, was not placed at Beverley, when Shepherd F. Knapp won, but at Wakefield his lordship was first, and the Shepherd nowhere. Lord Derby's hind leg action we noticed at Beverley, and that he was a little back at the knees. The second, Atlas, is a promising three-year-old, with good action, but rather herring-gutted. No one would quarrel with the verdict in the roadster brood mares "with foals sucking". Then again in hackney roadsters of any age "or sex" sounds very like Bow Bells, and horse, mare, or gelding to us would be more in tune; but the deep compact Polly by old All Fours wins in a poor class, with Flora, a neat hack, second, and the stout Miss Patty third. In hackneys or roadsters "equal to carry twelve stones"—a round-about way of putting it, when "up to twelve stone"—though not vulgarly correct, would answer the purpose. Mr. Millward opens the list with Hilton and Crape, but he mourns as he gets nothing; while Mr. Lovell with Woodbine, and Mr. Barker up, for we know her not by her number which is crumpled, is a nice clever hack, and so is Countess, a Driffield first, but with a little too much fuss and flourish for a genuine lady. Then Mr. Bowman, of Ripon, had a very nice chesnut by Yorkshire Grey, and Major Stapylton, of Myton Hall, a very promising two-year-old by Flying Cloud, but is the age correct? can such things be? The ponies we left the judges riding, and hope they came to a satisfactory verdict without a spill.

Recollecting that agriculture had been and still is the pursuit of Princes, we kept our eye on the cart-horses, which were in sight of the nag ring, and oft did we trot there, but to find them at a stand-still, for the judges were slower than the nags, which were an active lot. The agricultural stallions were not up to Wakefield or Beverley, but stay, the Wakefield were more like dray-horses, and Honest Tom does not please a Yorkshireman, as he prefers something a shade lighter. The Tykes are a bustling hardy race, with pay enough to keep themselves in condition, so that they can stride along by the side of a nag who can step. We love the Yorkshire cart-horse, with his powerful compact frame, short legs, and no lumber, but, above all, his moving; then there is that hardy look with the lively head that is always up, and not drooping on a level with his knees, with that hang-dog expression that you see in some, while their guardian is swilling or skulking behind a hedge or tree. Nonsuch is a great prize-taker, very active, but a rather light-minded, goose-rumped horse. Le Bon is a big one among little ones, as at York, but a little one among big ones, as at Wolverhampton; and Young Warwick we forget—but such is the treacherous memory of man. North Lincoln, accustomed as we are—not to public speaking—but to Barclay and Perkins', we do not take to be a grand specimen of a dray horse; in fact, he is not compact enough, and gives one the idea of a magnified coach-horse. The second, though conquered, was Invincible, like many a brave army. The brood mares were good, weight telling with the judges; but to our eye Mr. Thompson's black, by no means a heavy one, but all life, looked like performing any work on the farm, or,

with some ploughboy up, joining in and making a fair finish with the York and Ainsty like Dick Knight, famous in story in another shire. There were six passable two-year-olds, the winner being a deep well-made colt, and the second a grey, with looks good enough to carry off a first at Driffield. Then Noble, by name and in appearance, is a neat bay, of nice form and size, without beef, who won to the great chagrin of a noisy man in charge of the bouncing Bloomer, but it was after luncheon, and a man must "beer". The mares and geldings of four years old and upwards were an extraordinary class, with seventeen in out of an entry of twenty-four, and we do not recollect ever having seen a better; among them being Mr. Makin's first at Wakefield last year; Mr. Crowe's deep, short-legged bay, second at Wolverhampton; Mr. Brierley's well-known horses Champion, Farmer, Warwick, and Sensation, with Mr. Statter's prize chesnuts at Wolverhampton. But for beauty, combined with power, symmetry, and action, give us Sensation, who could trot off with a basket carriage that would hold *Cœlus* and *Terra*, and take the shine out of many a stepper in Hyde Park.

Our attention has been called to a contemporary who quotes our remarks about "Loiterer being a gig horse and the mistake of 1870," and adds that the owner of Borderer is quite satisfied with the decision. We never held up Borderer as the pink of perfection; but his late owner, a gentleman of some experience, has not such a poor opinion of him as his present master would seem to have. Loiterer's trumpeter may know a little more about him than we do from his occasional visits to Tathwell; but one victory, after four defeats in anything but the best society, is not much to crow about.

In the Shorthorn classes neither the entries nor the awards were by any means so much an echo of the July Royal as often has been the case at the Yorkshire August meetings. In the very first class, for instance, the best all-aged bull was not at Wolverhampton, nor has he previously been much heard of, although always in front whenever previously exhibited. This is Mr. Stamper's roan Grindelwald, a four-year-old bull bred by the Reverend T. Staniforth, and a really grand specimen of a Shorthorn, with plenty of size, fine character, a good if not a quite perfect masculine head, as certainly at all points one of the cracks of the year. This, indeed, was proved by the famous prize bull, *Telemachus*, who looked but little the worse for his travels, finishing second; while the third, another non-exhibitor at Wolverhampton, has been a frequent winner about home, as he is a very taking bull at most points, and he would probably have also been third at the national meeting. The class here was very well filled, about the worst looking of the lot being the Irish Charlie, who showed even worse than he did at Wolverhampton, where he was commended by the judges, and when we said he "had gone off" so palpably that this compliment must have been paid him more for old acquaintance sake than anything else."

The best bull in the show, however, was Mr. Linton's well-known white, Lord Irwin, the best of his class at Wolverhampton, a young bull who has gone on improving since he first came out this summer, as he never in his whole career looked so well as he did when paraded at York. At Guildford, in June, it will be remembered Messrs. Drewry and Bowly put all sorts of moderate animals before the Yorkshire white, and this unquestionably looks like the great mistake of the season. As for *Bythis*, he is the very Loiterer of Shorthorns; one set of judges will never look at him, and the next bench sitting will give him a prize, and he was third here; Lady Pigot being also highly commended for Victor Rex, and Lord Feversham for Colonist. The reading, so far as it could, was very much after the Royal return, with Lord Irwin, Royal Windsor, and *Bythis* in the prize list, and the Panton

Standard Bearer, the reserve and highly commended of Wolverhampton, in precisely the same place here. The yearlings ran up to only a small and moderate entry, of which the winner, Sir George Wombwell's Newbro', was quite the calf of the class, being nearly a year younger than the third. He is, however, a particularly nice young bull, a beautiful dark roan in colour, very true in his frame, and already a champion bull about home, having taken the cup at Easingwold. The next three were altogether, many preferring the highly commended Master Glanville; but the Burderop bull as we have before said of him, is at his best, but a second or third-rate animal. The first and second bull calves were also first and second at Wolverhampton, with British Flag always to be preferred of the two; while the third, Sandown, is a smart but very young calf, who may grow on into the best of the three.

Windsor's Butterfly, the best show cow of a bad year, and *Vivandière*, the champion prize cow at Brigg, were first and second here, backed by a good old-fashioned sort of cow from Darlington for third, with commendations extending to Sir John Swinbourne for Lady Margaret, Colonel Towneley for a white Butterfly, and Mrs. Barrowby for Verberna. Nevertheless the class was not a strong one, whereas the two-year-olds were good, and Concert with all her "great growth and grandeur" still correcting the Royal mistake, where, as we reported at the time, they judged her "with their eyes shut," and went against her touch. But all judges are liable to err, and it is simply impossible to understand how Mr. How's neat shapely Vesper Queen could ever have been put behind such a thing as Daisy, a plain vulgar heifer with really "frightful" hocks and thighs. The Wolverhampton winner Dame Swift was now merely commended or highly commended in much the same company, and *Bythis* and Dame Swift—and John Ward are the enigmas of the age. With the short-pedigreed Lady Brough out of it, the Osberton Fleur-de-Lis could still again get no nearer than second amongst the yearlings; while Baron Oxford Duches' bad head and fatally black horn now put her quite out of all place; and Verona succeeded to third. The absolute winner, Mr. Singleton's white Flora, is very stylish, and the commended Victoria Winsonia—what's in a name?—a wonderfully improving heifer, who has done better before now, although she never looked better than at York. The calf class was only moderately filled, but Mr. Stratton's is a very sweet lengthy heifer with every promise of growing into a handsome cow. Victoria Victrix was also second at Wolverhampton, but Mr. Bromet's smart third was little heard of until she made her mark here.

Mr. Briggs' Primrose is a grand specimen of the old-fashioned Yorkshire cow, an animal which was prized for her prowess over the milking-pail long before improved Shorthorns were invented. And Primrose sustained the family credit in the face of all comers, for the Alderney class was a poor one, with the best of the lot, from the Wakefield Asylum, sent too late into the ring to enter into competition.

Although Mr. Borton has been "correcting" the Royal awards ever since, we still question whether the lesson read there should not be of service in drawing some distinction between the more material and merely flashy points of a Leicester. The Barton flock won nearly everything it could here, of course occasionally at some discomfiture of previous decisions; thus the second old sheep here was only third at the Royal, but the best of all the Leicesters at Brigg. Mr. Sanday, with his sale approaching, did not enter at York, but Mr. Turner, of Alexton, Mr. Hutchinson, of Catterick, Mr. Riley, Mr. Jordan's executors, Mr. Cresswell, Mr. Tindall, Mr. Simpson, and Mr. Browne, of Highgate, all con-

tributed to this, the strongest feature of any Yorkshire sheep show. Not but that the Lincolns here were particularly good, with some fresh blood amongst the show sheep of the season, as it is, indeed, very noticeable that not one of the flocks which took first honours at the Royal meeting was first here. Mr. Marshall was quite out of it with his shearlings; the Duddings' three-shear had to give place to Mr. Wright's grand ram, the best of a great class; while the winning ewes at Wolverhampton were sent no farther North, and Mr. Cartwright's pens having been withdrawn, Mr. Pears succeeded to first place. Lord Chesham, Lord Wenlock, and Mr. Baker, of Atherton, were the only exhibitors of Shropshires, over which classes the two noblemen divided the honours very equitably; and there were a few entries of Lonks and other mountain breeds.

The pigs have been pretty generally run through before they reach York, and the chief winners here had been about at Glasgow, Guildford, Wolverhampton, and Brigg. Thus, Mr. Eden's first large boar, bred by Messrs. Howard, was first at Wolverhampton; Messrs. Duckering's first sow second at Wolverhampton, and so on. Then, again, Mr. Eden's best small boar, Young Prince, and the Duckering's best small sow, the renowned Topsey, were first, and first at the Royal meeting, or almost anywhere else you like to name, and the whole business so becomes a terribly stale story. The Berkshires are a very moderate show, as perhaps might have been expected, with the exception only of Duckering's magnificent sow, which took the Cup at Wakefield last year as the best sow in the show, and was bred by Mr. Griggs in Essex. The awards over the boars of other breeds were mainly noticeable for the discomfiture of Mr. Fox's Young Prince of Airedale, a white which has won 34 times and was never beaten until this day, when they did not even commend the Bradford pig! The return for the middle breed sows was more in accordance with precedent, for Mr. Eden's Busy Bee was a Royal first, and the Northorpe sow has been winning all about the country. In the section of younger pigs the judging over the two classes of large boars and sows was very hotly canvassed, as neither of Mr. Rudsdale's boars, it was maintained, should have taken prizes, while Duckering's sow was, no question, far away the best of her class. Mr. Eden had all the best of the small breeds here, and deservedly enough, though they passed over a capital sow from Northorpe. The young Berkshires again were indifferent, but there were some excellent entries of store pigs, even going beyond the actual winners, and the whole class might fairly have been commended.

The Hound Show comes a day too late in the week for all but those who come a' purpose; as it has always struck us that the afternoon of the second day would be the most fitting, and altogether most convenient, time for this "diversion" from the more orthodox proceedings of the occasion.

There were no premiums for implements, but the following were among the exhibitors: Clayton and Shuttleworth, Lincoln; Amies, Barford, and Co., Peterborough; Marshall, Sons, and Co., Gainsborough; Ransomes, Ipswich; Ruston, Proctor, and Co., Foster and Co., Robey and Co., Lincoln; Humphries, Pershore; Hornsby and Sons, Grantham; Fletcher, Winterton; Wright, Boston; Picketsley, Sims, and Co., Leigh, Manchester; Coultas, Grantham; Boby, Bury St. Edmunds; Baker, Compton; Cooke, Lincoln; Richmond and Chandler, Salford; Penny and Co., Lincoln; Hunt, Earl's Colne; Coleman and Morton, Chelmsford; Tong, Lincoln; Fell, Windermere; Beekwith and Sons, Stockton-on-Tees; Edlington, Gainsborough; Bradford and Co., London; Markall and Son, London; Rainforth and Son, Lincoln; Mason and Son, Alford; Nicholson, Newark; Reeves and Son, Westbury; Kitterer, Fulstow; Harrison, Lincoln; Carter and Co., London;

Weighill, Pickering; Peacock, Goole; Nicholson, Pegler, and Co., Ripon; Lawson and Sons, Leeds; Marsden, Leeds; Lambert, Sunk Island; Stow, Leeds; The Beverley Iron and Waggon Company; Barker, Dunnington; Sherwood, Kirkbridge, Bedale; Mattison, Leeming Bar; Green and Stainsby, Dewsbury; Foster and Smarthwaite, Millington; Vickers, Snowdon, and Morris, Doncaster; Hopperton, Sheriff Hutton; Kearsley, Ripon; Hydes and Wigfull, Sheffield; Waide, Leeds; Wade and Cherry, Hornsea; Thomson and Stather, Hull; Smith, Foston; Read, Malton; Robinson, Leeds; Edlington and Co., Chelmsford; Ashby, Jeffery, and Luke, Stamford; Rimington and Co., Newcastle; Pickering, Stockton-on-Tees; Mitehell and Co., Manchester; Baker, Wisbeach; Fowler and Co., Leeds; Tigar's Works, Grovehill, Beverley; Day, London; Beesley, Crystal Palace; Lippett, Manchester; Lyon, London; Dodge, London; Joes, Gloucester; Carson and Sons, Dublin; Barker, Hull; Pierson and Bailey, Hull; The Driffield and East Riding Company; Inman, Stretford, Manchester; Bushell, York; Matthews, Son, and Co., Driffield; Hague, York; Lawson, York; Richardson and Co., York; Catley and Ayre, Bishopthorpe-road, York; Mann and Parker, York; Hill and Co., Pavement, York; Walker, Walmgate, York; Foster, Layerthorpe, York; Cooper, Railway-street, York.

The Prize Farm movement on the part of the Yorkshire Society has fallen through, as there were only six entries made, while the conditions stipulated for ten.

PRIZE LIST.

JUDGES.

CATTLE.—H. Aylmer, West Dereham Abbey, Stoke Ferry, Norfolk; J. Douglas, Athelstaneford, Drem, N.B.; M. Sawidge, Sarsden Lodge Farm, Chipping Norton.

LONG-WOOLLED SHEEP.—S. Jefferson, Preston Hows, Whitehaven; W. Bartholomew, Waddington Heath, Lincoln; J. Turner, The Grange, Uleby.

SHORT-WOOLLED SHEEP AND PIGS.—S. Druce, Eynsham, Oxford; T. Atherton, Chapel House, Speke, Liverpool; C. Stephenson, Park Farm, Woburn.

HUNTERS AND ROADSTERS.—N. Milne, Faldonside, Melrose, N.B.; H. D. Boulton, Putnoe, Bedford; E. Paddison, Ingleby, Lincoln.

COACHING AND CART HORSES.—J. Furness, Cooxhoe East House, Ferryhill, Durham; S. Robson, Westgate, Louth, Lincoln; W. W. Hawton, Walkerfield, Staindrop, Durham.

WOOL.—T. Clayton, Stanley House, Ripley, York.

VETERINARY INSPECTOR.—C. Spooner, Royal Veterinary College, London.

CATTLE.

SHORTHORNS.

Bulls any age above three years old.—First prize, £25, T. Stamper, Oswaldkirk (Grindelwald); second, £10, Marquis of Exeter, Burleigh (Telemachus); third, £5, J. Knowles, Wetherby (Prince Leopold).

Bulls above two and not exceeding three years old.—First prize, £20, W. Linton, Sheriff Hutton (Lord Irwin); second, £10, J. Outhwaite, Catterick (Royal Windsor); third, £5, Lady Pigot, Branches Park, Newmarket (Bythis).

Bulls above one and not exceeding two years old.—First prize, £25, Sir G. O. Wombwell, Newburgh (Newbro' 3rd); second, £10, Col. J. Reeve, Grantham (Grandee 2nd); third, £5, G. Mann, Doncaster (Rory of the Hills).

Bull calves above five and not exceeding twelve months old.—First prize, £15, Messrs. Dudding, Wragby (British Flag); second, £10, W. Linton (Leeman); third, £5, Major Stapylton, Helderby (Sandown).

Cows of any age above three years old, in calf or milk.—First prize, £25, J. How, Huntington (Windsor's Butterfly); second, £10, J. Outhwaite (Vivandiere); third, £5, R. Emmerson, jun., Darlington (Jancy).

Heifers, not exceeding three years old, in calf or milk.—First prize, £20, F. J. S. Foljambe, M.P., Workop (Concert); second, £10, R. Tennant, Scarcroft, Leeds (Daisy); third, £5, J. How (Vesper Queen).

Heifers not exceeding two years old.—First prize, £20, J. R. Singleton, Great Givendale (Flora 15th); second, £10, F. J. S. Foljambe, M.P. (Fleur-de-lis); third, £5, J. How (Verona).

Heifer calves, above five and not exceeding twelve months

old.—First prize, £15, R. Stratton, Swindon (Village Rose); second, £10, Lady Pigot (Victoria Vietrix); third, £5, W. R. Bromet, Tadcaster (Countess of Flanders 2nd).

Champion Cup, value £50, for the best Shorthorn in any of the classes.—W. Linton (Lord Irwin).

DAIRY.

Cow for dairy purposes.—First prize, £10, W. Briggs, Hirst Courtenay, Selby; second, £5, T. Statter, jun., Stand Hall, Manchester.

Alderney, Jersey, or Guernsey cow or heifer in calf or milk.—First prize, £10, C. Marsdin, Hatfield, Doncaster; second, £5, C. Marsdin.

SHEEP.

LEICESTERS.

Shearling rams.—First prize, £20, J. Borton, Barton House, Malton; second, £10, J. Borton; third, £5, J. Borton.

Rams of any other age.—First prize, £15, J. Borton; second, £7, J. Borton; third, £3, E. Riley, Kipling Cotes, Beverley.

Pens of five shearling gimmers.—First prize, £15, J. Borton; second, £7, T. H. Hutchinson, Manor House, Catterick; third, £3, J. and E. Tindall, Knapton Hall, Rillington, York.

LINCOLNS.

Shearling rams.—First prize, £15, T. Cartwright, Dunstan Pillar, Lincoln; second, £7, R. Wright, Nocton, Lincoln; third, £3, Messrs. Dudding, Panton.

Rams of any other age.—First prize, £10, R. Wright; second, £5, Messrs. Dudding.

Pens of five shearling gimmers.—First prize, £10, J. Pears, Mere, Lincoln; second, £5, C. Clarke, Ashby-de-la-Launde, Sleaford.

SHROPSHIRE DOWNS.

Shearling rams.—First prize, £15, Lord Wenlock, Eserick Park, York; second, £7, Lord Chesham, Latimer, Chesham; third, £3, Lord Chesham.

Rams of any other age.—First prize, £10, Lord Wenlock; second, £5, Lord Chesham.

Pens of five shearling gimmers.—First prize, £10, Lord Chesham; second, £5, Lord Wenlock.

A silver goblet, value £5, for the best of all Shropshire rams.—Lord Wenlock (shearing).

MOUNTAIN.

Rams of any age of the Lonk breed.—Prize, £10, B. Dobson, Brook Street, Ilkley.

Rams of any other mountain breed.—Prize, £10, W. Rudsdale, Danby Lodge Farm, Yarm.

P I G S.

Twelve months old and upwards.

Boars, large breed.—First prize, £5, P. Eden, Cross Lane, Salford; second, £2, R. E. Duckering and Son, Northorpe, Kirton Lindsey.

Sows, large breed, in pig or milk.—First prize, £5, R. E. Duckering and Son; second, £2, P. Eden.

Boars, small breed.—First prize, £5, P. Eden; second, £2, C. R. N. Beswicke-Royds, Pyke House, Littleboro'.

Sows, small breed, in pig or milk.—First prize, £5, R. E. Duckering and Son; second, £2, C. R. N. Beswicke-Royds.

Boars, black or Berkshire breed.—First prize, £5, West Riding Asylum, Wakefield; second, £2, H. Crossley, Bloomfield, Halifax.

Sows, black or Berkshire, in pig or milk.—First prize, £5, R. E. Duckering and Son; second, £2, C. R. N. Beswicke-Royds.

Boars of any breed, not qualified to compete as large, small or Berkshires.—First prize, £5, F. Ambler, Halifax; second, £2, J. Umpleby, Guiseley, Leeds.

Sows of any breed, in pig or milk, not qualified to compete as large, small, or Berkshires.—First prize, £5, P. Eden, Cross Lane, Salford; second, £2, R. E. Duckering and Son.

Not exceeding twelve months old.

Boars of large breed.—First prize, £5, W. Rudsdale, Danby Lodge Farm, Yarm; second, £2, W. Rudsdale.

Sows of large breed.—First prize, £5, W. Rudsdale; second, £2, R. E. Duckering and Son.

Boars of small breed.—First prize, £5, P. Eden; second, £2, P. Eden.

Sows of small breed.—First prize, £5, P. Eden; second, £2, C. R. N. Beswicke-Royds.

Boars, black or Berkshire breed.—First prize, £5, R. E. Duckering and Son; second of £2, J. Knowles, Wetherby.

Sows of black or Berkshire breed.—First prize, £5, F. Walton, Halifax; second, £2, G. Hutchinson, York.

Pens of three store pigs of any breed, from four to nine months old.—First prize £5, R. E. Duckering and Son; second, £2, P. Eden.

HORSES.

Thoroughbred stallion for getting weight-carrying hunters.—First prize, £30, A. Beaumont, Haddersfield (Stampedo); second, £10, J. Casson, Burgh-by-Sands, Carlisle (Sincerity); third, £5, H. S. Constable, Wassand, Hull (Theobald). Commended: W. Shaw, Slipton (Prince Plausible).

Stallions for getting coach horses.—First prize, £10, H. Laverack, Brough (Emperor); second, £5, J. Ward, Acomb Grange (Admiral).

Stallions for getting roadsters.—First prize, £10, J. Leake, Drewston, South Cave (Lord Derby); second, £5, J. Crompton, Barton Agnes (Atlas). Commended: B. Balderstone, Boston (Norfolk Hero).

Stallions for getting agricultural horses.—First prize, £15, J. Forshaw, Leeds (Nonsuch); second, £7, C. Sharpley (Le Bon); third, £3, S. Barker, Doncaster (Young Warwick).

Stallions for getting dray horses.—First prize, £10, R. Marshall, Hull (North Lincoln); second, £5, W. Stones, Snaith (Invincible).

Brood mares for breeding hunters, with foals sucking.—First prize, £20, B. Spraggon, Nafferton (Chess); second, £10, T. M. Miller, Singleton (Lady Emily); third, £5, H. S. Constable (Mappleton). Commended: J. B. Booth, Killerby, Catterick (The Moth); J. Clarke, Beeston, Leeds (Lady Byron).

Mares for breeding hunters, without a foal, but stunted to a thoroughbred horse.—First prize, £10, J. S. Darrell, West Ayton (Songstress); second, £4, J. T. Robinson, Aseby, Thirsk (Go-a-Head). Commended: W. Robiuson, Warren Farm, Sledmere (Eita).

Brood mares for breeding coach horses, with foals sucking.—First prize, £15, J. Reader, Holme, York (Bonny); second, £7, W. L. Robinson, Thormanby, Easingwold; third, £3, M. Robinson, Hanxwell, Bedale (Princess).

Brood mares for breeding roadsters.—First prize, £10, R. Williamson, Sunny Bank, Ripon (Jessie); second, £5, Ann Cook, Pocklington (Favourite). Commended: T. Harrison, Wheldrake.

Brood mares for breeding agricultural horses.—First prize, £20, W. Bramley, Amcotts, Doncaster (Damsel); second, £10, W. Babis, Balthorpe, Howden (Trip); third, £5, T. Statter, jun., Whitfield (Highland Lassie).

Two years old agricultural gelding or filly.—First prize, £7, G. Robson, Easingwold (Bob); second, £3, W. Walker, Scarborough, Beverley. Commended: W. Bramley, Amcotts.

Three years old agricultural gelding or filly.—First prize, £10, Ann Heddon, Baldersby, Thirsk (Noble); second, £5, T. Statter, jun. (Bloomer). Commended, R. L. Dawson, Acaster Malbis.

Four years old and upwards agricultural gelding or filly.—First prize, £25, E. Crowe, Downham Market, Norfolk (Smart); second, £10, C. W. Brierley, Manchester (Warwick), third, £5, C. W. Brierley (Sensation).

Two years old cart gelding or filly.—First prize, £12, G. F. Wortald, Kirby Moorside (The Baron); second, £6, H. Pettinger, Easingwold; third, £3, J. Stephenson, Winestead, Hull (Cheerful).

Three years old cart gelding or filly.—First prize, £15, T. Darrell, West Ayton, York; second, £7, T. Darrell; third, £3, J. Johnson, Brigham, Driffield.

Hackney or roadster, any age or sex, equal to carry 15 stones.—First prize, J. Burlife, Leeds, (Polly); second, £7, T. Clarkson, Leeds (Flora); third, £3, J. Robson, Malton (Patty).

Hackney or roadster, any age or sex, equal to carry 12 stones.—First prize, £10, W. Lovell, Norton (Woodbine); second, £5, R. M. Bowman, Ripon.

Pony, any age or sex, not less than 12½ and not exceeding 14½ hands high.—First prize, £10, W. Stephenson, Cottingham, Hull (Harlequin); second, £5, W. Little, Willoughton, Kirton Lindsay; third, £2, E. Dixon, Micklegate, York (Miss Melbourne).

Pony, any age or sex, not exceeding 12½ hands high, suit-

able for children, to be ridden in the ring by boys under 15 years of age.—First prize, £6, T. Howdle, Hull (Tommy); second, £3, J. Roccliffe, Birdsall, York (Roderick); third, £2, W. Routledge, Shambles, York (Fan).

Two years old hunting gelding or filly.—First prize, £12, W. Myas, Lowthorpe, Hull (Coastguard); second, £6, J. Mason, Dishforth, Thirsk; third, £3, Sir G. Cholmley, Bart., Howsham (White Rose).

Three years old hunting gelding.—First prize, £15, W. Armstrong, Kendal (The Banker); second, £7, J. B. Barkworth, Raywell, Brough (Portland); third, £3, Sir G. Cholmley, Bart. (The King). Commended: W. H. Clark, Hook House, Howden (Wicked Eye).

Three years old hunting filly.—First prize, £10, J. B. Booth, Killerby (Duckling); second, £5, W. Green, Earswick (Lady Stanley). Commended: J. Welburn, Lund, Easingwold.

Four years old hunting gelding.—First prize, £20, E. Nessfield, Scarbro' (Mischief); second, £10, R. Brunton, Marton, Middlesbro' (Joe Bennett); third, £5, H. Hornby, Flotmanby (Spellahoe). Commended: Sir G. Cholmley (Danby).

Four years old hunting filly.—First prize, £15, J. Lett, Scampston (Sensation); second, £7, C. Rose, Market Hill, Malton (Lady Bird); third, £3, D. M. Inge, Pocklington.

Gelding or mare, five years old and upwards, and qualified to carry at least 15 stones with hounds.—First prize, the Bramham Moor Hunt cup, value 50 gs., T. H. D. Bayly, Ollerton (Banner Bearer); second, £20, J. B. Barkworth, Raywell, Brough (Pelham); third, £10, H. Jewison, Rais-thorpe (Sproxtton).

Gelding or mare, five years old and upwards, and qualified to carry not less than 12 stones with hounds.—First prize, the York and Ainsty Hunt cup, value 50 gs., S. J. Wellätt, Tatwell Hall, Louth (Lotterer); second, £20, T. H. D. Bayly, Ollerton (Borderer); third, £10, E. Hornby, Flotmanby (Lioness).

Gelding or mare, any age from three years old off to five years old off, bonâ-fide the property of a tenant-farmer in the county of York, who is not a licensed dealer.—First prize, £60, R. Brunton (Joe Bennett); second, £30, B. Hornby

(Spellahoe); third, £20, J. Lett (Sensation); fourth, £10, G. Ringrose (Willerby).

HOUNDS.

JUDGES: Capt. Percy Williams, Mr. W. H. Williamson, and John Walker.

ENTERED HOUNDS.—Two Couples—Dogs: First prize, Brocklesby (Ambrose, Aider, Rampart, and Clasper); second, Bramham Moor (Rallywood, Striver, Gamester, and Falstaff).—Bitches: First prize, Bramham Moor (Syren, Dainty, Gracious, and Whimsey); second, Brocklesby (Witchcraft, Anguish, Lufra, and Dainty).

UNENTERED HOUNDS.—Dogs: First prize, York and Ainsty (Commodore); second, Bramham Moor (Diver).—Bitches: First prize, Brocklesby (Gertrude); second, Burton (Solitude).

Cup, value 10 gs., for the best unentered hound, to York and Ainsty (Commodore).

Stallion hound.—Prize, Bramham Moor (Statesman).

Brood bitch.—Prize, Brocklesby (Gaiety).

W O O L.

Five hogg fleeces, long wool.—First prize, £5, M. Thomlinson, Cowthorpe; second, £3, C. Barrowby, Baldersby; third, £2, C. Baldersby.

The Council Meeting was held on Thursday, the President, Lord Wenlock, in the chair. After the disposal of some routine business, deputations from towns in the North-Riding which were desirous of having the next year's show were introduced. Mr. R. H. Bower, of Welham, headed a numerous deputation from Malton. The Mayor of Richmond was accompanied by Lord Bolton and others.

The Hon. G. E. Lascelles proposed that Richmond should be the place for the holding of the show next year. Mr. T. C. Booth, Warley, seconded the proposition.

Mr. G. Legard, Easthorpe, proposed that Malton be the place of meeting in 1872. Major Worsley, Hovingham, seconded the motion.

The question was then put by the Chairman, when 12 voted for Richmond and 17 for Malton.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

MONTHLY COUNCIL, Wednesday, August 2.—Present: Sir Watkin W. Wynne, Bart., M.P., President, in the chair; Viscount Bridport, Lord Kesteven, Lord Vernon, the Hon. H. G. Liddell, M.P.; Mr. Barnett, Mr. Cantrell, Colonel Challoner, Mr. Elmonds, Mr. Brandreth Gibbs, Mr. Holland, Mr. Hornsby, Mr. Hoskyns, M.P.; Colonel Kingseote, M.P.; Mr. Leeds, Mr. Milward, Mr. Ransome, Mr. Shuttleworth, Mr. Stone, Mr. Torr, Mr. Jabez Turner, Mr. Wakefield, Mr. Welby, M.P.; Mr. Wells, M.P.; Mr. Whitehead, Colonel Wilson, Professor Simonds, and Dr. Voelcker.

The following new members were elected:—

Anderson, William, Lesney House, Erith, Kent.
 Barton, Tom, The Crescent, Carlisle.
 Beach, John, Standeford Cottage, Wolverhampton.
 Blundell, Arthur, Chediston Hall, Halesworth.
 Booth, Thomas, Tamborue Park, Lichfield.
 Bowen, James, Troedyraur, Newcastle Emlyn.
 De Pass, Daniel, 9, Delamere Street, Westbourne Square, W.
 Easton, James, Hothe Court, Bleau, Canterbury.
 Farwell, Frederick G., Wolverhampton.
 Faulconbridge, W. F., Bestwood Park, Bulwell, Nottingham.
 Gough, Ralph D., Willenhall, Staffordshire.
 Gouldburn, John, Broomhall, Nantwich.
 Gurteen, Daniel, Haverhill, Suffolk.
 Ingram, George, Chetynd Park, Newport, Salop.
 Knight, Richard, Bobbing Court, Sittingbourne.
 Lea, Henry, 316, Bristol Road, Birmingham.
 Lewisham, Viscount, Patshull, Wolverhampton.
 Low, George, Bughtown, Athy, Kildare.
 Morgau, Richard, Newtown, Montgomeryshire.
 Parson, Edgcombe, Coates, Cirencester.

Thipps, Takering, Collingtree Grange, Northampton.
 Tolding, J. Belle, Burnley, Lancashire.
 Price, William, New House, Caerleon.
 Reynolds, Osborne, Owen's College, Manchester.
 Richardson, John, The Oaks, Dalston, Carlisle.
 Roberts, Oscar Wilson, Fisherwick Park, Lichfield.
 Sedgwick, Alfred O., Watford, Herts.
 Thomas, J. Howell, Starling Park, Carmarthen.
 Ward, William, Peubyort Hall, Oswestry.
 Whitworth, James R., Weston Underwood, Newport Pagnell.

FINANCE.—Viscount Bridport presented the report, from which it appeared that the Secretary's receipts during the past month had been examined by the committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and were found correct. The balance in the hands of the bankers on July 31 was £9,441 18s. 7d., the sum of £2,000 remaining on deposit. Cheques to the amount of £9,977 5s. 9d. were ordered to be drawn. The committee recommend that the Secretary be authorised to transfer the £2,000 on deposit to the current account. The committee have to report that, chiefly owing to the great expense attending the trials of steam-cultivating machinery and traction engines at Wolverhampton, the expenditure will exceed the receipts, although the attendance was as numerous as was expected, especially when the unfavourable state of the weather on some days is considered. This report having been adopted, a conversation arose in reference to the question of the expense incurred by the Society in connection with the country meetings. Colonel Wilson and Mr. Torr expressed their

opinion that some reduction in the expenditure could be made, while Mr. Ransome maintained that the money spent was carefully and judiciously disbursed, and that retrenchment could only be effected at the cost of efficiency—a result which he hoped the Council would not sanction. Finally, Lord Vernon gave notice that at the November meeting of the Council he would draw attention to the financial results of the shows held at Oxford and Wolverhampton, and move the appointment of a committee to consider the expenditure at the annual shows, and the possibility of securing equal results at less cost.

IMPLEMENTS.—Colonel Challoner (chairman) reported that the implement prize-sheet for the Cardiff meeting had been revised by the committee, the proposed prize for self-moving engines having been struck out, and that the committee recommended the amended prize-sheet for adoption by the Council. This report was adopted after some additional amendments had been made to the proposed prize-sheet.

GENERAL, WOLVERHAMPTON.—Lord Kesteven reported that the accounts due in connection with this meeting had been duly certified and recommended for payment, with certain exceptions. It was also reported that an error had been made by the judges in Class 92 (Shropshire rams above one year old), the numbers given in by them not agreeing with those to which they had affixed the cards: but as the error was merely clerical, they recommended that the cheque for the prize money be drawn in favour of Mr. T. Mausell, who was awarded the 1st prize in that class. This report was adopted.

GENERAL, CARDIFF.—Lord Kesteven reported the recommendation of the committee that the Cardiff meeting shall commence on Monday, July 15, and continue until the following Friday inclusive, and that the trials commence on Monday, July 8. The committee also recommended that Mr. Corbett, the agent of the Marquis of Bute, be invited to act as steward of forage at the Cardiff meeting, and, in the event of his being unable to act, to recommend some other competent person. This report was adopted.

VETERINARY.—Mr. B. T. Brandreth Gibbs presented the following report: An *ad interim* report from Professor Simonds was laid before the Committee on the experiments he has made at the Royal Veterinary College in reference to feeding cattle on a patent cake. So far as the experiments had proceeded, up to July 31, no symptoms of injurious action had appeared. The same result had been obtained on feeding pigs up to the same date. Professor Simonds will forward a further report on the completion of the investigation. It was also reported that the Secretary had laid before the Committee the correspondence between himself and the Veterinary Department of the Privy Council, together with a *précis* of the various acts and orders in Council relating to the importation of foreign animals. As this had been drawn up for the special use of the Society, the Committee recommended that it and the correspondence relating thereto be published in the forthcoming number of the *Journal*. This report was adopted.

SHOWYARD CONTRACTS.—Mr. Torr reported that the Committee had examined and certified certain accounts relating to showyard works, which they recommended should be paid, with the exception of one, which they recommended should be deferred for inquiry until November. This report was adopted.

The death was reported of Sir Thomas Dyke Acland, Bart., a trustee of the Society.

Mr. Holland having moved the renewal of the education grant for 1872, it was seconded by Lord Vernon, and carried unanimously, after a few words from Mr. Wells,

M.P., who stated that unless the number of candidates increased he could not continue to support the grant year after year. On this point Mr. Holland observed that the number of candidates could be increased if the standard of examination were lowered; but the committee were of opinion that it would be better to raise the level of the candidates, if possible, than to lower the standard of the examinations.

The Secretary was authorised to sign and seal the agreement with the authorities at Cardiff.

A letter was read from Mr. B. T. Brandreth Gibbs in acknowledgment of his election as a Vice-President.

An application for the loan of the Society's plough-dynamometer was granted on the usual conditions.

It was announced that a silver cup, value £100, will be offered by Sir W. W. Wynn, President, for the best managed farm in South Wales and Monmouthshire which shall conform to the following conditions: 1. That it is not less than 100 acres in extent; 2. That not less than one-fourth of the land (not sheepwalk) is under tillage; 3. That it is held (a) by a tenant-farmer paying a *bond fide* rent for not less than three-fourths of the land in his occupation, or (b) by a landowner occupying his own farm, the total extent of whose property in agricultural land (exclusive of sheepwalk) does not exceed 200 acres, and whose sole business is farming. The Council then adjourned over the autumn recess until Wednesday, November 1, the usual holiday having been first granted to the Secretary and clerks.

THE HEREFORDS AT WOLVERHAMPTON.—In our last week's number we stated that Mr. Duckham had written to *Bell's Weekly Messenger* announcing the sale of Ostorius, but omitting to give the price. Mr. Duckham now writes to *The Hereford Times* to say that: "I have long since ceased to contribute to the columns of *The Mark Lane Express*, which may, in some measure, account for the *animus* which has been displayed therein towards the Herefords generally and myself in particular." Was there ever such egotism as this! We were scarcely aware of the fact that Mr. Duckham ever did or even *could* contribute to our columns, beyond sending occasionally a sort of circular-report, or just such a "contribution" as that which has favoured our contemporary with—that is, a puff-paragraph, announcing the transfer of some "grand" bull, some "magnificent" cow, or some "splendid" calf, or the approach of some altogether "extraordinary" periodical sale. Of course we had to deal somewhat trenchantly with these "contributions"; and so, alas! they ceased to flow. And hence the *animus*. Was there ever such an absurdity proffered by a man as that "contributions" like these could influence the conduct of a straightforward Journal! As Mr. Duckham knows well enough, whether his "contributions" were received or not, they never had the slightest possible weight at this Office. But still he omits to give the price of Ostorius. Of course here the thing centres. We said the bull had gone off, lost character, and so forth, but this is disputed. We care nothing for Mr. Duckham's opinion, as he is or was, we believe, an auctioneer, and such gentry, from the days of George Robins, have been proverbial for their copious use of superlatives. All their pianos, like their bulls, are *grand*, their wines *choice*, and their kitchen ranges *elegant*. We care little for this sort of thing; but, as Mr. Gradgrind puts it, "what we want is facts." What was Ostorius sold for as a calf at Manchester? and what was he sold again for as a two-year-old at Wolverhampton? This is the point of the argument. If Mr. Duckham says that we have an *animus* against the Herefords he says that which is simply not true. No Journal, for instance, reports the Hereford meetings at such a length as our own; but that we decline to do is to bonnet and bolster up every Hereford, or any particular Hereford which comes out, or to sanction a system of clumsy puffing, which in the end can only do more harm than good to the breed and the breeders. Might we, further, tell Mr. Duckham a little story? A London man who late in life took what he called "a literary turn" and appreciated himself accordingly, wrote thus one fine day to the Editor of a

well-known Journal: "Dear L.,—You must not consider me any longer on the staff of your Paper, as I am about to accept an engagement elsewhere"—to which the ready answer was: "Dear G.,—I never did consider you to be on the staff of my Paper: pray how the deuce did you ever come to do so?"—*Mark Lane Express.*

THE WOLVERHAMPTON SHOW WEEK.—The thing before all others, as it appeared to us, which threw a gloom over the whole affair, was a want of the public spirit and *esprit de corps* on the part of the town authorities which have always formed so prominent a feature at the Society's country meetings. No social or convivial gatherings, *soirées*, or intellectual assemblies bear record to the Society's visit to Wolverhampton. Everyone was asking his friend or neighbour whether the capital of the black country did really possess a mayor and corporation, and no one, not claiming the rights of denizenship, appeared to be able with confidence to answer the question. It is not many years since that the head of the corporation of a town located in a purely agricultural district, from the energy, activity, and liberality he displayed, not only contributed to render a meeting successful which had been regarded by many with gloomy anticipations, but won for him-

self the reputation of being "the best mayor (mare) for agricultural purposes." The honour of winning the first prize by this gentleman has been followed by many successful competitors for the Society's second and third prizes and "high commendations" among the heads of other corporations; but it seems that the mayor (mare) of Wolverhampton will henceforth be remembered as having failed to obtain even a "commendation" in any of the classes. The decision arrived at by the judges with regard to the want of sufficient merit in the chief of the local candidates seems to have had a most depressing influence over the rest of the competitors for public honours, and, with a few exceptions, little was seen or known of any of them.—*The Veterinarian* for August.

THE R. A. S. PRIZE-LIST AT WOLVERHAMPTON.—It will be seen from the report of the proceedings of the Council that the extraordinary mistake made over the Shropshire sheep awards is due to the judges, who gave in the wrong numbers—and hence an error which has gone broadcast over the country. Even *The Veterinarian* for August publishes a prize-list wherein Mr. Allen is recorded as the winner of the first prize for old rams, a class in which Mr. Mansell is never mentioned!

BRIDLINGTON AGRICULTURAL SOCIETY.

In the cups and money prizes the Society on this occasion distributed upwards of £300. The entries bore a favourable comparison with those of last year, being from thirty to forty in excess, the increase being in sheep, pigs, cattle, and poultry, but there was a slight decrease in horses. The numbers were as follows: Sheep, 23; cattle, 29; horses, 14; pigs, 14; poultry, 128; and implements, 120, making a total of 458. No prizes were awarded for implements.

Amongst the cattle Mr. Linton, of Sheriff Hutton, obtained first honours with Lord Irwin; and Major Worsley, of Hovingham Hall, secured second place with Duke of Roxburg, three and a half years old. The yearling bulls and heifers were good, and the class for cows in calf or milk was excellent, Mr. Linton, of Sheriff Hutton, obtaining both first and second prizes with Carnation and Gratitude, the former seven and the latter five years old. The sheep classes, numerically speaking small, yet in merit they were creditable. The animals shown belonged to the best breeders in this part of the country; Mr. J. Borton, of Barton House, Malton; Mr. Riley, of Kipling Cotes, Beverley; Mr. Simpson, Hunmanby; and Mr. J. W. Sharp, Ulrome. The pig section was deserving of praise, the animals for the most part being in prime condition, healthy, and active. The most important section of the show was the exhibition of horses, in every respect equal, and in some respects superior, to the shows of previous years. The hunters were the great source of attraction, and the coaching and roadster classes were in every instance highly commendable, but this was particularly so in the agricultural classes, the class most deserving of mention being for the best horse or mare for agricultural purposes, in which there were seventeen entries. Mr. Tennant, of Barlow, near Selby, secured the prize with Topsy, five years old.

PRIZE LIST.

JUDGES.

SHEEP, CATTLE, PIGS, AND AGRICULTURAL HORSES.—T. Woodcock, Tibthorpe House; J. Jolly, East Mount Road, York; T. Barber, Spoutley Rise.

HUNTING, COACHING, AND ROADSTER HORSES.—T. Ellerby, Manor House, Whitwell; S. J. Wellitt, Tathwell House, Louth; C. Wood, South Dalton, Beverley.

SHEEP.

Shearling ram.—First prize, £5, J. J. Simpson, Pilmore House, Hunmanby; second, £2, F. Jordan's Executors, Eastburn, Driffield.

Three shearling rams.—First prize, £5, J. J. Simpson; second, £2, F. Jordan's Executors.

Aged ram.—First prize, £3, J. Borton, Barton House, Malton; second, £1, E. Riley, Kipling Cotes Farm, Beverley.

Five shearling gimmers.—Prize, £4, E. Riley.

Ten gimmer lambs.—Prize, £2, J. Stephenson, Penton.

CATTLE.

SHORTHORNS.

Two-year-old or aged bull.—First prize, £5, W. Linton, Sheriff Hutton; second, £2, W. C. Worsley, Hovingham.

Yearling bull.—First prize, £4, T. Frank, Fylingdales; second, £1, M. Thonlinson, Cowthorpe.

Bull calf under 12 months old.—Prize, £2, W. Linton.

Cow in calf or milk.—First prize, £5, and second, £2, W. Linton.

Two-year-old heifer.—Prize, £3, T. Hornby, Flotmanby.

Yearling heifer.—First prize, £2, W. Tennant, Barlow, Selby; second, £1, H. F. Smith, Lamwath House, Sutton.

Heifer calf under 12 months old.—Prize, £2, R. Crowe, Speeton.

Fat ox of any age.—P. Dunn, Sigglesthorpe, Hull.

HORSES.

Hunting mare and foal.—First prize, £5, H. Watson, Newbegin, Filey; second, £2, G. C. Jarrat, Harpham.

Two-year-old hunting gelding.—First prize, £4, R. Wise, Sewerby Field; second, £1, R. Wheatley, Catfoss, Sigglesthorpe.

Two-year-old hunting gelding or filly.—First prize, £3, W. Myas, Ulrome; second, £1, G. Angas, Beetford Grange, Driffield.

One-year-old hunting gelding or filly.—First prize, £2, T. Boynton, Lowthorpe; second, £1, R. Cadman, Broughton.

Three-year-old hunting filly.—First prize, £3, G. C. Jarrat, Harpham; second, £1, J. Milner, Middledale, Kilham.

Coaching mare and foal.—First prize, £4, J. Reader, Holme; second, £1, S. F. Simpson, Dringhoe.

Two-year-old coaching gelding or filly.—First prize, £3, — Piercy, Garton; second, £1, J. Jackson, Buckton Hall.

One-year-old coaching gelding or filly.—Prize, £2, J. S. Jordan, Elmswell.

Three-year-old coaching filly.—Prize, £3, W. Johnson, Lowthorpe.

Hackney mare and foal.—First prize, £3, Mrs. A. Cook, Huggate; second, £1, W. H. Russell, Kilham.

Two-year-old hackney gelding or filly.—Prize, £2, J. Wilson, Reighton.

Mare and foal for agricultural purposes.—First prize, £4, R. Wise, Sewerby Field; second, £1, Mrs. Smith, Bempton.

Two-year-old agricultural gelding or filly.—First prize, £3, A. Keith, Staxton; second, £1, J. and H. Sugden, Lecocfield.

One-year-old agricultural gelding or filly.—First prize, £2, — Crompton, Thornholme; second, T. Cranswick, Low Caythorpe.

Nag or mare pony, not exceeding twelve hands high.—First prize, £2, J. W. Jordau, North Burton; second, 10s., F. Naylor, Hull.

Four-year-old hunting mare or gelding.—First prize, £5, W. Johnson, Lowthorpe; second, £2, J. Smith, Marton Lodge.

SPECIAL PRIZES.

Hunting mare or gelding, of any age.—First prize, a silver cup, J. Holiday, Barmston; second, £5, H. Jewison, Rais-thorpe.

Hunting mare or gelding, four years old and upwards.—First prize, a silver cup, J. Crompton, Thornholme; second, £2, W. Johnson.

Three-year-old coaching gelding.—First prize, a silver cup, and second, £3, T. Darrell, Spickers Hill, West Aytou.

Hackney mare or gelding, of any age.—First prize, a silver

cup, W. and G. Lovel, Norton; second, £2, J. Brigham, Beverley.

Pony, not exceeding fourteen hands high.—First prize, a silver cup, W. Simpkin, Burton Agnes; second, £2, G. Hindson, Lockington Hall, Garth, Beverley.

Horse or mare for agricultural purposes.—Prize, a silver cup, W. Tennant, Barlow.

PIGS.

Boar, large breed.—First prize, £2, J. and H. Sugden, Leonfield; second, £1, R. E. Duckering, Northorpe.

Sow or gilt, large breed.—First prize, £2, R. E. Duckering; second, £1, J. W. Jordan, North Burton.

Boar, middle breed.—First prize, £2, and second, £1, R. E. Duckering.

Sow or gilt, middle breed.—First prize, £2, R. E. Duckering; second, £1, T. Rea, Bridlington.

THE DORCHESTER AGRICULTURAL SOCIETY.

MEETING AT DORCHESTER.

There were more entries than usual in all classes, but there were a number of empty pens. The Society's prize for the best bull of any breed or age was awarded to a Shorthorn belonging to Mr. G. W. Homer. The best bull, under two years, was Mr. Levi Groves' Hereford. In this class Mr. T. Ensor was highly commended for a yearling Devon, and Mr. Hull was similarly distinguished. For the dairy cow prize, Mr. J. A. Smith, Bradford Peverell, was successful; against him was shown a useful cross-bred by Mr. Harris. Mr. Groves, Weymouth, took the Society's prize for a pair of two years' old heifers, as also the Society's prize for a pair of yearling heifers; and in the yearling class Lord Poltimore's plate for three Devon heifers was won by Mr. Smith, Exeter. Mr. H. Mayo and Mr. T. Chick sent in some animals, which were highly commended. The best bull (for the Hon. W. H. B. Portman's plate) was exhibited by Mr. James—a Hereford, that won a first prize at Guildford; and Mr. Davey, Horn Park, was highly commended for an animal of the same breed. Mr. James also took Dr. Hawkins' plate for three heifers (excepting Devons) with some Herefords; while Mr. Caines' (Burton) was commended.

In the sheep classes, beginning with the Dorset horns, Mr. Henry Mayo, Coker's Frome, was the chief prize-taker—he won, indeed, in every class in which he exhibited, taking the Society's prize for the best ram, best yearling, best pair of ram lambs, Lord Rivers's plate for 100 stock ewes, under two years, and Mr. Floyer's plate for best 20 ewes. His old ram took first prize at Guildford, and in the previous year first at the Royal, and Bath and West of England; and the yearlings, beyond prize taking at the greater shows, were first at the Hants and Berks Meeting. Mr. Mayo's 100 ewes were the leading feature in the show. Mr. Hull showed against them some useful animals, and in the class for twelve ewes—three ages—took the Society's prize, Mr. Cox (Hyde) being highly commended. Mr. Cox won Mr. Gerard Sturt's prize for 20 ewes, and Mr. Hull's were highly commended. With South-downs Mr. Henry Fookes, Whitechurch, was the chief winner, for he took the Society's prizes for best Southdown ram, best yearling ram, best 12 ewes, Lord Herechester's plate for three rams under two years, the High Sheriff's prize for 20 full-mouthed ewes, and Mr. Middleton's plate for best 20 ewes under two years. In these Mr. J. Harding, Waterson, showed some very good sheep, and gave promise of sustaining the reputation of his father. Mr. G. W. Homer was also an exhibitor, and won the Society's prize for a pair of Southdown ram lambs; but his sheep bore traces of a Hampshire strain, and the judges did not consider them true to breed. However, in the short-wooled classes, Mr. Homer carried all before him. He had the Society's prize for the best ram, best yearling ram, best pair of ram lambs, Colonel Sturt's plate for best 20 ewes under two years, and Mr. Digby's plate for best 20 full-mouthed ewes.

The pigs were a fair show. The Society's prizes for the best boar and sow were both won by Mr. Maufield, who for many years has taken prizes in the pig classes. For Lord

Digby's plate for best three breeding sows, Mr. Walden, Came, and Mr. Maufield competed, the former winning.

There was a tolerable show of horses, Mr. Hull's pair of cart-horses especially deserving attention.

PRIZE LIST.

JUDGES.

CATTLE, HORSES, AND PIGS.—Mr. Forrester, Bryanston; Mr. V. B. Watts, Malcombe; Mr. Coate, Hammoon; and Mr. J. Caddy, Bradford Abbas.

SHEEP.—Mr. J. Ford, Rushton; Mr. H. Bone, Avon; and Mr. W. Watts, Frampton.

PIECES OF PLATE.

Three breeding sows, every one of which must have had a litter.—Prize, £5, T. Walden.

Pair of horses under six years old.—Prize, £10, W. S. Hull.

Three Southdown rams under two years old.—Prize, £5, H. Fookes.

Twenty Southdown full-mouthed ewes.—Prize, £5, H. Fookes.

One hundred horn stock ewes under two years old.—Prize, £5, H. Mayo.

Three dairy cows under seven years old, all same breed, and from the same dairy.—Prize, £5, A. J. Smith. Highly commended: H. Mayo.

Three pure bred Devon heifers under three years old.—Prize, £5, J. A. Smith. Highly commended: H. Mayo and T. Chick, Stratton.

Bull of any breed or age.—Prize, £5, J. W. James, Map-powder. Highly commended: J. Davey, Horn Park, Bea-minster.

Twenty Dorset full-mouthed ewes.—Prize, £5, T. Cox. Highly commended: W. S. Hull.

Twenty Dorset ewes under two years old.—Prize, £5, H. Mayo. Highly commended: W. S. Hull.

Twenty short-wooled ewes, otherwise than horned or South-down, under two years old.—Prize, £5, G. W. Homer.

Twenty short-wooled full-mouthed ewes, otherwise than horned or Southdown.—Prize, £5, G. W. Homer.

Cart stallion.—Prize, £5, H. Fookes.

Twenty Southdown ewe under two years old.—Prize, £5, H. Fookes.

Hackney colt or filly under four years old.—Prize, £5, Levi Groves.

Cart colt or filly under three years old.—Prize, £5, T. Birch.

Three heifers under three years old, of any breed excepting Devons.—Prize, £5, J. W. James (Herefords). Commended: — Caines, Burton.

At the dinner Mr. FLOYER, M.P., the Chairman, said: I have not observed whether the metric system has entered

largely into the consideration of Chambers of Agriculture; I do not know how far it has been discussed, how far it has been "thrashed out"—as they call it—at their meetings. I can fancy no subject of more importance for them to consider. You know that if we deal with weights and measures we deal with that with which we have to do not only every day but sometimes every hour of our lives. Poor people, as also farmers, cannot come into market without meeting with them. And in dealing with weights and measures we must also necessarily deal with the question of money. There can be no doubt whatever that if the metric system is adopted we shall come to what is called the system of decimal coinage. This is a question which it behoves us to think well of before we enter upon it: it affects our business occupations of everyday life. Instead of asking for yards and feet of certain articles, we shall, if the system is adopted, have to use terms compounded of Greek and Latin. A good many persons who have advocated this system have rather thrown Greek and Latin into the back-ground. We shall have to learn an entirely new system of measurements, we shall have to adapt ourselves to a new state of things. I shall be very glad to hear the opinions of others on this question, which is an eminently practical one. It is a practical matter of everyday life and nothing else; there is no moral question, no great political question, involved in it. Every single man, woman, and I was going to say child is concerned in it; there is no one who is not interested in it; no one who, if the proposed change is made, will not be deeply and vitally affected by it. It is a matter upon which I should be thankful for the opinion of my constituents, of such men as those I now see around me.

The ceremony of expressing in a substantial manner the cordial feelings of respect entertained towards the secretary of the Society, Mr. G. J. Andrews, who also fills the same office for the Dorchester Farmers' Club, was the next business on the programme. The compliment was paid by the presentation of a very elegant table ornament—an epergne and candelabrum, with three branches; the value exceeding 100 guineas.

The CHAIRMAN said: I can look back over something like thirty-five, certainly more than thirty, years since your society was formed. As one of the original members I am afraid that I am standing amongst but few who were amongst the founders of the Society and were associated with it from its earliest days. We had the fortunate assistance, I believe I

may say from the very beginning, of our excellent hon. secretary. It is true that we had another secretary, a very good friend and neighbour of ours, but you know his other avocations occupied his time so much that it was not long before he retired. Besides filling the office of secretary to this society, Mr. Andrews has performed the duties of hon. secretary to the Dorchester Farmers' Club; and it is in recognition of his excellent services rendered to both those bodies that I now beg to present to him in the names of the assembled, and also the absent, members this handsome testimonial.

Mr. ANDREWS said: I may recall to my mind the gratifying fact that near thirty years ago I received at your hands a similar token of your esteem and regard. When I consider this renewed mark of your confidence in me, my feelings are such as few men can hope to enjoy.

Mr. W. WATTS, one of the judges, regretted to see so many vacant pens, which gave the show-yard a very poor appearance, besides causing unnecessary expense to the committee. If persons made up their minds to exhibit they ought to do so. He should like to see a little more competition, then there would be a little more for the judges to do.

Mr. HENRY FOOKES reminded the meeting that next year the Bath and West of England Society would visit Dorchester. That society would, he said, be as liberal as it possibly could. At the Council meeting on Tuesday it was stated that more prizes would be distributed at Dorchester than had ever been offered by the Society at any previous exhibition. He (Mr. Fookes) therefore hoped for the honour of the county that they would all come forward to compete in order to keep back as much of the money as possible. It had been determined that next year the Dorchester Agricultural Society should not have an exhibition in consequence of the Bath and West of England Society's visit; but perhaps the donors of prizes would kindly contribute similar prizes to the Bath society in order that the committee might be enabled to offer some good local premiums. There were good Dorset horned sheep in this county, and the local prizes would be very attractive in the neighbourhood.

Mr. G. W. HOMER could not afford to breed little sheep, because, for instance, only that day he had sent some sheep to the market which fetched 62s. 6d. each, while those of pure breed realized only 45s. They had the same food, for they were fed together.

THE ROYAL AGRICULTURAL SOCIETY OF IRELAND.

MEETING IN DUBLIN.

Dublin had been greatly thronged for some time by stranger-tourists, from the manufacturing and business districts of England, enjoying their season's relaxation from the sterner business of life; while the city had been eager to welcome the visit of His Royal Highness the Prince of Wales, who is for the year President of the Irish Royal Agricultural Society, and gay with bunting throughout its principal thoroughfares. In 1867, when the Royal Society held its show in Dublin, St. Stephen's Green, in the heart of the city, was the site on which it took place, and a great success it turned out to be. Much disappointment and vexation was therefore caused when the Commissioners of the fine and beautiful square refused their consent to its being so occupied this year. But a far better site for this national exposition was found on the estate of the Earl of Pembroke, in the immediate vicinity of the south-side of Dublin—a fine grass park, of over thirty acres, surrounded at all sides with good, broad, and level roads, handsome villas, and ornamental grounds, with the Dublin and Kingstown Railway running quarter-hour trains at a short distance, so that the show-yards was easily accessible from all quarters.

The Royal Dublin Society's great annual horse show, as well as its recently-established sheep show, was by com-

part held this year in conjunction with that of the Royal Agricultural Society. The horse show turned out a monstrous affair, numbering no less than 599 entries. The arrangements and necessary erections were excellent, the whole being placed in the hands of a competent architect and builder. But holding such a horse show in conjunction with the agricultural one has been something of a mistake. To create an excitement and bring in the money, a double ditch with a bank between, a stone wall, a hurdle, and a water-fence were formed; a Royal Stand to contain 1,200 at one side, and another stand at the opposite side of the leaping ground to accommodate many more were erected. So that when a company of the Guards with fixed bayonets and their bands marched in and took up their ground, when the royal and vice-regal parties drove in, each accompanied by a squadron of horse, the advance with carbines, the rest with drawn swords, "in all the pomp and panoply of glorious war," when the *Lord Mayor*, with a numerous retinue of gentlemen in indigo on horse and on foot came on in procession, the agricultural show grounds were deserted, business was at an end, and half-crowns poured in to repletion, in order to witness the equestrian performances, especially those of Flynn of Tulsk, one of the most daring

and best horsemen of the day. This would be all very fine fun in its proper place; but there were a parcel of little great men, cycled a Local Committee, who usurped the management, and carried on a system of red-tapism, which instead of facilitating the object in view, threw all sorts of obstacles in the way; while the haubucks they appointed to carry out details became perfect obstructives. To see all officers and no soldiers strutting about with ribbons red, white, and green, streaming from their breasts, running here and there, bobbing against one another, and doing nothing useful, would be amusing, were it not very vexatious. A deputation of these people visited Wolverhampton to entice English manufacturers over to exhibit the embodiment of their anxious thoughts and artistic labours at great cost, but it is extremely doubtful if many of them will be able to make *good books* to recompense them for their skill, labour, and the expenses incurred, for their market has been spoiled by the equestrian exercises which lasted for three days of the show!

The implement department numbered near 200 stands, some so very extensive as to occupy each an entire shed. As this important part of the exposition has occupied so much of our columns lately, we need only give the names and addresses of the firms which have put in an appearance at this show.

The ENGLISH exhibitors were: Horsby and Sons, Grantham; Hill and Smith, Brierley-hill, Staffordshire; Robinson and Richardson, Highgate, Kendal; Bristol Waggon Works Company, Bristol; Corbett, Shrewsbury; Garrett and Sons, Leicester, Suffolk; Fuller and Co., St. George's-road, Bristol; Richardson, Carlisle; Samuelson, Banbury; Penny and Co., Lincoln; Taylor and Wilson, Accrington, Lancashire; T. Mortlock, Shepton-road, Hackney; H. Atkinson, City-road, London; Richmonds and Norton, Liverpool; W. A. Wood, Upper Thames-street, London; Ransome, Sims, and Head, Ipswich; J. and F. Howard, Bedford; J. Unite, Edgware-road, London; T. Read, Malton, Yorkshire; Picklesley, Sims, and Co., Leigh, Manchester; Reuben Hunt, Earls Colne, Essex; J. Le Butt, Bury St. Edmunds, Suffolk; Slack and Thompson, Manchester; De Leon and André, Aldgate, London; Day, Son, and Hewitt, Dorset-street, London; Jas. Williams, Bermodesy, London; B. Brown and Co., Blackfriars, London; H. Duffield, Regent's Park, London; J. Beesley, Oxford-street, London; T. Bradford and Co., London, Manchester, and Dublin; Robert Willacy, Preston, Lancashire; Hancock, Birmingham; Ashby, Jeffery, and Luke, Stamford; J. L. Norman, Mark-lane, London; Mellard, Rugeley, Staffordshire; Reading Iron Works, Berks; S. Lawson and Sons, Leeds; Barrowes and Stewart, Banbury; E. R. and F. Turner, Ipswich; Cambridge and Parham, Bristol; W. N. Nicholson, Newark; Thomas and Taylor, Salford, Manchester; J. Cranston, Birmingham; G. Wright and Co. Westminster Bridge-road, London; J. Beach and Co., Dudley; B. C. Tipper, Birmingham; J. M. Jones, Worcester-street, Gloucester; J. Bell and Co., Oxford-street, London; A. Lyon, Finsbury, London; J. Davis and Co., Crampton-street, London; F. and C. Hancock, Dudley, Worcestershire; J. H. Stiles, Westminster, London; R. C. Silvester, John-street Road, London; House and Co., City-road, London; F. Morton and Co., Liverpool; J. Dixon, Cheapside, Liverpool; W. H. Hilton, Park-road, Liverpool; E. Ellis, Oxford-street, London; N. Wilson, High Holborn, London; Spong and Co., Fulham-road, London; A. E. Peirce, Hatton-garden, London; Parham, Regent-street, London; B. Hodgetts and Son, Morton-in-Marsh; Carson and Sons, Ludgate-hill, London; J. R. Marsden,

Leeds; J. Haworth, Bolton-le-Moors; Sawney, Beverley, Yorkshire; H. Inuman, Stretford, Manchester.

SCOTCH EXHIBITORS.—Murray, Bauff; Young, Ayr; Hunter, Maybole; A. and J. Main, Glasgow; Gray, and Co., Uddingston, Glasgow; M. Jack, Cramond, Edinburgh.

IRISH EXHIBITORS.—McKenzie and Sons, Dublin, Cork, and Belfast; Keenan and Sons, Dublin; Edmondson and Co., Capel-street, Dublin; Curtis and Sons, do.; Booth Bros., do.; A. O'Neill, do.; H. E. Brown, do.; J. Brown, do.; Bates and Sons, Gorey; Colclough and Sons, Dublin; F. Sanderson and Sons, do.; W. White-stone and Co., do.; Dockrell and Co., do.; Booth and Son, do.; W. O'Neill, Athy; Daniel, Dublin; W. Kerr, Henry-street, do.; Butler, Capel-street, do.; Laurence and Son, Sackville-street, do.; Burke, Wellington-quay, do.; Francis, Camden-place, do.; Bowles, Bleikhill-place, do.; Fancett, Killneue; Smith and Wellstood, Capel-street, Dublin; Drogheda Manure Co., Drogheda; National Manure Co., Kingsend, Dublin; Mitchell, Townsend-street, do.; McMester, Hodgson, and Co., do.; Checketts and Co., Queen-street, do.; W. O. Barré, Talbot-street, do.; E. Cooper and Co., Kildare-street, do.; F. Healy, Cardiffs-bridge, do.; Hodges and Sons, Westmoreland-street, do.; J. McGee and Co. Belfast; T. Goodison, Sandymount, Dublin; M. Murphy, Bundoran; W. Lennan, Dublin; McMullen, do.; Ferrelly, do.; Tutty, do.; Hudson, do.; Sheridan, do.; Mahony, Blarney, Cork; Mrs. Callan, Dublin; Pim, Bros., and Co., Georges-street, do.; J. Bristow, Talbot-street, do.; Beutt, Stephen's-green, do.; Herbert, Sackville-street, do.; Davidson, Stephen's-green, do.; Newenham, Condensed Milk and Cheese Factory, Mellow, Cork; McKinley, Strabane; J. Murphy, Thomas-street, Dublin; T. W. Pim, Belfast; Lovely, Shaw-street, Dublin; Martin, Hill, and Co., Ushers-quay, do.; Askin, Newtownard, Gray, and Co., Belfast; Paul and Vincent, Blackhell-place, Dublin; Grendon and Co., Drogheda; Dickson and Sons, Edinburgh and Dublin.

This Society's shows of Shorthorns are never numerous, but when held in favourable localities are very good; at this meeting there were 70 of all ages and sizes brought forward, amongst which were several celebrities. The business commenced with the aged bulls, of which there were 7. Sovereign, which was never beaten in Ireland at least, since first exhibited as a yearling, and the winner of the Towneley Plate four times, had now to give place to Mr. Cook's St. Bingan (27517). Sovereign never looked better, nor has he ever been in finer, nor more servicable condition, and is unquestionably a grand bull, taking him at all points. The contest was severe, but the judges, Messrs. Unthauk and Crisp, eventually placed St. Bingan before him, and so gave over the Purdon Cup, for the best prize bull in the yard. St. Bingan was the third bull at the last spring meeting, since then, he has wonderfully improved, he is a fine lengthy animal, with grand crops, and a full level back, from the shoulders to loin, full ribbed, fine chest and quarters, as he, indeed, could not be overlooked. He was bred by the Honourable G. Lascelles, Moor Hill, Leeds, by Good Fitz, out of Brinder by Gay Mouk. Both bulls are superb animals, but of different shapes, and each of great value when used judiciously. Mr. Moffat's fine bull, Dey of Algiers, which was second at the Royal Dublin spring meeting of 1870, now falls in for third place. A high commendation goes to Mr. Smith's The Earl, the second at the last spring meeting; and Lord Bangor's Favourite, a beautiful bull, from the Westland herd, was commended.

Nine two-year-old bulls composed the next class. Mr. William Moutray's Lord Wodehouse, from Mr. Bolton's herd, was put first, and Mr. Meadows' Prince

Mason, second. They stood in the same relative positions at last spring's Royal Dublin meeting, and although their status would seem fixed, we have a suspicion, from the hollow back of Lord Wodehouse, that the second will wear the better. He is by Duke of Marlborough, out of Woodbine 4th; and Prince Mason, by Prince of the Realm (22627), out of Blossom 5th. A high commendation goes to Heir of Lothian, from the Islanmore pastures, now the property of J. Madden, Roslea Manor. He stood fourth in 1870, and third in '71, at the Royal Dublin spring meetings; so that he has not lost ground, and is much improved since last spring, being now a bull of great depth and substance. Mr. Reynards' Prince Arthur Patrick stood in this class, and he is a bull whose profile at a distance is everything that could be desired, but he loses interest on nearer inspection, not being filled in between the crops and fore rib.

The yearling bulls entered were 11. Mr. Meadow's Prince Charlie, the second bull at the last spring meeting, was entered, but having been exhibited at Wolverhampton, where he got the 4th place, was sold there. None of the others had appeared on the stage before, except Half-sovereign, the 4th bull at the last spring meeting; and now the property of R. P. Maxwell, Groomsfort-house, Belfast, and he was put first. Mr. Chaloner's handsome and very even bull, Knight of the Glen, second, is by Knight of the Crescent (26547) out of Gipsy Queen. A high commendation was given to Marquis of Lorne, bred by Mr. Archdall, and now the property of M. H. Franks, Westfield, Mountreth, which, if taken care of, will prove serviceable. Mr. L. Bland now owns the commended bull Maximus Gwynne, bred by Mr. Bolton, a right good yearling, but greatly impaired in appearance from the remains of ringworm about the neck; he should not have been brought forward so early.

The bull calves were eleven, and a very good lot they made. Mr. J. Downing, Ashfield, Fermoy, who for some years has been going in for Shorthorn honours takes both prizes; the first for Knight of the Roses, by Sir Egbert (27468), out of young Moss Rose, a sprout from the Dr. McHale stock; the second for Master Harbinger 3rd, also by Sir Egbert out of Gay Lass, by Master Harbinger. At the Cork local show these calves took equally high honours, Knight of the Roses first, and the Welsted Cup as the best bred in the county; while at the Limerick they were also successful.

Nine fine animals filled the cow class, Mr. Moutray being put first for Princess of Warlabay, a very straight, level, and grand cow by Prince of Warlabay (15107), out of Butterfly by Master Butterfly 2nd. She is now seven years old, and heavy in calf. Earl Fitzwilliam, Coolattin Park, his Irish demesne, takes second place for Adeline, bred by Captain Oliver, Sholebrook Lodge, Towcester, by Grand Duke 7th, out of Autumn Rose by Vanguard. She is a grand cow, with a sweet head, fine ribs, and firmly-fleshed from behind the arm, over the shoulder points, and along the back. Some good judges would place her higher. Limerick Lass, from the Straffan herd, now the property of J. Green, Millbrook, Mageny, was highly commended. An unnamed cow, bred by Mr. Lambert, of Beaupark, was commended. Mr. Cook's fine but aged cow, Ruth 20th, first at both the Limerick and Waterford local meetings this year and first at the Royal Dublin spring show of '67, stands altogether unplaced; Miss Matilda, with a calf at her side, the second in 1870 and the first in her class in '71 at the Royal Dublin spring meetings, is passed also without any mark of recognition. She is the property of and bred by Mr. J. Smith, a tenant farmer, by Dr. McHale,

out of Lady Alice 3rd by Hiudoo. There were but two three-year-old heifers in calf or in milk. Mr. Moutray's Carnation by Knight of the Grand Cross (555), out of Columbine by Jupiter (484), takes the lead. She is a smart one, well-filled behind the shoulders, but inclined to be patchy. The other, Game Hen 5th, by Dr. Collins, out of Game Hen 2nd, is very good behind the arm, but falls away from the top to the fore ribs, so that the fore part of the spine is rather too prominent.

Of two-year-old heifers in calf or in milk there were five. In this class stood Chaumontil, the prize yearling and two-year-old heifer in '70 and '71 at the Royal Dublin spring meetings; she has again changed owners, and is now the property of Mr. Moutray. Favour Royal, who seems to go in determinedly for Shorthorn honours. She is now a grand heifer, and, as she always promised, of great substance. She is again the prima. Mr. Kearney's second prize heifer, Patteru, at last spring's meeting, is now again second to Chaumontil, so that both hold their respective positions. She is by Prince Bertram, out of Pretty Maid by Dr. McHale, a neat sweet heifer, but a trifle hollow between the hips.

Nine very good heifers entered the lists for yearling honours. Mr. Smith, Islanmore, takes both prizes for the same two heifers which won at the last spring show in Dublin—the first for Repose by the prize bull Liotor, out of the late Captain Ball's prize cow Recherché; and the second for Truelove 5th by Prince Bertram, out of Truelove 2nd by Dr. McHale. These two heifers also took the Purdon Cup for the best two two-year-old heifers, which was last year won by Mr. Bolton, The Island. Mr. A. S. Montgomery, Kilmear, Co. Meath, received an H. C. for Princess Louise by Prince Bertram, out of Louisa 4th by Dr. McHale, so that she is closely related to Mr. Smith's second prize heifer, Truelove 5th. Mr. Meadow's very sweet heifer, Fanny 29th, which was placed third at last spring's show, had no place given her at this meeting. Seven very sweet heifer calves were marshalled before the judges in competition for the two prizes. Henry Lyons, Croom House, Croom, took both—the first with Dove, by Lord Francis, out of Darling by Victor; and the second for Juno by the same bull, out of Diana by Saturn, both excellent. Mr. Downing, the winner of the two prizes for bull calves, comes in with a very sweet thing, Lady Harbinger, which took first honours at the Limerick show. She is by Sir Egbert, out of Roan Lilac by Master Harbinger. The Hon. J. Massey was commended for Rose by Knight of the Garter, out of Rosebud by Proteus.

The other distinct breeds of cattle were as usual but indifferently represented, as regards numbers or competitors, but seventeen Herefords of all ages and sexes put in an appearance. Mr. Gilliland, Brook Hall, Londonderry, and Mr. Kearney, Miltown House, Meath, who seem the only breeders that cultivate this sort here with any zeal, divided the prizes. There were but eight Devons, six of which were owned by Mr. Peake, Mullaghmore, Co. Monaghan, who pockets all the prizes. Of the polled Angus there were but six, and with one exception Mr. Owen Blesinton takes all the prizes. Two West Highlands, a bull and a cow, made up this class. Of the Ayrshires there were but four bulls and eleven cows. The native Keries mustered stronger, thirty-five filling up this section. The Channel Island cattle numbered nine, and of the Brittany there was a solitary cow; while tenant-farmers' milk cows mustered but fifteen, not much to the credit of either the Irish Royal Society or the tenant-farmers.

The show of sheep was good and altogether creditable; owing, most probably, to the stimulus given by the Dublin

Society in establishing annual sheep shows in Dublin, which for this year has been held in connection with the national migratory Show. 19 shearling Leicester rams eight of them direct from England, made up the first section. Mr. S. Mowbray, Killearny, being first for a ram which we believe was bought at the Wolverhampton Royal meeting, while Mr. G. Turner, Alexton Hall, Uppingham, is second; and Mr. T. Marris, The Chase, Uleebly, third. Of aged Leicester rams there were 15: with Mr. G. Turner, first and third; and Mr. Marris, second. There were but two pens each of shearling ewes, and ewe lambs: with Mr. Mowbray, first in shearlings; and Sir Allen Walsh, Bart., first in lambs.

Border Leicesters mustered strong. There were 43 shearling rams, T. Robertson, Narraghmore, Athy, taking first place and the Cork cup for the best ram in the yard; G. Laing, Coldstream, second, and L. Bland third prizes. There were but sixteen aged rams, L. Bland taking first and second, and T. Robertson third, while he had another unnoticed which should have been first. Five pens of shearling and six pens of lamb ewes closed this class. A. H. Smith Barry, M.P., first, L. Bland second, and R. G. Cosby third in shearling ewes, and A. H. Smith Barry the prize for ewe lambs.

Roscommon Sheep were not fully represented, many of the pens appropriated to them being untenanted, as one owner found his sheep too much out of sorts to hazard the journey. However, there were thirty-three entries, J. Blood Smith, Fedamore, Limerick, being first and second, and Wm. Cotton, Longford House, Castlereagh, third. For shearling rams, Mr. Blood Smith was first and highly commended, Mr. Roberts, Strokestown, second and commended, and Wm. Cotton third. In aged rams B. Smith was first, Rd. Coffey, Killucan, second, and W. Cotton, third. For shearling ewes, J. B. Smith was first, Rd. Coffey second, and Wm. Cotton third; with Rd. Coffey taking the prize for ewe lambs.

For Lincoln W. F. Marshall, Branston, is the first and third, and Caleb Going second for shearling rams; while Mr. Going takes all the prizes for aged rams, shearling ewes, and ewe-lambs.

Of Shropshire and other Downs there were forty-three entries; shearling rams twenty-one. C. W. Hamilton, who makes the Shropshires his hobby, was first and third; J. L. Naper second and highly commended. In aged rams, C. W. Hamilton was again first, third, and commended; and His Royal Highness the Prince of Wales highly commended for a Southdown ram. L. Bland had a magnificent ram in this section. In shearling ewes, H.R.H. the Prince of Wales takes first for a pen of Southdowns; Peake, Monaghan, second for a pen of Shropshires; with L. Bland commended for another. In pens of ewe-lambs, His Royal Highness is also an exhibitor, but Sir Allan Walsh takes the prize with Shropshires. Tenant-farmers exhibited but thirteen pens of ewes of all ages, but of so mixed a character that the contest for prizes was not very encouraging.

The show of pigs was very good in both sections of black and white; and Lord Clermont's Berkshires especially commendable. Mr. Naper, Mr. Cooper, Mr. Marne, Mr. Reynell, and Mr. Cosby, were amongst the other successful exhibitors.

The exhibition of butter was excellent, 36 firkins, 31 cools, and 5 samples in prints were staged, the prize-specimens in each being fit to compete with the world in quality.

A new industry in dairy produce was for the first time brought forward, in specimens of condensed milk, and first quality of cheese, from Mr. Newnham's Condensed Milk Manufactory, Mallow. The condensed milk is made up in tin cases, to keep for any length of time, even

when open, a great boon to those living in large towns, in ships on voyage, in the nursery, and in hospitals—fresh pure milk being obtained at any time by diluting with water.

The show of flax and wool was not in extent what we should expect in Ireland, where there is great room for improvement; still the samples in both were good; but the wool was not properly classified by the Society—all sorts of long wools and short wools being found in competition in these two sections.

The show of horses was, no question, the strong feature of the meeting, but this must be regarded rather as the Dublin horse show *per se* than any actual part of the Agricultural Society's programme. There was a capital entry of thorough-bred stallions, where the Lord-Lieutenant deservedly won with General Hesse, a hunter all over to look at, and a horse, moreover, who can move. The still better-known Citadel, now the property of Mr. Power, and the winner of an Islington £100, was second, although it was a very close thing between him and Lord Spencer's Dalesman, hitherto an almost invincible nag in the ring; but he did not show well here, looking high and three-cornered. Of the others, Kidderminster is a nice level handsome horse, who will improve with a year's furnishing; but he seemed to lack muscle by the side of such horses as Citadel and Dalesman. Little Stag is the very *essence* of a hunter, but on too small a scale; and his hocks bear the Birdcatcher mark. Roman Bee, a fine, flash horse, with middling fore-joints, is not a hunter-sire; and Tom King, of a good colour, wants substance, action, and hunting character. Yorkminster is neat enough, and of a good hardy chesnut in colour, but he is too light throughout, especially behind the shoulder, and Duke of York is a fine coach horse, but with his hocks turned in as well as his knees and elbows.

The class of sires, also thoroughbred, for getting chargers, roadsters, and carriage horses, was by no means so good. The winner, Mr. Mansergh's Joco, a fair race-horse, has plenty of good looks, but lacks bone, and the second prize, Mr. Dickson's Strood, is a finer goer, but wants the other's rich colour for chargers or carriage pairs. Mr. Dickson's other entry, the commended Mallet, is of a rare sort, but disfigured from an accident. Word Union has his neck on upside down, and of the others, Outcast and Donny-brook were never brought into the ring! The thorough-bred and half-bred brood mares were alike sorry specimens, and such as never could have been the dams of the hunting horses here exhibited, of which there was a really magnificent display. The premiums for cart stallions and mares were awarded as under:

Stallions of the Clydesdale or Suffolk breed.—First prize, P. O'Malley, Woodlands (Orphan); second, S. Rait, Kerr (Lanark); third, T. Butler, Prieststown (East Lothian). Highly commended: W. G. Banner, Tralee (Star of the West).

Stallion of any other breed.—Prize, L. M'Court, Dublin (England's Glory). No further merit.

Brood mare.—First prize, S. Rait; second, Messrs. Mooney, Crumlin; third, J. Dennis.

Gelding for agricultural purposes, over two and not exceeding four years old.—First prize, J. Rooney, Hilltown; second, R. Patterson, Dundalk.

Filly for agricultural purposes, not exceeding five years old.—First prize, L. Joynt, Raheny; second, Messrs. Mooney.

The judges were as under:—

HORSES.—B. Persse, R. Watson, H. Thurnell, Major Borrowes, Captain Bernard, Hon. W. R. Arbuthnot, Captain Barlow, H. R. Corbett, H. Briscoe, A. Darker, N. M. Archdall.

CATTLE.—Shortorns: J. Crisp, J. Unthank. Herefords and Down Sheep: W. Heywood, W. Hewson. Polled Angus

and West Highland, &c.: T. Gibbons, A. Borthwick, Kerries: G. Hewson.

SHEEP.—Roscommon: S. Garnett, Major D'Arcy. Lincoln: W. Seagrave, A. Borthwick, J. Clay. Leicesters: L. Bernard, T. Harris, J. Potter. Border Leicesters: J. Clay, A. Borthwick, W. Seagrave. Shropshires: T. Horley, J. Coxon.

PIGS.—H. McClintonck, A. Warburton.

DAIRY PRODUCE.—W. Fetherston, H. W. Greene.

SPECIAL PRIZES.—Mr. Wade, Mr. Boyce.

At the banquet, H. R. H. PRINCE ARTHUR said: The fine animals exhibited and the great improvements in all the agricultural implements speak more than any words can do the increasing and advancing prosperity of the country, and I am greatly rejoiced to hear that, turning to a more humble branch of agriculture—I mean the potato crops—there is a commensurate advance. These crops have been better this season than they have been known to be for years—I may say for a quarter of a century. We know well that they are of great importance to the poorer classes of our fellow-countrymen.

H. R. H. The PRINCE OF WALES, the President, said: I think I may say, without fear of contradiction, that at the present moment Ireland is rich and is prosperous. There has been a great decrease of pauperism and of crime, and I may say that what will do more than anything else towards making a country prosperous is the extension of its agriculture. It was with great pleasure that I accepted the position of President of the Royal Agricultural Society, and it afforded me great pleasure to be present for a short time at the Show to-day. I feel sure that in no other part of the United Kingdom could a more creditable show be held than that which was opened near Dublin this morning. During the last four years there has been a great improvement in every respect in the shows of the Royal Agricultural Societies. I believe I am not wrong in stating that in 1867 the entries in the department of horses numbered 257, and now, on this occasion, they are but one short of 600. That alone shows the interest which all classes of the community take in these shows, and how anxious each one is to do all in his power to promote the object it has in view. I am assured that if the many gentlemen and landlords who very often find some difficulty in leaving England, but who have large interests and large estates in this country, could contrive to come over here more frequently, it would do more good than anything else I could imagine. I am certain that they are anxious to come over, and that their relations with their tenantry and those around them should be in every respect good. I may also here refer to the great improvement made in the erection of farm buildings and cottages. Beyond doubt

there has been progress in the direction of improvement there; but still I believe much yet remains to be done. Everything depends on the well-being of the people, and if they are properly lodged it tends to cleanliness, and very possibly to moral advantage. Perhaps I may be allowed to speak of a slight personal experience in that matter. I have a small estate in Norfolk, and observed myself the great importance of providing suitable small cottages for those resident there, and, having done so, now reap immense advantage. I am sure that that is a question which belongs in itself to the well-being of Irish agriculture, and which will accordingly receive the best consideration of this Society.

His Excellency the LORD-LIEUTENANT said: As to the improvements effected by the Society, he would point to the better class of farm buildings and the greater attention paid to drainage and manure, and the larger amount of tillage in the country. He felt assured that, with the confidence which was increasing every day between landlord and tenant, the capital of the farmer will be more largely invested in the land, and that will produce still greater prosperity.

LORD LEICESTER said: Your Royal Highness well knows that in that district of England in which you are not only an owner but an occupier of land, it is all-important that the Irish cattle, on which we so largely depend, should be of good quality; and I think that the exhibition of Shorthorns to-day would rejoice the heart of a Norfolk farmer.

The MARQUIS OF LORNE said: I have attributed to my special connection with Scotland that I see my name in the list of toasts to answer for the Highland Agricultural Society of Scotland, but I prefer, with your permission, to base my claim upon another and personal ground. It is this—that the Duke of Argyll was one of the first founders of the Highland Agricultural Society, and that the Duchess, who took much interest in the Highland Society, was a native of the county of Roscommon. Since the time of the founding of that Society it has done all in its power to advance the interests of agriculture in Scotland; but I must tell you and confess that we in the Highlands have had to take, in the matter of agriculture, most of our hints from the Lowlands, and I need hardly remind you how close a connection there is between some parts of the Lowlands of Scotland and the country of Ireland. Indeed, I am not wrong in saying that some time ago it was quite common for the farmers of Ayrshire to buy regularly in the markets for Antrim. This shows a very close connection. I may express a hope that the ancient community of farming interests will always continue between the two countries, and that the Highland Agricultural Society of Scotland will always find its most formidable rival and friend, and one of its most successful competitors, in its fellow society in this sister kingdom of Ireland.

DURHAM COUNTY AGRICULTURAL SOCIETY.

As compared with that of last year, the show, upon some points, was numerically weaker, whilst it completely eclipsed the anniversary of three years back, when the meeting was last held at Hartlepool. As a whole, in the open classes, the cattle were good, the class for all-aged bulls including the York winner, Lord Irvine, who secured the £15 prize, and Royal Windsor, another white, which carried off the second prize of £5. Earl Vane scored a win with Grand Turk in the class under 2 years; and Messrs. R. Burdon, of Castle Eden, and T. H. Hutchinson, of Catterick, were winners in the younger classes. As a lot, the sheep which gained prizes were very good, Mr. T. H. Hutchinson, of Catterick, taking all the first and not a few of the second prizes. The presence of several of Mr. Duckering's celebrated sows was enough to secure him the prizes for the large and small breeds, and Mr. W. Lister, of Armley, Leeds, was equally lucky with his boars. Among the horses, the proportion of good ones to the number shown was astonishingly large, the class for Captain Beaumont's £5 cup and a £15 prize, falling to Mr. Bayley's Banner Bearer. Marmalade, by Orpheus, was second; and Joe Bennett, a four-year-old, highly commended. The young hunter classes in-

cluded some very good, notably a two-year-old chesnut, which gained a well-deserved first for Mr. Tattersall, the owner of Marmalade. The foal classes, as a whole, were but moderate; but the agricultural horses included some capital pairs. After a long delay the palm was awarded to a pair of rather small but wonderfully symmetrical blacks, owned by Mr. Upton, of Pallathorpe, Tadcaster; Mr. G. Atkinson's pair of bays, Damsel and Dinah, being placed second; while Damsel also secured the £5 first for the best brood cart mare. Some good youngsters were also shown in the junior carting classes; and the roadsters competing for Mr. R. W. Jackson's silver cup were a capital lot, where Mr. Robson's celebrated chesnut, Miss Patty, however, had no difficulty in passing her rivals, of whom a very clever gelding, owned by Mr. Knowlson, of Thormanby, was adjudged second best. Mr. Pease's £10 cup for the best pair of coaching colts was won by Mr. Robinson, of Leckenby, Thirsk, with a pair of roans; and the High Sheriff's cup, for the best lady's hackney, which drew together a good lot, fell to Mr. D. Dale, of Darlington, with a Greatheart; Lallah Rookh being second.

THE BADMINTON FARMERS' CLUB.

This annual agricultural exhibition and cottagers' horticultural show was held on Tuesday, Aug. 9, in the Huntsman's close. The horse show generally was good, there being some twenty more than last year, including a rare lot of weight-carrying nags, and some good agricultural mares and foals. The Duke of Beaufort, as usual, sent a lot of his Scotch polled oxen for exhibition, and contributed not a few horses in the extra classes. The show of cattle was numerically inferior to some of the recent shows at Badminton, but the quality was tolerably well sustained. The short number is owing partly to the removal of two or three well-known breeders from the neighbourhood, and partly to the bad season of last year, which resulted in stock getting out of condition, while the early period of the present show has not given time to bring the cattle up to their proper standard. Of sheep there was but a short show; but the animals were well bred; and the same remark may be applied to the pigs. There was a small show of cheese, and a capital exhibition of roots of extraordinary growth, considering the season of the year. The horticultural show far outstripped everything that has ever preceded it. Instead of one tent, the specimens this year required two for their accommodation, and the quality was unquestionably good.

JUDGES.

HUNTING STOCK.—H. Corbet, Farmers' Club, London (absent); W. Humann, The Priory, Old Windsor; J. T. Handy, M.R.C.V.S., Chipping Sodbury.

CART HORSES, SHEEP, PIGS, AND ROOTS.—W. Brown, Hazlebury, Box; E. P. Fowler, Aston Farm, Minchinhampton; E. Little, Lanhill, Chippenham.

CATTLE.—W. Beaven, Woodborough, Marlborough; C. Rich, Sutton Benger, Chippenham.

CHEESE.—G. Butcher, Bath.

PRIZE LIST.

HORSES.

Yearling colt or filly for hunting purposes.—Prize, a piece of plate, value £5, W. White, Tetbury.

Two-year-old gelding or filly for hunting purposes.—Prize, a piece of plate, value £5, H. Hewitt, Coalpit Heath, Bristol.

Hunter, mare or gelding, above three years old.—First prize, a piece of plate, value £10, C. A. Tanner, Yatesbury, Calne; second, ditto, £5, C. G. Peterson, Mowswell Farm, Wapley.

Roadster, mare or gelding, above three years old.—Prize, a piece of plate, value £5, J. C. Hatherell, Oldbury-on-the-Hill.

Brood mare and foal for hunting purposes.—Prize, a piece of plate, value £5, H. Hewitt.

Brood mare and foal for agricultural purposes.—First prize, a piece of plate, value £5, J. W. Alway, Hillsley; second, ditto, £2 10s., J. P. Limbrick, Lower Chalkeley. Commended: H. G. Highnam, Dyrham.

Two-year-old gelding or filly for agricultural purposes.—First prize, a piece of plate, value £5, T. Arnold, Wickwar; second, ditto, £2 10s., H. Reynolds, The Idovers, Dauntsey, Chippenham.

CATTLE.

Bull, above two years old.—Prize, £2, R. H. Gould, Didmarton. Highly commended: D. F. Long, Oldbury-on-the-Hill.

Bull, above one and under two years old.—Prize, £2, J. Cornock, Hillsley.

Bull-calf, above three and under twelve months old.—Prize, £2, J. Thompson, Badminton.

Cow, above four years old, in-milk or in-calf.—Prize, £2 R. H. Gould. Commended: J. Thompson.

Cow, above three and under four years old, in-milk or in-calf.—Prize, £2, J. Thompson.

Heifer, above two and under three years old.—Prize, £2, J. Thompson.

Heifer, above one year and under two years old.—Prize, £2, J. Thompson.

Heifer-calf, above three and under twelve months old.—Prize, £2, D. F. Long. Commended: J. Thompson.

Cow, above three years old, in-milk or in-calf.—First prize, £3, J. Cornock; second, £2, J. Goulter, Acton, Turville; third, £1, R. H. Gould.

Pair of heifers, above two and under three years old.—First prize, £3, R. H. Gould; second, £2, J. Goulter; third, £1, D. F. Long. Commended: S. B. Witchell, Stoke Gifford, Bristol.

Pair of heifers, above one and under two years old.—First prize, £3, J. Cornock; second, £2, D. F. Long; third, £1, J. Goulter. Commended: R. H. Gould.

Heifer-calf, above three and under twelve months old.—Prize, £2, J. Goulter.

SHEEP.

Long-wooled shearing ram.—First prize, £2, H. Arnold, Tormarton; second, £1, H. Arnold. Commended: H. Arnold.

Long-wooled ram, of any age.—First prize, £2, H. Arnold; second, £1, H. Arnold.

Pen of eight long-wooled ewes.—Prize, £2, H. Arnold.

Short-wooled ram, of any age.—Prize, £2, R. H. Gould, Didmarton.

Pen of eight cross-bred ewes.—Prize, £2, J. Bennett, Tormarton.

Pen of eight cross-bred wether lambs.—Prize, £2, J. Bennett. Commended: H. Gould.

Pen of eight cross-bred Chilver lambs.—Prize, £2, J. Bennett. Commended: J. M. Williams, Chipping Sodbury; and H. Gould.

PIGS.

Boar, under twelve months old.—Prize, £1, Rev. G. F. Le Mesurier, Didmarton Rectory. Highly commended: Rev. G. F. Le Mesurier.

Boar, above twelve months old.—Prize, £1, Rev. R. Mullen, Acton Turville Vicarage.

Extra stock commended: J. Goulter, Acton Turville.

Sow, above twelve months old.—Prize, £1, R. H. Goulter.

Pen of six pigs, under eight months old.—Prize, £2, R. H. Gould. Highly commended: R. H. Goulter.

ROOTS.

Mangold wurtzel, swedes, and common turnips, twelve of each.—Prize, £2, W. Minett, Acton Turville. Highly commended: R. H. Gould.

Twelve mangold wurtzels.—Prize, £2, Mary Witchell, Stoke Gifford.

Twelve Swedish turnips.—Prize, £2, W. Minett, Acton Turville.

Twelve common turnips.—Prize, £2, W. Minett.

CHEESE.

PRIZES GIVEN BY THE CLUB.

Cwt. of thick cheese.—Prize, £2, T. Goulter, Acton Turville.

Cwt. of thin cheese.—Prize, £2, T. Goulter.

At the dinner, his Grace the Duke of Beaufort, K.G., presided, and about four hundred ladies and gentlemen were present.

THE FARMERS' CLUB.—During the last few days a number of portraits of past chairmen of the Club have been hung in the dining-room. The series so far is not yet quite complete, but it is hoped that the portraits of the late Mr. Shaw, the late Mr. Joseph Pain, and the late Mr. Spencer Skelton may be supplied by the relatives of those gentlemen. The portraits, which are of uniform size, and coloured, are very excellent specimens of photography, and generally very successful likenesses. The Club had previously presentation portraits of two of its earliest presidents, Mr. Robert Baker, of Writtle, and Mr. Fisher Hobbs.

LEICESTERSHIRE AGRICULTURAL SOCIETY.

MEETING AT LEICESTER.

If the Longhorns be gradually fading away, the Short-horn has but a comparatively recent hold in Leicestershire, and the Leicester sheep promises soon to be so called because he is *not* bred in the county. In fact, in the purely agricultural classes the strength of the competition came from beyond the confines, and even then this was very generally of the most limited character. Amongst the cattle there were often enough but two or three entries for two or three prizes, and notwithstanding the number of classes, the judges here must have had a very easy day's work. Mr. Pulver's steer, which won at Bedford, was again the best fat ox, as he is no doubt a very improving beast, but he must drop to his leg a little more, and even then he will never rank with the Christmas ox of '70, although noticeably taking after the other. This steer, however, was bred by Mr. Burditt, in Northamptonshire. The second prize steer, from Rutland, is very small and neat; and Mr. Sharpe's best fat cow at three years and four months old was the best *breeding* animal when exhibited by Mr. Searson, at Oakham, in December. The Shorthorns made up a very middling show, but Sir W. W. de Capell Brooke's Knightley Grand Duke is a stylish length bull, by no means pampered up for display in public. Mr. Bayes' bull-calf was also very promising, while Mr. Bradburn and Mr. Sharpe did everything for the cows and heifers. A very moderate yearling Waterloo, from the famous Gadesby Hall herd, only took a second prize in a moderate class, but the calf did more credit to her belongings. Of the Longhorns, Mr. Chapman's pair of stirks were very excellent specimens of the breed; and there were a few Alderneys shown, but the pick of the milking cows were both Shorthorns, and the long figures in parentheses gave the cue to most of the winning numbers in the catalogue.

The strong feature of the meeting was the riding-horse section, where the classes were almost generally well filled, so that the judges had a really hard day's work under a broiling sun. In the all-aged class of hunters there were no less than twenty entries, a strong proportion of which were by thorough-bred horses, and many with blood on both sides of their heads. The winner, an improving brown five-year-old, is by Knight of Kars, out of a half-sister to the Colonel's dam, and so well bred enough any way for a hunter. It was, however, a very close thing between Mr. Miles and a chestnut Irish horse of more character, shown by Mr. Pain, of Shington, and the decision as to the placing of the first and second was not unanimous. The two prize four-year-olds were both by Mogador, but with Mr. Ward's filly all for the choice of two; while the well-known Mr. John Bennett had all the pull in the younger classes, taking first prizes for three-year-olds, two year-olds, and yearlings, all by thorough-bred sires, out of mares by thorough-bred horses, and the two-year-old by the Duke, quite thorough-bred. The three-year-old is a very neat colt of hardly size enough, while the yearling shows a deal of breeding, backed by great liberty, with every promise, so far, of growing into a Leicestershire hunter. The two-year-old class was the best filled of any in the catalogue, and three or four commendations followed the award in favour of the stylish brown colt from Bosworth, but there should have been two prizes over such an entry. Mr. Bennett was first again for the best hack, a very neat one by Nutshell, and seemingly a delightful horse to ride,

as altogether in advance of his class. Mr. Milward's handsome old grey mare was no goer, and the first prize for cobs was awarded accordingly to a very useful but rather plain bay, who went very straight and strong. In the pony class, Castance, the celebrated jockey, came before the public in a new character, riding a little roan for his next-door neighbour, Mr. Fowler, of Manton, with which he took a second prize, apparently with as much gratification as if he had won a Derby. The almost equally renowned Diek Webster—at least in these parts—beat the other great horseman for first, and a commonish chestnut thing, with high, flash, hammering action, took no prize whatever, to the no little astonishment of its owner and his friends, who had regarded victory as a certainty. We could not wait to "assist" over the brood mare class, where they contrived to put aside the famous Lady Florence, whose luck was never very great at Leicester. There were some good cart horses both in work and coming on; but it would seem to be bad policy to limit the entries of show or travelling stallions to horses the property of members of the Society.

Only two Leicester rams were entered in two classes, from Mr. G. Turner, jun.; while Mr. Lynn's Leicester and Lincoln rams were the best of the other longwools, though closely run by Mr. A. Hack's Lincolns. Mr. Lynn was also successful with ewes, but did not compete in the classes for heaves and ewe lambs, in both of which Mr. T. W. D. Harris stood first. There was a stronger show of Shropshires, Mr. German taking first with a big shearling, with a good back, but coarse wool; Lord Chesham second with one of his neat sheep; and commendations were bestowed on a second ram of Mr. German's and on Mr. W. Baker's entry. In the aged ram class the Rugby and Wolverhampton decisions were reversed in favour of Lord Chesham's, though Mr. Baker's Rugby winner and highly commended Wolverhampton ram, and another two-shear of great size of Mr. German's, were competitors. Lord Chesham also took first prizes for fat wethers and for a pen of heaves; Mr. Baker taking all the other honours, viz., first and second for pen of three ewes, first for ewe lambs, and first for pen of ten breeding ewes.

Messrs. M. Walker, Duckering, Lynn, Wheeler, and Carver were the principal exhibitors of pigs. The show of poultry was quite up to the average; but not so the cheese, in one class of which the first prize was withheld. The dinner of the Leicestershire Society and Sparkenhoe Club, not long since a very agreeable feature in the proceedings, has been abandoned, as "it did not pay."

P R I Z E L I S T .

J U D G E S .

HUNTING AND HACK HORSES.—C. Millward, H. Corbet, and G. Higgins. CART HORSES: G. Bedford and G. C. Woolhouse.

CATTLE.—C. Howard and T. Harris.

SHEEP AND PIGS.—R. Brown and T. Cartwright.

CHEESE AND BUTTER.—J. W. Daniel and C. Mills.

POULTRY.—E. Hewitt.

IMPLEMENTS.—E. Wortley.

VETERINARY INSPECTOR.—M. Hack, Leicester.

H O R S E S .

HUNTERS AND HACKS.

Hunter gelding or mare, not less than five years old and under ten, open to all England.—First prize, £10, R. D. Miles, Keyham; second, £5, J. Pain, Shington.

Gelding or filly, four years old, adapted for hunting purposes, bred within the limits of the Belvoir, Quorn, Mr. Tailly's, Cottesmore, Atherstone, and Pynchley hunts.—First prize, £20, F. L. Ward, Burton Overy; second, £5, A. J. Milner, Kimoulton.

Gelding or filly, three years old, adapted for hunting purposes, bred as above.—First prize, £10, J. E. Bennett, Husbands Bosworth Grange; second, £5, G. Hill, Edenham Grange, Bourne.

Gelding or filly, two years old, adapted for hunting purposes, bred as above.—Prize, £5, J. E. Bennett. Highly commended: R. Battams, Oxendon; and the Baroness Berners. Commended: J. E. Bennett, and the Baroness Berners.

Yearling colt or filly.—Prize, £5, J. E. Bennett. Commended: J. Torbitt, Rosliston.

Mare calculated to breed hunters.—First prize, £10, J. W. Jenkins, Husbands Bosworth; second, £5, Captain Baillie, Ilston Grange. Commended: J. A. Beale, Brockhurst, Lutterworth.

Hack not less than 14½ hands, and not exceeding 15-1 hands high.—First prize, £7, J. E. Bennett; second, £3, L. Turner, Richmond House, Leicester.

Cob not exceeding 1½ hands high.—First prize, £5, Thomas Burnaby, Upper Lodge, Pipewell, Kettering; second, £2, R. Milward, Thurgarton Priory, Southwell. Commended: J. Allen, Knighton.

Pony not exceeding 13½ hands.—First prize, £5, R. D. Miles; second, W. Fowler, Manton, Uppingham.

Jumping hunters.—First prize, £10, R. D. Miles, Keyham; second, £5, G. W. Coleman, Great Glenn.

SPECIAL ENTRY.

Jumping hacks and cobs.—First prize, £7, Mr. Smith, Oadby; second, £3, Mr. Payne, Foston.

CART HORSES.

Gelding or filly two years old.—First prize, £5, J. M. Brown, Ibstock; second, £2, J. Perry, Salter's Hall, Claverley, Bridgenorth. Commended: T. Allen, Thurmaston.

Gelding or filly one year old.—First prize, £5, S. C. Pilgrim, The Outwoods, Hinckley; second, £2, S. C. Pilgrim. Commended: H. W. Pateman, Carlton Curlien.

Mare in-foal.—First prize, £, J. A. Beale, Brockhurst; second, £2, H. Burgess, Ilston Grange. Commended: Ann Bass, Aylestone.

Stallion, bonâ fide the property of a member of this Society.—First prize, £10, H. Spencer Loughborough; second, £5, J. Hack, Braunston, Oakham.

Foal.—First prize, £5, the Executors of Lord Berners; second, £2, H. Burgess, Ilston Grange. Commended: H. Ingle, Elmsthorpe.

EXTRA STOCK.—Highly commended: W. Grant, Kibworth Beauchamp.

CATTLE.

Fat ox.—First prize, cup, T. Pulver, Broughton; second, £5, E. Wortley, Ridlington.

Fat cow or heifer.—First prize, £10, J. J. Sharpe, Broughton; second, £3, R. D. Miles.

Bull above one year and under two years old.—First prize, £7, Sir W. de Capel Brooke, Bart., Geddington Grange; second, £3, R. D. Miles, Keyham.

Bull of any breed, over two years old.—First prize, £7, Sir W. de Capel de Brooke, Bart.; second, £3, W. Bradbourne, Wednesfield, Wolverhampton.

Bull calf under one year old.—Prize, £5, C. Bayes, Kettering.

Cow in-milk, having had live calf since January 1st, 1871.—First prize, £7, W. Bradburne; second, £3, W. Bradburne. Highly commended: Sir W. de Capel Brooke.

Shorthorn cow, above three and under four years old, having had a live calf since 1st of January, 1871.—First prize, £5, W. Bradburne; second, £2, J. J. Sharpe.

In-calf heifer, above two and under three years old.—First prize, £5, W. Bradburne; second, £2, R. D. Miles.

Stirk, above one and under two years old.—First prize, £7, J. J. Sharpe; second, £3, E. H. Cheney, Gadsby flail.

Heifer calf under one year old.—Prize, £5, E. H. Cheney. Highly commended: J. J. Sharpe. Commended: T. Allen Thurmaston.

Long-horn bull.—First prize, £5, J. Godfrey, Wigston Parva, Hinckley; second, £2, W. T. Cox, Spondon Hall, Derby.

Long-horn cow, in-milk, having had a live calf since December 1, 1870.—First prize, £5, W. T. Cox; second, £2, R. H. Chapman, Upton. Commended: J. Godfrey.

Long-horn heifer, in-calf, above two and under three years old.—First prize, £5, W. T. Cox; second, £2, W. T. Cox.

Alderney and Guernsey cow or heifer, having had a live calf since 1st January, 1871, or now in-calf.—First prize, £5, R. D. Miles. Commended: W. H. Salt, Bird's Nest Farm, Leicester.

Bull of any age, whether hired or bonâ fide the property of the exhibitor.—First prize, £5, J. A. Beal; second, £2, J. Mudford.

Cow in-milk, having had a live calf since January 1, 1871.—First prize, £5, E. Wright, Sysonby House; second, £2 10s., J. J. Sharpe.

Heifer under three years old.—First prize, £5, J. J. Sharpe; second, £2, W. Bradburne. Highly commended: W. Bradburne and J. Perry. Commended: J. Perry.

Pair of stirks under two years old.—First prize, £5, R. H. Chapman; second, £2, S. Burchall, Catton, Burton-on-Trent.

SHEEP.

Leicester shearling ram.—First prize, £5, George Turner, jun., Allexton Hall; no other entry.

Miles ram of any other age.—First prize, £5, George Turner, jun.; no other entry.

Long-wooled shearling ram.—First prize, £5, J. Lynn, Church Farm, Stroxtun; second, £2, A. Hack, Buckminster.

Long-wooled ram of any other age.—First prize, £5, J. Lynn; second, £2, A. Hack.

Pen of three under twenty months old Leicester fat wether sheep.—First prize, £5, the executors of Lord Berners; second, £2, the executors of Lord Berners.

Pen of three, under twenty months old, long-wooled fat wether sheep.—First prize, £5, Sir W. de Capel Brooke, Bart.; no other entry.

Pen of three long-wooled ewes.—First prize, £5, J. Lynn; second, £2, J. Lynn.

Pen of five long-wooled theaves under twenty months old.—Prize, £5, T. W. D. Harris.

Pen of five long-wooled ewe lambs.—Prize, £5, T. W. D. Harris.

Shropshire shearling ram.—First prize, £5, W. German, Measham Lodge, Atherstone; second, £2, Lord Chesham, Latimer, Chesham.

Shropshire ram of any other age.—Prize, £5, Lord Chesham. Pen of three under twenty months old Shropshire fat wether sheep.—Prize, £5, Lord Chesham.

Pen of three cross-bred fat wether sheep under twenty months old.—Prize, £5, Sir W. de Capel Brooke.

Pen of three Shropshire ewes.—First prize, £5, W. Baker, Moor Barns, Atherstone; second, £2, W. Baker.

Pen of five Shropshire theaves under twenty months old.—Prize, £5, Lord Chesham.

Pen of five Shropshire ewe lambs.—Prize, £5, W. Baker.

Pen of ten long-wooled breeding ewes.—First prize, £7, T. W. D. Harris; second, £3, W. Everard, Narborough Wood.

Pen of ten short-wooled breeding ewes.—First prize, £7, W. Baker; second, £3, S. C. Pilgrim.

PIGS.

Boar of the large breed.—First prize, £3, M. Walker, Stockley Park; second, £1, R. E. Duckering and Son, Northorpe.

Boar of the small breed.—First prize, £3, R. E. Duckering and Son; second, £1, M. Walker.

Berkshire boar pig, not exceeding eighteen months old.—First prize, £3, R. E. Duckering and Son; second, £2, J. Wheeler and Sons, Long Compton, Shipstone-on-Stour.

Breeding sow of the large breed.—First prize, £3, M. Walker; second, £1, J. Wheeler and Sons.

Breeding sow of the small breed.—First prize, £3, J. Wheeler and Sons; second, £1, R. E. Duckering and Son.

Three breeding pigs of the large breed.—First prize, £3, R. E. Duckering and Son; second, £1, M. Walker.

Three breeding pigs, of the small breed.—First prize, £3, R. E. Duckering and Son; second, £1, J. Wheeler and Sons.

CHEESE.

Four cheeses, weighing 40lbs. each or more.—First prize, £5, J. Choyce, Pinwall Grange; second, £3, W. Drackley, Osbaston; third, £2, Emma Barrs, Odstone Hall. Highly commended; T. Oakey, Normanton-en-le-Heath; S. Burchall, Catton; W. Drackley.

Four cheeses, weighing not more than 40lbs. and not less than 30lbs.—First prize, £5, W. Grewcock, Barwell Fields; second, £3, T. Oakey; third, £2, Emma Barrs. Highly commended; J. Choice and W. Grewcock. Commended: M. Walker, Stockley Park, and S. Burchall.

Four cheeses, weight under 30lbs.—First prize, £3, not awarded; second, £2, T. Oakey; third, £1, G. Grewcock.

BUTTER.

Six pounds of fresh butter.—First prize, £1, W. H. Johnson, Braunstone, Leicester; second, 10s., R. Abell, Stapleton. Highly commended: Ann Bass, Aleystone, and T. Allen, Thurmaston. Commended; J. Choice.

IMPLEMENTS.

Prizes were awarded to Hunt and Pickering, Leicester; F. Johnson, Leicester; Woods, Cocksedge, and Warner, Stowmarket; W. Ball and Son, Rothwell, Kettering; Ball, Kilworth, Rugby; and Choyce and Son, Gibston, Atherstone.

NORTHUMBERLAND AGRICULTURAL SOCIETY.

MEETING AT ALNWICK.

Home of the Percy's highborn race,
Home of their beautiful and brave;
Alike their birth and burial place,
Their cradle and their grave.

I wandered through the lofty halls
Trode by the Percys of old fame,
And traced upon the chapel walls
Each high heroic name,
From him who once his standard set
Where now, o'er mosque and minaret,
Glitter the Sultan's crescent moons;
To him who, when a younger son,
Fought for King George at Lexington
A major of dragoons.

This last half stanza—it has dashed
From my warm lip the sparkling cup.
The light that o'er my eyebeam flashed,
The power that bore my spirit up
Above this bank-note world, is gone;
And Alnwick's but a market-town,
And this, alas! it's market-day,
And beasts and borderers throng the way;
Oxen and bleating lambs in lots,
Northumbrian boors and plaided Scots,
Men in the coal and cattle line;
From Teviot's bard and hero land,
From Royal Berwick's beach of sand,
From Wooller, Morpeth, Hexham, and
Newcastle-upon-Tyne.

Alike in its total of entries and general excellence, the Northumberland Society's Show of 1871, held at Alnwick, on August 3, must take precedence of all its predecessors. The entries this year reach the large total of 1,039; last year, they were 939; while the last time the Society visited Alnwick, which was in 1866, they were 521, so that they have all but doubled within the space of five years. No wool was exhibited this year; the reason being that the experiments made in that direction five successive years, however successful in bringing out splendid fleeces, showed that little competition took place, either because little interest was felt in the matter, or, more probably, perhaps, because the general body of agriculturists considered it useless to try to compete against one or two exhibitors accustomed to carry everything before them. The Society, therefore, resolved to discontinue a competition which was actually no competition at all. Never before did any of the local Societies manage to bring together such a collection of Shorthorns as that witnessed in the Abbey Park. The number of entries was 84, and the judges had no easy task set them when the horn bulls above two and under seven years old were led into the ring. At length the first prize was awarded to Mr. W. Linton's Lord Irwin, which also carried off the silver cup given by Sir Matthew White Ridley for the best bull. The whole class, as it deserved to be, was commended; and the bull calves, again, were commended, where Mr. W. Linton, Sheriff Hutton, York, obtained first prize. The show of cows was of the best; one belonging to Sir

John Swinburne was awarded both the first prize given by the Society and a silver cup, value £20, given by Sir Walter C. Trevelyan. The heifers were good specimens. The turn-out of Channel Isles and Ayrshire cows or heifers, though not large, was good. Mr. Thomas Statter, jun., Stand Hall, Manchester, being first in the former, and Mr. David Tweedie, Castle Crawford, Abington, Scotland, first in the latter class. The show of sheep was one of the best ever seen in the district. The prize-takers were the Rev. R. W. Bosanquet, Rock, Alnwick; Mr. G. Hope, Fenton Barns, Drem, East Lothian; Mr. Thomas Forster, jun., Ellingham, Chathill; Mr. Thomas Elliot, Hindhope, Jedburgh; Mr. Robert Shortreed, Attonburn, Kelso; Mr. John Robson, Byrness, Rochester; and Mr. T. H. Hutchinson, Mauor House, Catterick. This was only the second occasion on which Mr. Bosanquet's good sheep have been brought out this year. Mr. Hope's ram, which got both a first prize and a silver cup was also first at the Highland and Agricultural Society's Show at Perth. The "shearing question" was the subject of considerable remark; and the opinions of the secretary and committee of the Northumberland Society are such that steps will probably be taken before long to prevent, if possible, the practice of "clipping animals into shape." The total entry of horses was 383, well on to 100 more than had ever been entered before. The value of the money prizes offered, combined with the large number of silver cups presented by gentlemen who evince their interest in the Society after a practical sensible fashion, was quite sufficient, perhaps, to account for such a large display. The agricultural classes were good, and the show of hackneys and hunters very superior indeed. To a bay gelding, belonging to Mr. J. B. Booth, of Killerby Hall, Catterick, was awarded a silver cup, value £25, for the best horse or mare five years old and under ten; and Mr. Wm. Smith, jun., Melkington, Coldstream, got a cup for the best hunter in Northumberland, Durham, and Cumberland. The pigs, poultry, and dogs were well worthy the show.

The display of implements was both extensive and good, and included a set of the Fiske Patent Steam Ploughing Tackle, reaping and mowing machines, ploughs, washing machines, and much else needed either on the farm or in the house. The judges, however, expressed their strong disapproval of being called upon to award prizes without seeing the implements properly tested.

The following is a list of the exhibitors of implements: Ravenshorpe Engineering Company, Mirfield; Gillis, South Tyne Implement Works, Haydon Bridge; Symm, Newton, Stocksfield-on-Tyne; Bickerton and Sons, Old Tweed Implement Works, Berwick-on-Tweed; Colegrave, Newcastle-on-Tyne and Stockton-on-Tees; Richardson, Brunton-place, Carlisle; Archbold, Horsley, Wylam, Newcastle; Lillie and Elder, Tweedmouth, Berwick-on-Tweed; Scott, Tweedmouth, Berwick-on-Tweed; Wright, Belford; Cockburn, Newcastle-on-Tyne; Wilkin and Dickman, Alnwick; Thompson, Water-side House, Alnwick; Brigham and Co., Berwick-on-Tweed; Carss, Morpeth; Gregory, Westoe, South Shields; Scott and Son, Felton, Northumberland; Carss Brothers, Guyzance,

Aeklington; Hogarth, Kelso; Robinson and Sons, Easington, Belford; Nichol, Felton, Aeklington; Bolom and Thomson, Alnwick; Rimington and Co., Newcastle-on-Tyne; Reid and Co., Aberdeen; Hudspith, South Tyne Works, Haltwhistle; Bradford and Co., London and Manchester; Furness, Morpeth; Young, Hassington, Kelso; Wood, Egingham, Alnwick; Howard, Bedford; Newton, Wilson, and Co., High Holborn, London; Aytton and Co., Hexham; Robinson, Newcastle-on-Tyne; Newson and Co., Newcastle-on-Tyne; Maule and Sons, Alnwick; Drysdale, Alnwick; Luke, Alnwick; and Hutchinson, Felling, Gateshead.

JUDGES.

CATTLE (for Shorthorns, Channel Islands, and Ayrshires).—A. Metcalfe, Ravenstonedale, Westmoreland; J. Wood, Harewood Hill, Darlington; and A. Mitchell, Alloa, N.B.

SHEEP (Border Leicesters).—T. Bell, Townfoot, Brampton; L. Drew, Merryton, Hamilton, N.B.; and W. Smith, Melkington, Coldstream. (For Cheviot and any other distinct breeds): J. Jardine, Arkleton, Langholm; J. Hedley, Bewshaugh, Bellingham; and G. Gibson, Freestone Burn, Wooler.

HORSES (for Agricultural purposes).—T. Penny, Bartle Hill, Coldstream; C. R. Wilson, Hipsburn, Bilton; and J. Tinning, Oakbank, Longtown. (For the field): Anstruther Thomson, Atherstone; J. Cookson, Neasham; and W. Cattle, Dormont Grange, Lockerbie. (For hackneys and ponies): T. H. Hutchinson, Manor House, Catterick; H. Moore, Burn Butts, Driffield; and C. Stephenson, Woburn, Beds.

PIGS.—J. Fisher, Woodhouse, Cross Hill, Leeds; W. Morrison, New Bewick, Alnwick; and J. Davison, jun., Brandon White House, Alnwick.

POULTRY.—R. Teebay, Fulwood, Preston.

SHEPHERDS' Dogs.—The same as for Cheviot and distinct breeds of sheep.

IMPLEMENTS.—Same as for hackneys and ponies.

PRIZE LIST.

CATTLE.

SHORTHORNS.

Bulls, above two and under seven years old.—First prize and silver cup, W. Linton, Sheriff Hutton, York (Lord Irwin); second, The Marquis of Exeter, Burlleigh Park, Stamford (Telemachus); third, J. Outhwaite, Bainesse, Catterick (Royal Windsor). Commended: T. Willis, Manor House, Carperby, Bedale.

Bulls, above one and under two years old.—First prize, Sir W. C. Trevelyan, Bart., Wallington, Newcastle-on-Tyne (Woodland King); second, J. Lamb, Burrell Green, Penrith (Ignoranus); third, R. Stratton, Burderop (Master Glanville). Commended: Sir M. White Ridley, Bart., Blagdon, Cramlington.

Bull calves, under twelve months old.—First prize, W. Linton, Sheriff Hutton, York (Leeman); second, Sir W. C. Trevelyan, Bart., Wallington, Newcastle-on-Tyne.

Cows.—First prize and cup, J. Outhwaite, Bainesse, Catterick (Vivandiere); second, J. Howe, Broughton, Huntingdon. Highly commended: Sir M. White Ridley, Bart., Blagdon, Cramlington, and W. Linton, Sheriff Hutton, York. Commended: A. H. Browne, Bank House, Aeklington.

Heifers, above two and under three years old.—First prize, L. C. Chrisp, Hawkhill, Alnwick (Primrose); second, J. Wilson, Woodhorn Manor, Morpeth. Highly commended: J. How, Broughton, Huntingdon; T. Willis, Manor House, Carperby, Bedale. Commended: W. Lambert, Elrington Hall, Haydon Bridge.

Heifers, under two years old.—First prize, J. How (Verona); second, and highly commended, R. Stratton, Burderop, Swindon.

Heifer calves, under twelve months old.—First prize, Major Stapylton, Myton Hall, Helperby (Knightly 4th); second, the Duke of Northumberland, Alnwick Castle.

CHANNEL ISLES.

Cows or heifers of any age.—First prize, T. Statter, jun., Stand Hall, Whitefield, Manchester; second, Sir J. Marjoribanks, Bart., Lees, Coldstream. Commended: Sir M. W. Ridley, Bart., Blagdon, Cramlington.

AYRSHIRES.

Cows or heifers of any age.—First and second prizes and commended, D. Tweedie, Castle Crawford, Abington, N.B.

SHEEP.

BORDER LEICESTERS.

Rams of any age.—First prize, G. Hope, Fenton Barns, Drem, East Lothian; second, Rev. R. W. Bosanquet, Rock, Alnwick.

Shearling rams.—First and second prizes, Rev. R. W. Bosanquet; third, T. Forster, jun., Ellingham, Chathill.

Pens of five ewes.—First and second prizes, Rev. R. W. Bosanquet.

Pens of five gimmers.—First and second prizes, Rev. R. W. Bosanquet.

CHEVIOTS.

Rams of any age.—First and second prizes, T. Elliot, Hindhope, Jedburgh. Commended: J. Robson, Byrness, Rochester; T. Elliot.

Pens of two shearling rams.—First and second prizes, T. Elliot. Commended: J. Robson.

Pens of five ewes.—First prize, T. Elliot; second, R. Shortreed, Attonburn, Kelso.

Pens of five gimmers.—First prize, T. Elliot; second, J. Robson. Commended: R. Shortreed.

SHEEP OF ANY OTHER DISTINCT BREED.

Rams of any age.—Prize, T. H. Hutchinson, Manor House Catterick.

Pens of five ewes or gimmers.—Prize, T. H. Hutchinson.

HORSES.

FOR AGRICULTURAL PURPOSES.

Brood mares, with foal at foot, or in foal at the time of show.—First prize, L. Drew, Merryton; second, B. Spraggon, Nafferton, Stocksfield-on-Tyne; third, T. Statter, jun., Stand Hall, Whitefield, Manchester.

Three-year-old geldings or fillies.—First prize, L. Drew, Merryton, Hamilton; second, J. Dinning, Belton.

Two-year-old geldings or fillies.—First prize, L. Drew; second, The Duke of Northumberland.

One-year-old colts, geldings, or fillies.—First prize, H. B. Howie, Detchant, Belford; second, W. Cairns, Branton East Side, Alnwick. Commended: T. Statter, jun.

Pairs of geldings or mares, of any age.—First prize, G. Black, Lanton, Woolo. Commended: J. and G. Atkinson, Bywell Hall Farm.

FOR THE FIELD.

Brood mare.—First prize, Major Stapylton, Myton Hall, Helperby; second, J. Brown, Wiggonby, Wigton; third, T. Baxter, Broomfield Farm, Aspatria. Commended, L. C. Chrisp, Hawkhill, Alnwick.

Three-year-old gelding or filly.—First prize, J. Moffat, Kirklington Park, Carlisle; second, W. Graham, Gapshields, Haltwhistle. Commended, —Calder, Kelloe Mains, Edrom.

Two-year-old gelding or filly.—First prize, Dr. Marshall, Annstead, Chathill; second, R. Dand, jun., Field House, Bilton. Commended, J. C. Bolam, Low Trewhitt, Rothbury.

One-year-old colt, gelding, or filly.—First prize, J. and W. Thompson, Frolic, Capheaton, colt; second, Major Stapylton. Commended, W. Graham, Gapshields, Haltwhistle.

Horse or mare, five years old, and under ten years old.—First prize, J. B. Booth, Killerby Hall, Catterick; second, Sir W. C. Trevelyan, Bart., Wallington, Newcastle-on-Tyne.

Hunter.—First prize, W. Smith, jun., Melkington, Coldstream; second, B. Spraggon, Nafferton, Stocksfield.

Horse or mare, four years old.—First prize, R. Brunton, Marton, Middlesbrough; second, J. W. Smith, Ancroft, Beal, gelding.

Hackney.—First prize, W. Armstrong, Kendal; second, J. Moffat, Kirklington Park, Carlisle.

Pony.—First prize, A. H. Browne, Bank House, Aeklington; second, J. D. Hannan, Dunse Castle, Dunse, N. B.; third, J. Johnston, Crailing Hall, Jedburgh.

PIGS.

Boars of the large white breed.—First and second prizes, R. E. Duckering and Sons, Northorpe, Kirton Lindsey.

Boars of the small white breed.—Prize, W. Lister, Armley, Leeds. Commended: R. E. Duckering and Sons.

Sows of the large white breed.—First and second prizes, R. E. Duckering and Sons.

Sows of the small white breed.—First prize, C. Roberts, Wakefield; second, R. E. Duckering and Sons. Highly commended: J. Wilson, Woodhorn Manor, Morpeth, Commended: W. Lister.

Sows of a breed not eligible for the preceding classes.—Prize, R. E. Duckering and Sons.

Pens of three sow pigs of the large breed (of any colour), under sixteen weeks old.—Prize, C. Roberts.

SHEPHERDS' DOGS.

Rough haired.—First prize, W. Herdman, Hepburn Moor, Alnwick; second, J. Turnbull, Hindhope, Jedburgh; third, J. Wilson, Woodhorn Manor, Morpeth; fourth, W. Pringle, Middleton Hall, Alnwick.

Smooth haired.—First prize, M. Wright, Charlton, Bellingham; second, J. Smith, Quarry House, Cold Egingham, Alnwick; third, J. Watson, Rothbury; fourth, J. Scott, Harehope, Alnwick.

IMPLEMENTS.

T. Colegrave, Newcastle and Stockton, £3; J. and F. Howard, Bedford, £3; T. Bradford and Co., London, £2; J. Gregory, Westoe, South Shields, £2; J. Richardson, Carlisle, £1; Cockburn, Newcastle, £1; W. Thompson, Alnwick, £1; W. Hudsph, Halthwistle, £1; Bolam and Thompson, Alnwick, 10s.; and Rimmington and Co., Newcastle, 10s.

At the dinner, Sir GEORGE GREY, M.P., said: To those who, like himself, could look back on the last twenty-five years, it must be a source of unmixed gratification to observe the immense improvement which during that period had taken place in the agriculture of the county. That period was one of great distress, and of considerable alarm. Twenty-five years ago, changes were to be effected, which naturally produced fears and gloomy forebodings as to the future. These changes were now passed; and political and party questions happily were allayed, and there was no one who, with the experience of the last twenty-five years, wished to revert to the former state of things, or exchange our present condition with that which existed even before 1845, so that the day was one of which he thought the county might justly be proud. But it was not to this alone that he would refer as showing the improvements which had taken place in the agriculture of the county, and though in that period vast sums had been laid out in draining and improving the land in various ways. By the combined skill, energy, and capital of the landlords and tenants the productiveness of the soil had been immensely increased, and we saw the result when we looked about us and saw the productiveness of the ground, the amount and character of stock maintained upon it, and the value of the produce when brought into the market. He also noticed not only the large improvement in the machinery within 25 years, but also the increased

application to agriculture during that time. The show of implements in the yard that day was a most satisfactory one; and as they rode or drove about the county they could not help noticing the ploughing machines, thrashing machines, reaping machines, and every kind of agricultural machines which they met. Another point which he thought of the utmost importance was the immense improvement which had taken place in the dwellings of the agricultural population of the county. These changes and improvements were going on no doubt 25 years ago; but during that period the greatest impulse had been given to those improvements, and they had reached a state which gave the greatest satisfaction, though there was no doubt still room for advance and improvement. Addressing an audience mainly of North Northumbrians, he was sure they would bear him out in saying that they owed very much of these changes to the large, liberal, and judicious expenditure by a predecessor of the noble duke—Algernon, Duke of Northumberland. To him they were largely indebted for agricultural improvement, and especially in the erection of agricultural buildings—an expenditure which did not produce an immediate return to the man who expended it, but which might justly be considered as holding the first place among improvements, inasmuch as it tended so much to the health, comfort, and well-being of the agricultural population.

The Duke of NORTHUMBERLAND, the Chairman, said he thought one great reason why the agriculturists of Northumberland had been so much more successful than those of the south, as far as his observations as a humble imitator went, was owing, firstly, to the greater pressure of poor rates, which pressed down the labour, and there was a larger amount of capital which had been devoted to the cultivation of the soil in Northumberland than was the case in the southern counties. Now, he believed that earth, like the other elements of fire and water, was a good servant but a very bad master. By the possession of sufficient capital, the accidents of season and climate which might happen at one moment or another, an agriculturist was the master of the land under him, and he could turn it to his purposes. He hoped, therefore, that that propensity which he had met with on several occasions in the persons of the old school, that of desiring more land than they were capable of turning to profitable account, was pretty nearly past, and that all of them understood that the only chance of prosperity which they had was that the capital supplied to the soil should be sufficient to meet emergencies. Of course, without labour, without skill, without energy, skill in capital was insufficient; capital came in aid of these qualities, but it did not supersede them. But he was perfectly convinced that no man could be a good farmer unless he had sufficient capital for the land which he had to cultivate.

WEST OF ENGLAND HORSE SHOW.

AT PLYMOUTH.

Thorough-bred stallions.—First prize, £15, T. K. Bickell (Hunting Horn); second, £7 10s., Major J. S. Ballard (Clapham).

Weight-carrying hunters, mares or geldings.—First prize, £15, W. M. Lancaster (Ploughboy); second, £7 10s., W. M. Lancaster (Father McCarthy).

Light-weight hunters, mares or geldings.—First prize, £15, C. Trelawny (Bessy); second, £7 10s., W. F. Collier (Hazel). Highly commended: J. Michelmore (Countess).

Hacks, mares or geldings.—First prize, £10, W. Jackman (The Old English Gentleman); second, £8, F. T. Gloyn (Charley).

Light-weight hacks and ladies' horses, mares or geldings.—First prize, £10, M. Collier (Ladybird); second, £5, J. Laity (Hebe).

Weight-carrying cobs, mares or geldings.—First prize, £8, Major Stode (Taffy); second, £4, A. H. Pethick (Master Robert).

Ponies, mares or geldings, exceeding 12½ and under 14 hands.—First prize, £5, J. Sampson (Alice Bray); second, £2 10s., W. L. Penno (Guess).

Ponies, mares or geldings, not exceeding 12½ hands.—First prize, £5, T. Williams (Jack); second, £2 10s., G. Stephens (Gay Lass).

Agricultural stallions.—First prize, £10, W. Jackman (Matchless); second, £5, J. Bailey (Young Nelson).

Agricultural horses, mares or geldings.—First prize, £8, G. Elliott (Blossom); second, £4, T. Fellow (Flower).

Special prize, a silver cup, for the best colt or filly for hunting purposes, foaled in 1863 or 1869.—T. Palmer and Sons (by Ali Pacla).

Leaping prize, a silver cup.—W. Jackman (Jumping Hannah).

There were also prizes for Hounds.

The judges of horses were Mr. SISMAN and Mr. MARSH.

THE GARIOCH FARMERS' CLUB.

At the dinner following the show, the Chairman, Sir J. D. II. ELPHINSTONE, Bart., M.P., said :

The Garioch Farmers' Club was established sixty-three years ago, by a few of the proprietors in the Garioch district whose representatives are now here present. The rules were drawn up at Logie-Elphinstone by the late Mr. Leslie, of Warthill ; Mr. Gordon, of Rothney—the grandfather of my young friend here, Mr. Gordon, of Newton—and my father ; and at that time there were few Clubs of the sort in Scotland. A short time previously Sir John Sinclair had set the notion of the great improvement of Scotland agoing, and it was beginning to occupy the minds of those men who were best qualified to judge on the subject. The Club has continued with uninterrupted prosperity and harmony down to this time. There has never been a difference of opinion in the Club ; and it has exercised a very large share of influence over the improvement and condition of this part of the country. It was followed by other clubs in Aberdeenshire, and the whole of this great county, as you know, is now a network of agricultural associations, adjoining each other, and in some cases overlapping each, but all of them exercising a most beneficial effect upon the subjects which are of the most permanent importance to the community. I hold in my hand an extract from the records of this club, which I shall read, and from which I find that the first show of live stock under the auspices of the Garioch Farmers' Club was held on the horse market stance of Laurence fair, the 9th of July, 1811, being the day before St. Sair's fair of that year, now sixty years ago. The report of that exhibition appears to me so interesting that I here transcribe it verbatim :

July 9, 1811.—At the show of cattle and horses held here this day, in consequence of premiums given by the Garioch Farmer Club, present—Mr. Gordon, of Newton, *Preses* ; Mr. Duff, of Hutton, *V.-P.* ; Mr. Leslie and Mr. Shepherd, *Stewards* ; the Earl of Kintore, Mr. Horn Elphinstone, Mr. Gordon, of Manar ; General Hay, Mr. Leith, of Freefield ; Col. Leith, Mr. Ramsay, Mr. Leslie, of Rothie ; Mr. Leslie, of Warthill ; Mr. Jameson, Cushay ; Mr. Gordon, of Rothney ; Dr. Garioch, Mr. Hay, Monkshill ; Mr. Ad. Maitland, Mr. James Williamson, Mr. Keith, Netherthirld.

Colonel Gordon, of Cointachy ; Mr. Shand, of Conland ; and Captain Macpherson, of Gibstone, who were appointed Judges, having inspected the whole of the black cattle and horses brought for competition, do unanimously judge as follows :

- The Best Bull belonged to Mr. Gordon, of Newton.
 2d ditto " Mr. Gordon, of Wardhouse.
 3d ditto " John Ledingham in Lewesk.
 The 1st Stot—Mr. Gordon, of Newton's, ... Brown.
 " 2d " —Mr. Leith, of Freefield's, ... Branded.
 " 3d " —Mr. Leith, of Whitehaugh's... Branded.
 " 4th " —Mr. Philip, Barreldykes', ... Black rigged.
 " 5th " —Mr. Matheson, Waukmill's, ... Branded.
 " 6th " —Mr. Horn, Elphinstone's, ... Black.
 " 7th " —Mr. Brown, Pitmaachie's, ... Rigg'd.
 The Best Quey—Mr. Taylor, Gight's ... Dark dun.
 " 2d " —General Hay's, ... Brown.
 " 3d " —Mr. Mitchell's, ... Branded.
 " 4th " —Mr. Keith, Netherthirld's ... Branded.
 The 1st Best Colt—Mr. Geo. Williamson's... Brown.
 " 2d " —Mr. R. Williamson's, ... Bay filly.
 " 3d " —Mr. Hay, of Fyrie's, ... Bay filly.
 " 4th " —Mr. Taylor, of Gight's, ... Bay stallion.

(Signed) Jo. GORDON, }
 " AL. SHAND, } Judges.
 " AND. M'PHERSON, }

At this meeting of the Club, Mr. Davidson, in Mains of Cairnbrogie ; Captain Marr, in Cairnbrogie ; Mr. Shand, in Conland ; and Mr. Charles Barclay, at Knockleith, were admitted members.

At same meeting, the subject of the new hall to be built for the accommodation of the Club was renewed, and Mr.

Leslie, of Warthill, was requested to communicate with Mr. Horn Elphinstone, and report to the Committee.

At Club meeting, 25th April, 1812, on the subject of the new hall, Mr. Leslie reported that he had conversed with Mr. Horn Elphinstone.

Meeting of the Club, 3rd May, 1813.—The meeting, on the motion of General Hay, unanimously voted their thanks to Mr. Horn Elphinstone for his great attention and exertions in procuring for the Club the accommodation which they now enjoy for the first time in the new room at Pitmaachie.

Well, gentlemen, from the very beginning of this club, the proprietors competed with the tenants, and in many cases, as you see, beat them ; but it is not an easy thing now for the proprietors to compete with the tenants. I don't see so many proprietors entered in the show list as there were in those days. If I recollect rightly, most of the prizes were carried off then by proprietors. However, that was the duty of the proprietors at the time, because there was a great transformation going on then on the composition of the land. Draining, subsoiling, and all that was then in its infancy. I am sorry to say I am now one of the oldest members of the Club, and my connection with it extends over fifty years, and the changes are very great since that time. I think it was in the year 1828 or 1829, when the first shorthorned beasts that came into this country went over the brige of Ellon, and these were a bull and cow that were sent to the minister of Ellon by Mr. Robertson, of Ladykirk. He met Mr. Robertson at Harrowgate, and Mr. Robertson was so much charmed with the description of this country for the growth of cattle that he undertook to send him a couple of shorthorned beasts. What became of these beasts I could never trace, but I believe there was an old bull, called Inkhorn—a white bull ; some of you may remember it. However that may be, towards the end of 1829 Mr. Barclay began to introduce Shorthorns, and he brought down Shorthorns from Lord Spencer, who was afterwards Secretary of State for the Home Department ; and the Spencer breed took possession of the country in the first instance, and I see the trace of it most clearly in a great many of the animals in the showyard to-day. After that, Mr. Grant Duff took it up strongly in this country, and made a variety of improvements. The tenant-farmers showed their prejudices to the valuable breed, and at the same time, from the prizes which were given at that time for shorthorned stock, they did not see it to their interest to go into the thing so strongly as proprietors. However, the proprietors took the lead, and Mr. Grant Duff introduced the herds of Bates and Booth into the county. I saw one of Bates' blood that I think was one of the most fashionable animals that I have seen, that would have cut a good figure in any English showyard, but, as a high-bred animal, I admired him very much indeed. The feeding and breeding of shorthorned cattle began about the year 1830, and from a very small beginning it has risen to one of the greatest trades in Scotland. The statistics of the trade are perfectly surprising, and the amount of money which it has brought into this country is equally surprising. Well, gentlemen, taking all these things into consideration, I think that this club, although this is the last time perhaps we may meet in this room, has not been an unprofitable association. It has brought us together in harmony and in kindly intercourse, and it has maintained a feeling between the proprietors and the occupiers of the soil in this country which I shall be very sorry ever to see interrupted by anything. I only regret that circumstances have arisen of late years which I think have unnecessarily in some parts of the country interrupted that feeling ; I allude to matters which have arisen with regard to the Game Laws. We have had a great deal of agitation upon that subject, and a great many statements have been made which I think, if they were properly sifted, would be found to be of an exaggerated nature. I am perfectly certain that there is no proprietor in this country that I could put a name upon that would not meet his tenantry in the most cordial manner for the purpose of removing any difficulty or

difference that might be between them. But I cannot see myself that it can lead to any good effect any movement which is now going on in this country for the purpose of doing what nothing but a Royal Commission could possibly effect. Last session we had a variety of Game Bills introduced into the House of Commons, and it ended in a perfect wrangle amongst the members who brought them forward. They could not agree among themselves, and the Government at last took the question out of their hands, and it was proposed next year to lay the whole matter before a large Committee of the House of Commons. To that several members, myself among others, objected that no Committee of the House of Commons could possibly deal with such a subject, and it must be a Royal Commission for the purpose, and the most impartial persons and the highest authority that could possibly deal with a subject of such delicacy as the relations between landlord and tenant. The House of Commons, I believe, took that view, and it is now generally understood that next year we shall have a Commission for the purpose of investigating, and if possible settling that question. In the meantime statements were circulated which were certainly to a great degree exaggerated; and I was sorry that our member for West Aberdeenshire—I regretted it most extremely both as a personal friend and as a member for this great and influential county—should have committed himself to statements which, had they been noticed at the time in the House of Commons would certainly have been contradicted, and certainly will be contradicted if they are again advanced. I also object to the formation of a self-constituted committee on this matter, not elected by the great districts of this county, but elected at a hole-and-corner meeting in the city of Aberdeen, headed by an Aberdeen baillie, not representing the feeling or the sense of the tenantry of Aberdeenshire, and still more so do I object to that in the view of having a commission appointed by the Government, fully, thoroughly, and impartially to investigate the question, which must be of the very greatest delicacy. Now, gentlemen, we have a variety of matters connected with every sort of thing in the House of Commons this year. On one occasion the Chancellor of the Exchequer coolly proposed to tax the whole of the agricultural horses. Well, we naturally said that taxing the agricultural horses must lead to the taxing of the steam-engine, because if the farmer is prevented from moving a horse for the purpose of the motive power he cannot possibly overtake his business; and that if so, he should rise against such a preposterous proposal, and should insist upon the principle being carried into all sorts of useful things. Well, the Government withdrew it for the time; but it is my full belief that if Mr. Lowe has his swing next year, we shall have most certainly a proposal to tax our agricultural horses. At all events, I will take the

most decided stand against that proposal, and I think we have men enough to prevent it becoming law. It was a very curious thing to see the Speaker leave the chair and speak, a thing I never saw done before during the time that I have been in the House of Commons. When the matter came up the Speaker jumped out of the chair, and threw aside his gown, and stood up for farm-horses. At all events, we have got him with us. Well, I think that we can only hope that in our future locality, wherever it may be, be it at Insh or be it at Piteapple, we may maintain the same good feeling and the same conviviality which has always characterised these meetings, and that we will always keep an eye to the main chance, and endeavour to forward the agriculture and the good in every possible way of the community in which we live; and therefore I beg leave to propose long life to the Garioch Agricultural Association, and wherever we may be obliged to pitch our tent, I hope and trust that at the end of the next 60 years those who are living at that time, who will be our successors, will be able to give an account of their stewardship as we have done on this occasion. They had the pleasure of meeting to-day a gentleman from America, sitting on his (the Chairman's) right hand, Mr. Ferguson. He was a son of Mr. Ferguson, of Woodhill, who was a great agriculturist in Scotland in the days of his youth. He was a great friend of Mr. Barclay, of Ury, and was one of those gentlemen to whom he alluded in the observations he made as to the introduction of Shorthorn cattle. He emigrated to Canada, importing bulls of the highest class into that country; but for a time he found that the people would not accept of their services. Now, however, through his exertions, and the exertions of other gentlemen who had taken their cue from him, the breed of cattle in that country had been much improved, and would be yet much more improved by the introduction of fresh blood into the country. His friend on the right was a gentleman highly connected with business in his adopted country, and he trusted and hoped they would give him a hearty welcome on that occasion as a stranger who had come to grace their board, and that they would wish him good speed in all his undertakings. He begged to welcome him to the Garioch Farmer's Club.

Mr. FERGUSON said that his father emigrated in '34 from Aberdeenshire to Canada; and that he was one of the original members of the Highland Society. In Canada he found the farmers had little stunted-looking calves and bulls that they would not take a present of, and when he imported Shorthorn stock and Leicester sheep, he offered the use of the stock without charge; but it was refused, the reply being, "No, sir, we are rather afraid of that big animal." That prejudice had, however, disappeared, and there was now a fine race of animals.

THE FARMERS' POSITION.

At the quarterly meeting of the Carmarthenshire Farmers' Club, Mr. T. T. Mousley in the chair, the subject for discussion was "The Farmers' Position in the Country," which was introduced by Mr. G. F. H. Rowe, of the *Carmarthen Journal*.

Mr. ROWE said: One of the most renowned but ill-fated withal, of the many occupants of the throne of France—Napoleon Bonaparte—pronounced the inhabitants of Great Britain to be a nation of shopkeepers. Nearly seventy years have passed away since this description was applied; and whatever truth it contained at the commencement of the present century, has been augmented by the course of time. Yet its unqualified accuracy can be questioned for a variety of reasons. Commerce carries a great deal of fuss and bluster in its train, and thereby ensures for the manufacturer and tradesmen more than their proper share of attention. Anyone who takes the trouble to examine impartially the several strata—if I may be pardoned for using a geological and common expression—which comprise our entire population, and their relative positions to each other, must arrive at the conclusion that those of the community who are engaged in agriculture form the stable base of the national pyramid of Great Britain. In every prosperous country the same arrangement exists. Across

the Atlantic the possession of unbounded resources in land has secured for the Great Republic of the United States an almost unrivalled advancement. An agricultural population is almost invariably loyal, peaceful, and averse to convulsive agitations; for these are hereditary traits, descending with slight diminutions from generation to generation. There have been times when their value has become felt in the United States. Contrary examples may no doubt be quoted both in Europe and elsewhere; but reference is here made to the rule and not its exceptions. Now it may be argued that commercial intercourse has given Great Britain the larger part of its enormous wealth, thickly peopled whole districts, adorned the country with innumerable palatial dwellings or "stately homes," and offered a fruitful stimulus to latent energies. All this may be granted, and it represents a very glowing picture of facts; still it would be unsafe for the prosperity of Great Britain to be hinged on commerce. A capitalist whose stock chiefly consists of the circulating medium—I say thus having due regard to the cost of the buildings and machinery for the purposes of production—may quit and often does leave this country without inconvenience when adversity begins to dawn, in order to invest his hoardings profitably in a foreign clime. The high

rate of interest yielded by capital in trade makes the manufacturer a monied man; and when his particular branch of business is paralysed, the machinery thus rendered idle is nearly always saleable because it is convertible for other designs. Land, however, is a fixture; and its owner, although a participator in the untoward prospects that shed a gloom around, must necessarily in the majority of instances be immovable also, or else be prepared for absolute ruin. Thus it follows that the agriculturist is instinctively jealous for the prosperity of his country, and is induced by powerful motives to watch its interests, and to promote them. For the very same reasons the British Government ought to be vigilant in furthering the farmer's welfare. Something is undoubtedly done with that intent from time to time, but with a half-heartedness that well nigh destroys all sense of the benefit; anyhow, farmers are less grateful on that account than they otherwise would be. Now there is a cause for this semi-negligence and disparagement of the farmer. In the world of man as in the regions of inanimate or material nature, a law of cause and effect ever operates. History testifies to that law; and the profoundest philosopher and the greatest discoverer is not the man who is capable of exploring the starry realms, and exposing in a massive volume the realities of their apparently hazy contents, nor he who sees with strange vision the unbroken line of man's descent from the lowest types of living organisms; but the shrewd observer who traces the faintest impresses produced upon the mind by events in the gigantic task of human government, and during the growth of mankind in numbers. There was a day when agriculture constituted the main employment in Great Britain. The gradual upheaval of the feudal system gave birth to commerce or manufactures. In its infancy commerce enjoyed the patronising care of the sovereigns on the throne, and as one result of its development, its influence displaced that previously exercised by the tillers of the soil. And it is partly because Parliament now wrongly imagines the nation as a whole to be dependent but in a small degree on the farmer, that the feelings and desires of the latter remain comparatively unheeded, and his petitions virtually disregarded. Can the nation afford to adopt an attitude of indifference towards the agricultural situation? This has been tested a hundred times. Witness the prevalent anxiety about the probable results of the home harvest, an anxiety penetrating into commencing circles, where it is calculated with precision that a partial or complete failure of any crop, and how much more of crops in general, must tend to increased prices, and to affect the selling rates of most commodities. And yet place in juxtaposition the treatment meted out to the farmer, of which we have an excellent exemplification in the circumstances surrounding the question of local taxation. A clearer case of injustice could not be adduced than the infliction of the whole burden of local taxation on land. Colossal fortunes had not been heaped up to an appreciable extent in the reign of Queen Elizabeth when the relief of the poor by local taxation commenced; so that the legislators of the middle ages merely adopted the idea that it was a duty of such wealth as was discernible to sustain the poor. This was but the re-affirmation by law of the principle that was integral to the feudal system, when the owners of estates were under obligation to sustain the indigent amongst their vassals or serfs. The theory was that property, humanly speaking, brought the poor into being. When, therefore, a new species of property has been originated in the country, viz., personality, a most fertile agency moreover in the production of paupers and pauperism, it is only just that it should contribute its quota towards the expenses of the Poor-law, and not selfishly impose the entire charge on the soil. The justice of the farmer's case has been laughed to scorn; the whole of the twenty millions and more of local taxation has still to come out of his pocket. For this agriculturists have themselves much to blame. However active they may be now, they have not been energetic in the past; their Chambers of Agriculture and Farmers' Clubs are modern institutions, and have only recently brought pressure to bear on the legislature. A retrospect of the last forty years will evidence how many changes have been procured by means of organized associations. Scarcely a single innovation of any moment can be mentioned which is not due to such agencies either in the whole or a large part. There is one of those changes in which the cultivators of the soil were deeply and closely concerned—the repeal of the Corn-laws. Avoiding an entrance into the merits

of a controversy which raged with fury for seven years, and which has been in all probability lastingly settled, it may be affirmed without chance of contradiction that the Repeal of the Corn-laws in 1846 ensued from the exertions of the Anti-corn-law League. Whether Mr. Cobden and his fellow-lecturers were right or wrong they succeeded in accomplishing their object by sheer dint of persevering agitation. If farmers are to succeed now in obtaining a recognition of their just demands, and in securing a redress of grievances, they must proceed in like manner and emulate so notable an example. But they will never succeed satisfactorily until the Cabinet includes a Minister whose functions will wholly relate to Agriculture. Why should there not be a Minister of Agriculture for Great Britain? To protect the interests of Commerce a Board of Trade has been established; and therefore in soliciting a Minister of Agriculture agriculturists cannot be accused of preferring a preposterous request. There are some who maintain that the present Board of Trade works unsatisfactorily. On Friday last, in the House of Commons, Mr. Macfie invited attention to its constitution and *modus operandi*. But the discovery of imperfections affords no room for contention against the principle of a Board, and therefore in favour of its extinction; but rather argues for its reconstruction. A Board of Trade is indispensable. I may be reminded that a department of the Privy Council professes to represent the farmer in a somewhat analogous manner. Little, however, is done beyond the issue or relaxation of restrictions respecting the importations and slaughter of foreign cattle. This sub-department of the Privy Council is utterly inadequate for all practical purposes. To adopt the phraseology of Ardenus Ward—agriculture is not its *forte*. Besides, there is or soon will be a general breaking up of the composite character of the Privy Council, in response to the universal conviction that its multiplied powers ought to be distributed. It would be out of place, nor would time permit me, now to anticipate and answer the objections that may be invented against the appointment of a Minister of Agriculture. Amongst the foremost would probably rank the plea that a salary must be paid him, in proportion to the official income of other members of the Cabinet, amounting perhaps to £2,000 a year. Now at all times the labourer is worthy of his hire, even if he be a Minister of Agriculture. Notwithstanding the necessity for national economy, it is very unlikely that Great Britain will be plunged into bankruptcy by the suitable remuneration of such a Minister. Farmers contribute very liberally to the National Exchequer, and to expend something in return on their interests is only a fair requital. France has a Minister of Agriculture; and Great Britain ought not to be behind her neighbours. The present would be a most opportune period for starting the cry in behalf of a Minister of Agriculture, because ere long ministers for other purposes will be created. For example: it is now believed that a separate Board of Health will shortly be formed for the United Kingdom with a Cabinet minister as its president. Much easier will be the task of rendering reform comprehensive in its scope while it is in progress, than of reviving its spirit when allowed again to slumber. But if a Minister of Agriculture be instituted, his efforts ought to be supplemented by the ramification of Chambers of Agriculture and Farmers' Clubs throughout the kingdom. Here again, agriculturists may advantageously extract a leaf from the books of their commercial fellow-countrymen. In the majority of manufacturing towns of importance in England, particularly in the northern and midland districts, Chambers of Commerce are to be found. The meetings are held at regular intervals, and "Business" is the watchword of the members. Tariffs are discussed with commendable intelligence and zeal; no time is wasted in conversational gossip; and petitions are forwarded to parliament with a promptitude that cannot fail to tell in the long run. To agriculturists at large, I would say, "Go and do likewise," and let "*Nihil Desperandum*" be engraven on your hearts. The farmer's position in the country is affected by several grievances, which Chambers of Agriculture and Farmers' Clubs could help to remove. Two of them will be cited for illustration. When an industrious tenant-farmer has contrived by thrift and unflagging industry to save a few hundreds of pounds, he naturally begins to aspire to change his position from a tenant to a landowner. Shakespeare condemns ambition to be a sin; but at least this kind of ambition is a very pardonable fault, and one that even deserves

encouragement. The tenant learns that a certain farm is for sale, which will suit his purpose. But when he comes to buy, he is compelled to pay a heavy price to some lawyer for making a conveyance before his title can be considered complete. This is an oppressive interference by law. A commercial man can purchase £10,000 worth of wool, iron, or any other raw material at the extra expense of a few coppers, an invoice only being requisite; but if a tenant-farmer acquires a few acres of land costing £500, the chances are that he will have to pay a purchase-bill when he receives his deeds, amounting to £20 or £30. The time has arrived when a more simple and inexpensive, and still equally effectual method of registering the sale and purchase of land ought to be devised and sanctioned by the legislature. The second illustration relates to the sufferings endured by cattle in their transit by rail. Huddled together in a truck, in nearly the same fashion as the unhappy victims of the Black Hole in Calcutta, the animals are exposed, perhaps, to a scorching sun and perpetual torment by the flies for twenty-four hours without cessation. Often for so long a period they remain without water, and suffer intensely from thirst. Need it be said that the constitution of an animal is seriously injured by such treatment, and its value in the market either for farm stock or the shambles greatly depreciated? Railway companies ought to be forbidden to carry cattle beyond a certain distance without supplying them with water under heavy penalties. A law to that effect, however, will be postponed for a long time unless associations such as I have the honour of addressing move in the matter. Recent legislation is calculated to affect materially the farmer's position in the country. By the Elementary Education Act of 1870 the scholastic training of every child in England and Wales is intended to be secured. In time the employer of agricultural labourers will experience the effects. Whenever the mental faculties of a human being are developed by culture, a higher degree of self-estimation is liable to be generated; and once our agricultural labourers begin to be so affected, they will insist on a more liberal scale of wages. Therefore, before long, farmers must expect to find this call made on them. Capital and labour have been antagonised in England for thirty years. This antagonism, which spreads like contagion, threatens to overwhelm the agricultural districts of the country. Combination among employes is its fundamental feature; nor am I indulging in dreams while warning farmers that the time is approaching when they will be forced to confront the difficulty. Already societies have been formed called "Agricultural Labourers' Improvement Societies," being neither more nor less than the germs of trades' unions. One of these recently held a meeting on the borders of Wales, the report of which, contained in the *Mark Lane Express* for the 17th of July, is instructive, though only in one sense interesting. The very style in which the proceedings are detailed is significant, and you will pardon me for delineating that style as an imitation of what has been adopted in the reports issued by the now celebrated "International Working Men's Association." As a specimen of what was spoken at this meeting, the following may be quoted: "Kinsley broke new ground. He contended that if the labourer had not been true to his employer, the latter could not have risen so high in the social scale as he had done; some getting from the donkey-cart to the gig, and others from the gig to the carriage and pair. It was their duty to ask for an increase of wages, no matter what the answer might be, and also for facilities to keep a cow." At present such sentiments are incipient, but are not likely to remain so. Another generation will find them more general, and ere then the Elementary Education Act will have given them an impetus. Let it be understood that I am not pronouncing any opinion whether that Act is a wise or premature one, but merely entering into facts. If a demand for increased wages be made, tenant-farmers will be the first to feel it and acutely. The immediate future promises to be favourable to such a demand, because, by the gradual opening out of the mineral resources of the Principality, the pressure in the labour market will be much relieved, and it will be proportionately less easy to obtain farm labourers; consequently they will command the terms on which they shall be hired. In anticipation of this possibility, all who hear me will mentally realise the urgent necessity for extending the use of machinery in agriculture, rendering the farmer less dependent on his employes. At first sight this in turn may seem utopian to the small tenant-

farmer. His means present an insuperable hindrance to the purchase of machinery; but what a single purse cannot afford may be within the grasp of a number of purses combined. The Carmarthenshire Farmers' Club, for example, might, when the time arrives, purchase suitable machinery, and let it on hire to various of its members. Nor would the speculation be unremunerative. Farming has now become a science, and is recognised, moreover, as not the least of the sciences. In an age of progress, it is natural that the method of tilling the soil should change and improve. I am not about to say whether the eight-course, six-course, or four-course system in the rotation of crops is best, but I do affirm that it is now seen the powers of mother earth cannot be stimulated without the expenditure of a larger amount of capital than has been customary. Scientific knowledge is essential to the most successful farming. He who knows the composition of the soil owned or rented, the primary elements and their proportions composing the manure at his command, the properties which will feed the crop he wishes to grow, must necessarily employ his capital to the best advantage. In other words, a farmer, in order to be successful, ought to possess a familiarity with chemistry. Need I state that the growth of a plant is caused by the absorption of certain contents of the soil, and that a living plant is but a transformation into another and vitalised compound of certain elementary atoms coalesced in the surrounding earth? It is almost too late in the day to insist on the close connection subsisting between agriculture and chemistry; the plea is stale. So early as 1795 the Earl of Dundonald published a treatise dealing with the subject, a short extract from which may not be out of place: In his introduction, the noble earl remarked: "The slow progress which agriculture has hitherto made as a science is to be ascribed to a want of education on the part of the cultivators of the soil, and to a want of knowledge, in such authors as have written on agriculture, of the intimate connection that subsists between the science and that of chemistry." Properly studied this points to the want of Farming Schools in the country, without which the farmer will not be able to occupy a proper position. A boy intended to be a surgeon, a lawyer, a chemist, is at an early age put to learn his trade or profession. The same must be done with the boy whose predilections are for agriculture. To a certain extent this may be done already; but when farming has clearly become advanced into a scientific operation the embryo farmer ought to be taught science. Experience is a poor substitute. Across the Channel in France similar schools have existed, and in England they may be found but not in sufficient numbers. And the expense attending them could not be great, because the pupils when engaged in agriculture, as would be the case perhaps daily, would help to earn the cost of their maintenance. The cry for technical schools or colleges swells on every hand; and if farmers are true to their position they will add their voices to the chorus. The rapid growth of population on the island leads me lastly to inquire how the farmer's position is likely to be affected thereby. During the last thirty years commerce has expanded in a manner without parallel, and has drawn the people as it were within its friendly embraces. The multiplication of woollen, worsted, and cotton mills, with the incessant demand for their production, has proved a profitable field for the investment of capital, and has swallowed up much that otherwise would have competed for the possession of land. Perhaps in this way we may partly explain the fact that whereas in 1770 there were 250,000 landowners in the United Kingdom, now there are less than 30,000; for commerce often pays 20 per cent. and more for the use of money; while land can with the greatest difficulty be made to return 5 per cent. on the outlay or the capitalised value. Unless our exports continue to augment in equal ratio to the population, or an emigration to foreign lands or the colonies takes place, a keen competition for the tenure or possession of land will commence, and it will follow that rents will rise. A slight relief would be afforded by bringing under the plough tracts now uncultivated. In Wales I find from published figures that 2,230,840 acres are put down as untilled. But it must not be presumed that this is accurate, because no allowance has been made for patches and whole districts covered with buildings. Again, in these figures there is included barren soil, mountainous, and hardly worthy of being reckoned as arable. But making all allowance it is indisputable that no small section of the Principality is not and has not yet been

farmed. Including England and Scotland also, the quantity is immense and reaches millions of acres. I am far from disputing a landowner's right to indulge his choice and keep a portion of his estate as game preserves. Interference by law with that right must absolutely be condemned as prejudicial to the public welfare. But in the event of a considerable amount of capital being disengaged from commerce the landowner will find it a profitable speculation to bring his game preserves into the market for sale. And that will proportionately relieve any prospective pressure of competition for land, and diminish the chances that rents will tend upwards. Should the farmer's position be rendered more uncomfortable either by an increase of rents or an increase in the rate of wages, it is not difficult to foresee the consequence. Small tenements will cease; small holdings will be amalgamated; otherwise farming will not pay. The growing use of machinery, and the disposition to expend more capital by the agriculturist, alike point to a similar result. Whatever may be the future of the tillers of the soil, for the present they have no reason to despair. There is an ancient, an honourable occupation. The sons of the soil have in ages of yore firmly laid the foundation of our island's fame, affording the present and future generations a noble ancestry on which to gaze and meditate. At home, abroad, wherever found, lion-hearted Britons have left the impress of their race. Such a race know not despair. Going onward in life, they will ever trust in a superintending Providence, Who has never yet deserted them; Who, when they have put their hands to the plough, made the furrows, and scattered the seed, has bounteously commanded the rains to descend, and the sun to shine, and blessed their efforts with a fruitful increase.

Mr. H. NORTON (Mayor of Carmarthen) being a commercial man or a manufacturer, he hardly thought it was in good taste for Mr. Rowe to use the words "fuss and bluster" in respect of commerce. And in defence of the commercial interests of the country he must say that they had fastened the agricultural interests. It was his sincere belief that without the cotton mills of Lancashire and the woollen mills of Yorkshire, agriculture in this country would not be in the advanced state in which we now find it; but rather in the backward condition which was visible in the remote districts of the earth, in the western parts of North America, in South America, in Australia, and elsewhere. The agricultural interest was deeply indebted to the ingenuity of the great intellects which had figured in the ranks of commerce, to the Stephensons, the Watts, and others. Agriculture and commerce would fade and prosper together. Mr. Rowe had also made allusion to the sale of land and the comparatively easy sale of machinery. Now on the latter point he could speak from experience. He had a relative who had a woollen mill that had been lying idle for many years at a loss of £500 or £600 per annum, a proof that machinery was not very saleable, although not unmovable like land. Whether land be moveable or saleable, he could say he should be well satisfied with the prospects of land if a landowner. Mr. Rowe had stated that land would not return more than five per cent. on its value. That was attributable to the want of expenditure of capital on the soil. If a landlord was wise enough to drain his land, and then hand it over to a good tenant, then, like the merchant or tradesman, he might make 15 or 20 per cent. on its value. (No, no.) Well, that was his opinion; the interest yielded by land would entirely depend on the amount of capital expended upon it. Some people were apt to pooh pooh Mr. Mechi on the point; but that gentleman, whom he had the honour of knowing personally, produces his balance-sheets, showing that he could make 15 or 20 per cent. on his land by a great expenditure of capital. Instead of making five, six, or seven pounds per acre, he (Mr. Norton) believed it was possible to make, and that Mr. Mechi really did make, £10, £15, and £16 per acre. There was nothing so generous as the soil when properly attended to. He agreed with Mr. Rowe that it would be a good thing to appoint a Minister of Agriculture. Of course he would be elected by the House of Commons, or in some such way; but in respect of political opinions such a minister ought to be neutral, for he did not believe there was any necessary connection between agriculture and politics. He was of opinion that a Minister of Agriculture ought not to be appointed by the Cabinet, nor did he see the necessity that such a Minister should be a member of the Cabinet; and as for the paltry sum required for his salary, whether it be £3,000

or £4,000 a year, it ought not to be considered an obstacle for a moment. Mr. Rowe had also mentioned the subject of conveyancing, and expressed a wish that there were a cheaper method established. He had himself a relative who had bought land in the State of Kentucky in the United States, and when he came over, his relative was in the habit of pulling out of his pocket his conveyance, which was a piece of paper about foolscap size. The cost of the conveyance was only a few dollars, and he believed it was quite as good as if it consisted of four or five skins of parchment. Another point in the introductory lecture with which he agreed was that boys intending to be farmers should go to an agricultural college, where they would learn the rudiments of chemistry, if not learn the science more elaborately. Dr. Hopkins, who was present, would tell them in detail if required the value of chemistry to a farmer. On the whole, the paper read by Mr. Rowe had afforded him much gratification, and he believed it was calculated to do much good.

Mr. HIGGINSON (agricultural implement agent) only hoped the farmers in the country would follow up the advice that had been given, and use in future a greater quantity of agricultural machinery. And in so doing he also hoped they would not lose money, but would find the investment of increased capital in land a profitable speculation.

Mr. HARRIS (Penllwni) alluded to the want of leases as a farmers' grievance; in fact, he regarded the question of the leases as one of the most important that could be discussed at an agricultural meeting. He could mention an instance which had occurred during the last twelve months, and could name the place, if necessary, of a tenant-farmer who had invested £150 in his land; and the game had been sold, and all the benefits of the outlay had gone to others by the sale. Now that circumstance proved that the want of leases was a great grievance to farmers, and it was a grievance which landowners ought to take in hand. He then referred to similar illustrations which had occurred in Carmarthenshire. Now he wished to speak candidly on the subject, especially in the presence of Mr. Mousley, who was agent to one of the best of landlords, Earl Cawdor; and had been the means of getting excellent tenants on his Lordship's estates. Now the simple point he wished to enforce was that there ought to be security offered to the tenant for the outlay of his money; otherwise enterprising tenants would be knocked on the head and lazy fellows would enjoy equal advantages. With regard to commerce and agriculture he could only say he differed with Mr. Norton, and only wished that in tilling the soil it was possible to reap a return of 15 per cent. on all outlays of capital. As a farmer he would be glad to get five per cent. It would be a good thing if when a man spent money he did meet with so great a reward. It was so in commerce, but in agriculture he did not believe that 3½ per cent. was always obtained; in fact, in nine cases out of ten it was hard to get both ends to meet. The use of steam machinery might be a means to that end and effect considerable improvement. If land were well drained then he admitted it would pay, but not without it. But what security had tenants in general at present if they expended money and drained land? And if some farms were even drained, containing much bog-land, they would not pay more than £2 per acre. He agreed with Mr. Norton in the opinion that both agriculture and commerce had a bright future before them, and that they depended much on each other; but still he was not of opinion that the prospects were so extremely bright as had been spoken of. Farming was almost in its infancy even yet, but farmers ought to be going a-head; they ought to take the interests of agriculture in hand and watch them. The commercial men had been making great efforts for a great many years, and almost everything they had asked Parliament they had got. Now a better organisation was wanted amongst agriculturists throughout the kingdom, and then, ere long, what they wanted they would also be able to obtain. If they did not do that then there would be no help for them but quietly to submit to their fate. They ought to put forward what they desired in a prominent way, and then they would be able to get almost everything they could reasonably expect for the protection of their interests.

Mr. MORGAN (Llwyn) did not quite agree with Mr. Rowe when he recommended tenant-farmers not to go to lawyers for advice in the purchase of land. When a person became his own lawyer it was often found to be much the dearer plan. He did not think £5, £10, or £15 spent on the lawyers was at

all thrown away, and was apparent by the cheapest mode often proving the worst in the end. The higher scale of wages which would be likely to be asked for by labourers had also been referred to. He quite agreed with Mr. Rowe's remarks on that point. The "Go-ahead" style would not do entirely; there must be a little of the "All right" with it. At the recent banquet given by the Lord Mayor of London, at the Mansion House, the American Minister said: "If you Englishmen could just add a little bit of the go-ahead style to your all-right style the amalgamation of the two would act very well." Now perhaps that was true. But his belief was that when education was spread more amongst the lower orders the result would be a superior class of labourers, a body of skilled labourers who would be worth more wages. But he should like to ask how in the name of fortune it was possible to make land pay if they had to give higher wages to men like those at present employed. He agreed however with the idea that a labourer ought to have his cottage and cow; and where a man was so useful that he could be reckoned as a farmer's right-hand man, he might have a couple of cows. It would tend to make such a man more looked up to, and Dick, Tom, and Harry would be taught to regard him as a head man, and would be induced to strive to qualify themselves to take his place whenever the situation became vacant. At present a farm-labourer, generally speaking, had nothing to look forward to; he earned so many shillings a week, and when he became too old for further employment, or was not in good health, he was simply told he must go elsewhere. As to scientific knowledge, he perfectly agreed with Mr. Rowe that it was necessary. A proper scientific training for a farmer's son could now be had by sending him to the College at Cirencester, but the terms there were no less than £95 or £100 a year, which were very high. It would be useless to expect a farmer to educate more than one of his sons at such a rate. He should very much like to see school-boards introduced into any schools they might establish such elements of education as could become useful to tillers of the land.

Mr. NORTON: Rudiments of chemistry for example.

Mr. MORGAN agreed with that. Mr. Rowe had also referred to the preservation of game. He himself thought that game ought to be preserved, but thought rabbits ought to be destroyed as being vermin. But he objected to giving his servants permission to shoot, because it tended to convert them into regular Radical poachers. Mr. Norton's remark respecting the interests of commerce and agriculture being welded together he also endorsed. An illustration of the mutual dependence of the two he had witnessed that day at the fair at Llandovery. Having a short time to spare, he sold a lot of sheep there for a higher price than usual to purchasers who had come down from England. And he further noticed that the competition for cattle was also keen. For those results they were indebted to the railway. Respecting the relationship of landlord and tenant, he regarded the former as the elder and the latter as the younger brother, and he maintained that it was always wise for the younger brother to listen to the elder brother's counsel and advice, and anyone who interfered between them was a meddler. There could be no mistake about that, for no one would do so unless he hoped to reap some benefit to himself by so doing. He likened such a meddler to the little cur who, when he saw two dogs quarrelling over a bone, came up and stole it away from both. With respect to the draining of farms, he contended that when that was done others reaped the benefit at a future time. For example, his late lamented father drained no less than 1,700 perches in one year, the benefit was now derived by himself. Now, that was a large quantity of land to drain in one season, especially with stone, or brush, or shale. His father would never allow a pipe to be laid in his land. And in order to drain those 1,700 perches, it required 1,700 cartloads of stone; no mean lot to be carted in a single autumn. Now, the question was when land was required to be drained who was to do it. It was a rule with his late father that as landlord he would cut the drains and the tenants should haul the stones and fill the drains up, subject to his superintendence. Now, a tenant might be fairly expected to do that, and when that was the arrangement too much of the burden did not fall on either side. He disagreed from Mr. Harris in respect leases. Suppose a tenant-farmer obtained a lease which bound him for 21 years and in the meantime he died, he should like to know whether in that case the widow, who might be left with a

young family and little means, was to be compelled to complete the lease? It was very seldom that anybody could be found who would say a word in favour of sub-letting. To a widow thus circumstanced a lease would be a burden and not a boon. He preferred an agreement, and believed it would be found better for both tenants and landlords.

Mr. LEWIS (Llwynfydwed) also warmly espoused the cause of Tenant Right. He further argued that the farmers' grievance in respect of Local Taxation, in which Mr. Rowe had referred, was diminished by the abolition of the law of removals. The old law requiring paupers to be removed to their own parishes had been done away with, and consequently the pressure in that respect on agricultural parishes was lightened, inasmuch as labourers who had gone into the commercial districts would not be brought back again.

Dr. HOPKINS said the experiment of agricultural schools had been tried in two or three instances in large places like Cirencester, and had rather proved a failure. There was this to be considered, that when a person was educated at some such college he could not be bound to become an agriculturist. And the fact was that many of such persons had entered on entirely different pursuits. Especially was this the case in Ireland where very little benefit had resulted from the farm-school movement. Now that was a most important thing to consider. A person when he had gained information of a certain kind qualifying him for a particular vocation in life might go and engage himself to something else. It was rather his opinion that attention should be bestowed in our elementary schools in some way to farming. If little plots of land could be procured for the children to cultivate, much good might result. And it should be remembered that an agricultural training was seldom thrown away. Even supposing a man emigrated to the back States of America, he would always reap the benefit of a knowledge of agricultural pursuits. Those also in a higher station of life could never lose by such knowledge, because it could be employed in horticulture, and it would tend to the benefit of the community at large. He had taken a note of what was said in the introductory lecture respecting the enclosure of waste land. Now he contended that it would be impossible to get more than 6s. 6d. per bushel for corn, and it would not pay therefore to enclose the waste land. At any rate at the present time landowners could not undertake to include wastes, for the plain reason that they could never make the virgum soils in Wales superior to any they had in Wales at the present time. Another question which had turned up during the discussion was the Game laws. Now it was a fact that game had very little chance of taking anything out of the soil with the exception of when it was first sown, or when it was just ready to reap. And it should not be forgotten that the effect of the game laws was to make landlords much more satisfied than they otherwise would be, and to come down and spend their great revenues in the country. Therefore on that account farmers ought not to be too sensitive about a paltry matter, but consider it in its proper light. As to farmers having been neglected by the Government it was no doubt the case. When the first agitation took place respecting the Corn-laws, he listened very attentively to Mr. Cobden in Drury Lane and other places. At that time it was fashionable to speak against the farmers as being the greatest bores possible; the manufacturers were every thing. But those who did so forgot this, however clever they might be, that each man must look to his cook; and there was nothing man enjoyed which was not obtained from the ground. He wished to bring that to Mr. Norton's recollection, for Mr. Norton was a most liberal man and always had been so. Everything they got, whether for manufacturers or otherwise, was procured from the soil, whether they looked at cotton goods, or woollen manufactures, or malt for brewing.

Mr. NORTON: Water comes from the land too, Doctor.

Dr. HOPKINS: Yes, and you know something about that too. Turning to the question of leases he argued that it was requisite the landlord should have security as well as the tenant, for security must not be on one side alone. It was requisite a landlord should know whether a tenant who wished a lease for 21 years was capable of managing the farm in a proper way. The speaker here instanced how he had suffered in that way, by leasing a farm to a bad tenant, who allowed the fences to get into such a miserable condition that it cost more to repair them than all the rent received from him.

He approved of the suggestion for a cheaper transfer of land on sale. He also agreed with Mr. Harris that it was almost impossible to get five per cent. in return for the outlay of capital in farming. Take the case of the present season, those who had had turnips had suffered great losses, and also those farmers who had some rye-grass and clover. They had been obliged to cart them home for the dung-heap, or cut them up for horses.

The CHAIRMAN really thought, as Mr. Rowe said, that agriculture, as a rule, had not received the encouragement which, considering the important stake it holds in the country, it ought to have had, and which many branches of commerce had obtained. It was true, as had been remarked by Mr. Norton, that commerce and agriculture were closely allied, but that rather tended to strengthen the cause of complaint that too great a share of the burdens of the country had been cast on agriculture. There was no reason in the world why commerce and agriculture should not sail together and so if the one was unduly burdened the effect would re-act on the other. Respecting the position, or what ought to be the position, of farmers, and condition of farmers in the country, they were all agreed that it was not satisfactory; but there were so many difficulties surrounding the same, so many obstacles to encounter, in endeavouring to effect any improvement, that he feared it must be a work of very long time before any perceptible alteration would be accomplished. Certainly there have been "go-ahead" times in agriculture as well as other departments of industry, yet it might safely be said that agriculture had not kept pace with other branches of industry. Some few districts it might be possible in consequence of climate or the soils to make available for good agriculture, without having regard to any great expenditure of capital. But that unfortunately was not the case in this part of South Wales. In reference to climate, however, they had nothing to complain of. The last three years had been very successful years for farmers in point of weather, and so far as he could see they had been doing well. But the system of farming in this country was not what it ought to be. It was an unpleasant thing to say, yet it was the fact that farming in this part of the country was carried on upon too small a scale. Whether it would pay to any great extent to merge the farms and make them larger, considering the nature of the soil and the advantages that the farming classes had in this country, was a serious question. It could hardly be expected that there would be any very perceptible improvement in the mode of cultivating the soil in this country, until there was a more general system of education abroad, and a greater amount of capital by some means, in the hands of farmers. He did not know whose place it was to improve or put the land or the country into a better condition to start with, but he earnestly wished to see it in a better condition, for then it would yield two or three times the extent of crops now realised. In some places it was possible to see the land yielding only one quarter of the crop of which it was capable, owing to the very bad farming. But the difficulty was in deciding who ought to improve the soil, the tenant or the landowner, for to effect that something like the value of the fee simple would be requisite. Now, it was certain that landlords could not afford to expend that sum; and the tenant farmers were unwilling to spend that sum even if they had the capital and held under an agreement or a lease. Now as to the question of leases he must say, speaking impartially, that a tenant was a great fool to go on improving his land to any great extent unless he got some security. If he had reason to place confidence in his landlord, all well and good. But whether he was wise in placing reliance on a mere hope or expectation would always depend on circumstances. It was perfectly fair and reasonable that a farmer should say to his landlord—"I am prepared, sir, having got so much capital, to expend it on my farm, if you will give me some reasonable security, a lease or an agreement, to protect me in the outlay." They could not expect tenants to lay out money without obtaining some security in return. And while on that subject he might mention that Lord Cawdor has recently drawn up, after taking his tenants into council, an agreement for a lease, which he hoped was, after the great trouble that had been taken about it, calculated to protect both sides. It was better to be without a lease unless it should protect both landlord and tenant. One word more in respect of education, which had become a very important question indeed. He was not quite sure

whether they were not educating the lower classes to a greater extent than those classes above them.

Mr. MORGAN: There is no doubt about it.

The CHAIRMAN said he was firmly persuaded that the working classes were now being put in possession of a more liberal education than a great many of the farmer class above them. The labouring class had not the same difficulties to contend with that farmers had. They got their regular wages, or should do so, and did not suppose there was any difficulty about that, and their anxieties were relieved. He sincerely hoped means of providing a more liberal system of education for small farmers would be found. Of course small farmers could not be expected to go to places like Cirencester, which were too expensive. If they could only engraft on school boards, if they were to have them in the country—

Mr. MORGAN: You are quite right, sir, if we are to have them.

The CHAIRMAN repeated that if they were to have school boards he should like to impress on the members the necessity of giving a general and practical system of education for pupils in those schools, for it would not be sufficient to give an agricultural education to only a few. Then there would be a better chance of expending capital on the soil with the advantage of skilled labour.

Mr. ROWE, in reply, said: He hoped he had not hurt the feelings of the Mayor of Carmarthen by the reference in the introductory paper, to the "fuss and bluster" which attended commerce. What he meant was that commercial men were necessarily travelling throughout the kingdom, and that combined with the transit of their goods, tended to produce an excitement which attracted more attention than was given to the agriculturist. He feared that some remarks in his paper had been slightly misunderstood, perhaps because they were not expressed with sufficient clearness. It was not said in the opening paper that agriculture and commerce were necessarily in opposition to each other. Allusion was certainly made to the success attending the efforts of commercial men in obtaining certain concessions from the Legislature, which was a totally different matter. He agreed that commerce and agriculture were mutually dependent; and the concluding portion of his paper went to prove it by showing that if any great amount of capital were released from commerce, those who possessed it would instantly seek opportunities to invest it profitably in the soil, thereby helping to raise the rents in an almost artificial manner. The agriculturist must of necessity be dependent on the manufacturer, because the latter was a large purchaser of what he had to sell. Now, it was gratifying to him to find, notwithstanding the searching criticism to which his paper had been subjected, that many of the suggestions and ideas it contained had been endorsed in the able speeches delivered during the discussion. Before proceeding further he would mention that while some of the speakers had referred to leases, the word had not occurred in the introductory paper. It was purposely omitted as relating to a topic that might not add to the harmony of the meeting. The question of leases was a most difficult and delicate one to treat off, as had been shown that afternoon. One of the points that had been warmly commended in his paper, was the indication of the connection between farming and chemistry. He wished he could press that home on the minds of farmers. All plants were fed mainly by the properties of the soil. Sometimes a crop would be found to grow in one soil and not to thrive in another. Why was that? Simply because the soil in the one case contained properties adapted to feed the plant which in the other it did not possess. It was as clear as possible. It was customary for farmers to say that they were dependent on Providence for their crops. He admitted the fact, and believed in his very heart in the superintendence of a Divine Providence in the affairs of this life as firmly as any ecclesiastic in the United Kingdom. But what was the real truth? Providence had applied certain laws to material Nature, laws relating to the soil; and if farmers did not understand those laws and adapt them to their own purpose they would suffer. One of the great laws of Nature was that when its system of procedure was disregarded, the neglect was always followed with penal consequences. Let farmers therefore endeavour to understand the chemistry of the soil, of manures, and plants, as much as possible, and they would be the gainers. Before departing from that subject he would mention that just as he

was on the point of starting for the meeting he laid his hands on a book that had afforded him much pleasure, which was very instructive respecting the growth of plants, and was entitled "How crops grow," by S. W. Johnson. It detailed how inanimate matter was translated into the vitalized vegetable organism or plant. This subject naturally led to the question of Farming Schools. Now, Mr. Morgan had said that the annual cost of a pupil at the Agricultural College at Cirencester was £95 per annum. The figures being correct they must tend to show an extravagance, or a want of economy. In many excellent schools and colleges the cost did not equal that, and if a similar college were established in Carmarthenshire, he ventured to say that pupils would be trained for much less than £95 per annum. When pupils were employed in agriculture they helped to earn the cost of their maintenance, and to

say under such circumstances that the cost of a pupil was £95 per annum astonished him. The time had arrived for a large increase of Farming Schools. There was a general plea for technical education throughout the country, and he had not seen it advanced more ably in a small compass than in the two orations on the subject recently delivered at Peterborough by Dr. Mill, the secretary to the proposed National University, in which the want of Farm Schools was alluded to. Finally, he would urge on farmers once more the necessity for organisation if they desired to obtain a redress of grievances. If they pressed their claims on the legislature earnestly and perseveringly and unitedly, if they lost no opportunity for so doing, they would find in course of time that though the exertions required would exhaust much patience and required to be again and again renewed, their labour would not be in vain.

THE AGRICULTURE OF EGYPT.

At the quarterly meeting of the Ayrshire Farmers' Club, held in Ayr, Mr. Brown, Ardneil, in the chair, Mr. M'CREATH read a paper, in which he said:

In Egypt there is great difficulty in getting correct information. What I give is from personal observation, and should on that account be the more reliable. The soil of Egypt is either sandy desert in all its sterility, or land luxuriantly fertile. Where you have the Nile with its life-giving influences there is vegetation in profusion, and where its waters do not reach, the land is barren as the seashore. There is no rain in the Upper country, and little in the Lower, so that all the resources of Egypt flow from the Nile. This river annually rises and falls. It is at its lowest in May and June, and at its highest in September and October. From its lowest level it rises in Upper Egypt 20 to 30 feet, but in the Delta or Lower Egypt only some 4 feet. In Upper Egypt, it in a great measure overflows the country, but in the Lower district it is confined by embankments. The Nile in the Delta divides itself into two branches, and from these branches there are many canals, while from the canals there are innumerable reservoirs, so that the country is all intersected with watercourses. The Nile not only waters the country, but what to agriculturists is another great essential, it manures the land. The water of the Nile is of a brownish colour, and when it remains for a time upon the land, it leaves a sediment or deposit that is extremely fertilising. The rise and fall of the river is not uniform. The extent to which it rises is a matter of great importance. Two years ago it rose very high, and did immense damage. On the other hand, a very low Nile leaves a great tract of country unwatered, and consequently out of cultivation. When the Nile is at its height the canals and water-courses are full, and the water is easily flooded over the fields. As the Nile recedes the work becomes more difficult, and gives rise to immense labour. There are three modes of raising the water—the first is by manual labour, the second by animal labour, and the third by steam-power. There are several modes of manual labour. A very common one is to use a leathern basin slung from a long pole, which is mounted on pivots, and balanced by a large stone as a counterpoise at the other end. The basin end is depressed by the labourer until it dips into the water below; on being freed it is raised by the counterpoise until the leathern basin comes to the level. It is then emptied, and the operation begins again. The animal labour is sometimes done by donkeys, but generally oxen, in connection with pumps. The apparatus consists of a wheel turning on a horizontal axis, and carrying an endless rope, upon which are placed earthen pots or jars. As the wheel is turned the pots and jars are carried round, and fill themselves with water at the bottom, and empty themselves at the top. Steam-power has recently been introduced, and is now greatly used in connection with hydraulic pumps. The land under cultivation is all flat ground, and when the water is raised to the level, it is carried through trenches, and from those trenches it is led in small courses, and those courses, when filled, overflow and flood the ground. When the water is absorbed, it leaves a deposit that acts as a fertiliser and, being in the shape of a crust upon the ground, tends to prevent evaporation and excludes the

drought. The pumping of water is not confined to the banks of the river and canals. The water of the Nile seems to percolate all over the country; and, with a well sunk under the level of the river or canal, a supply of water can be had. Grain is the principal production of Upper Egypt, but the Viceroy has of late introduced the cultivation of the sugarcane on a very extensive scale, so that there are now thousands of tons of sugar annually exported from Alexandria. In Lower Egypt the staple crops are corn, cotton, and clover, which are grown on something like the following rotation: Cotton planted in March occupies the ground till November; clover is then sown, and is on the ground till February. Wheat, beans, or barley may then be taken, and they are reaped in May and June; Indian corn is then sown, and it is reaped in September. Then there may be one or two crops of clover got up till February, when cotton comes again. Of course this only applies to land where cultivation is carried on under the most favourable circumstances. In many cases less is made of the land. Crops such as grain and clover give a yield such as we are accustomed to in this country, even under what is termed high farming. The implements used are few and exceedingly primitive. The land is not turned over by the plough, as in this country, but is simply stirred up. This is done by a light, wooden article, something like our plough, without the reist or mould-board. The seed is sometimes sown before and sometimes after this operation. Water is applied immediately after the seed is put into the ground. Reaping is done by pulling the grain or cutting it with small hooks—reaping-machines not yet having found their way into the country. Carrying is all done on the backs of camels or donkeys—carts or waggon not being in use. Thrashing is done, as in olden times, by the treading of oxen. Winnowing is done by casting the grain up, and the wind separates the chaff. The grain is sent in barges down the canal to Alexandria, and is shipped to Europe—principally to this country. England is also the market for the cotton grown in Egypt. The beasts of burden used are oxen, camels, and donkeys. The tillage is generally done by them, but murrain has frequently made sad havoc amongst them, and left their work for the camel and donkey. It is rather a strange sight to see the camel and donkey yoked together. The oxen are strong powerful animals, and some of them would grace a Scotch showyard. In travelling through Palestine I was astonished with the inferior class of oxen in use there. The best of them are no larger than a two years old Highland stirk. I don't know what it may have been in ancient times, but at present a yoke of oxen in that country does not represent much capital, but in Egypt it is different. Sheep and goats abound in Egypt. Stock is good and valuable, and although much less so than in this country. The great hindrances to agriculture in Egypt are exorbitant taxation and insecure tenure of land. It is difficult to conceive a more arbitrary system of government than prevails in Egypt. The Viceroy or Governor pays tribute to the Sultan of Turkey. The latter extorts what he can from the Viceroy, and the Viceroy adopts the same principle towards the tillers of the soil. The rate of taxation is at the discretion of Government officials, and it is of the most oppressive nature. The country is divided

into districts, and each has its governor, and those governors extort in every possible way from the poor natives. When the occupier of the land is unwilling or unable to pay the taxes laid upon him, his ground is confiscated to the Viceroy. Owners of land are not only deprived of their possessions in that way, but valuable land is often made over in the most arbitrary manner to the Viceroy, or some favourite official, and assumed compensation given in some other holding. But such changes are always against the interest of the poor agriculturists. To such an extent has this been carried, that it is reckoned the Viceroy at the present time is in possession and managing on his own account about one third of all the land in Egypt under cultivation, and it is grievous that all this land of his should be done by forced labour. Such a system may enrich him individually, but it cuts the root of national prosperity. In Palestine there is the same blighting influence; naturally fruitful fields and fertile valleys lying waste, owing to the oppression and tyranny of Turkish rule. However hard and oppressive the rule of the Viceroy may be upon the poor Egyptians, those Europeans engaged in commerce meet with every encouragement. They are relieved from all taxation, each nationality has its own legal tribunal, and life and property are in every way protected. There are indications of an important change, and if it would bring about security in the tenure of land, combined with moderate taxation, the agriculture of Egypt might yet become a field for British capital and enterprise.

Mr. DALGLEISH (Fempe Mains) said Egypt was no doubt a very interesting country. Mr. McCreath did not say whether the Egyptians came up to the pitch they might in agriculture. Perhaps Ayrshire farmers, if there, might see much that could be done to better advantage. But they must give the natives credit for what they were fit for.

Mr. CUNNINGHAM (Shields) said, in regard to what Mr. McCreath had stated about the Egyptian tilling, or rather stirring or "poutering" the land with the rude ancient plough, if the people lived in Ayrshire they would require to go deeper into the soil if they wished to be able to pay the increased rents and the other burdens which the farmers had to bear. He dare say they would all like to have a Nile here to water and manure their land; but as they had not, it was their duty to take the best substitute they could get. The subject of manure was the leading subject in regard to agriculture of the present day. Every year they found an increased quantity of manure was required for their lands. Whether the land needed more, or the manure sold was not up to the mark, he was not prepared to say. The fact was that more manure was yearly required, and he therefore thought they were more than ever called on to do something to put themselves right in regard to the subject of manure.

Mr. ROBERTSON (Ryeburn) said what struck him during the reading of the paper was, that it might be beneficial if farmers in this country took advantage of running streams, rivulets, and ditch water, for the purpose of irrigation, particularly in dry seasons. Although the water here was not so rich in fertility as in Egypt, yet it might be of advantage in dry seasons, both for cropping and grazing.

Mr. MURDOCH (Holehouse) agreed with Mr. Robertson, that if a proper system of irrigation could be devised, it would pay the expense.

Mr. CALDWELL (Knockshoggle) doubted if any system of irrigation here would pay. The waters of the Nile had evidently a fertilising power which the water in this country had not. The water there Mr. McCreath said, was brown, and high in colour. Was there anything special to account for this?

Mr. FLINX did not see that irrigation was much required here. He thought they had abundance of rain in Scotland these last two or three years. As to manure, the Nile, they were told, by its deposits manured the soil of Egypt. Well, what did they do with the natural manure? Could some means not be devised to send over that to this country? He knew there were large quantities of bones coming from that quarter. He thought, too, something might be done as to improving the grain which came here from Egypt. It was greatly mixed with clay. Probably this was partly caused by the mode of thrashing—the grain being trodden by oxen—but he believed the adulteration was also partly intentional. He thought it would be well if something were done to put a stop to this. He had expected to hear from Mr. McCreath

something about hypothec and the Game-laws in Egypt, but not a word had been said on the subject. He was sorry to hear of the poor agriculturists being so oppressed by their superiors. There was little chance of much progress in a country where the Government acted in such an unjust and oppressive manner.

Mr. M'CREATH said there were no leases in Egypt. The land was farmed almost entirely by the owners.

Mr. YOUNG said he was astonished that the old system of thrashing referred to by Mr. McCreath was still adopted. Could some more modern system, such as travelling thrashing-mills, not be introduced?

Mr. M'CREATH: Roads would first require to be made.

Mr. YOUNG thought until the country had a liberal and wise system of Government, things would never improve much. As to slaves, were they bought and sold?

Mr. M'CREATH: Not publicly, but they could be had privately in Cairo.

Mr. M'CREATH, in reply to the remarks of Mr. Flint about mixing the grain with clay, said the people here were as much to blame as the Egyptians. Clean grain, unmixed with any deleterious substance, could be sent here if the buyers chose to give the price for it. Suppose you sent a lot of clean grain, and another shipment with 10 per cent. stones and mud, the best lot would not bring 2½ per cent. more than the other; so it paid to send it out. Until the value of grain was regulated by the quality, the practice of mixing would, he feared, be continued. As to the game-laws, game in Egypt was public property, and, instead of hypothec, the practice of fore-renting was adopted.

Votes of thanks were awarded to Mr. McCreath and the Chairman.

DRESSING THE EARTH.—Mr. Ruskin has resolved to give £1,000 to the public; and has had this sum invested in Consols, in the names of two men of honour. Mr. Ruskin thus describes his plan of dealing with the money: I will tell you a little more of what we are to do with this money as it increases. First, let whoever gives us any be clear in their minds that it is a gift. It is not an investment. It is a frank and simple gift to the British people; nothing of it is to come back to the giver. But, also, nothing of it is to be lost. This money is not to be spent in feeding Woolwich infants with gunpowder. It is to be spent in dressing the earth and keeping it—in feeding human lips, in clothing human bodies, in kindling human souls. First of all, I say, in dressing the earth. As soon as the fund reaches any sufficient amount, the trustees shall buy with it any kind of land offered them at just price in Britain. Rock, moor, marsh, or sea-shore—it matters not what, so it be in English ground, and secured to us. Then, we will ascertain the absolute best that can be made of every acre. We will first examine what flowers and herbs it naturally bears; every wholesome flower that it will grow shall be sown in its wild places, and every kind of fruit tree that can prosper; and arable and pasture land extended by every expedient of tillage, with humble and simple cottage dwellings under faultless sanitary regulations. Whatever piece of land we begin work upon, we shall treat thoroughly at once, putting unlimited manual labour on it, until we have every foot of it under as strict care as a flower garden; and the labourers shall be paid sufficient, unchanging wages; and their children educated compulsorily in agricultural schools inland, and naval schools by the sea, the indispensable first condition of such education being that the boys learn either to ride or to sail; the girl to spin, weave, and sew, and at a proper age to cook all ordinary food exquisitely; the youth of both sexes to be disciplined daily in the strictest practice of vocal music; and for morality, to be taught gentleness to all brute creatures, finished courtesy to each other, to speak truth with rigid care, and to obey orders with the precision of slaves. Then, as they get older, they are to learn the natural history of the place they live in; to know Latin, boys and girls both, and the history of five cities—Athens, Rome, Venice, Florence, and London. Now, to what extent I may be able to carry this plan into execution, I know not; but to some visible extent, with my own single hand, I can, and will, if I live.

PRESTON AGRICULTURAL SHOW.

MEETING AT PRESTON,

The annual show was marked by manifold features of genuine success. The weather was of the most favourable character, and even the intense heat of the previous week or ten days was tempered into a genial warmth entirely within the scope of human comfort and sustenance. The entries in all the varied classes and departments, both in live stock and in mechanism, were larger than at the first meeting a year ago. Exhibitors stood well by their promises, and the muster in articles lay and specimens lively was beyond all expectation gratifying. In the prime point of quality, whether of farm-stock, farm produce, or farm implements, there was indisputable proof not simply of comparative value but of intrinsic merit and excellence. Further, the attendance of visitors was very gratifying in point of numbers, and therefore promising in the practical interests of the Society. The main conditions of thorough success, then, were amply fulfilled; and although, in the nature of things, it would be an easy matter to find justification and excuse for any incident of failure, there is no direction in which it is requisite, or even desirable, to cast about for such dubious assistance. The extreme youth of the Society might readily be advanced as an irresistible plea to cover any apparent shortcomings. Without a history of bygone successes by which to test present achievements, the Preston Agricultural Society escapes a critical process that as easily adduces signs of decadence as of flourishing growth; whilst demanding all consideration, for aught of drawback or demerit that may be apparent, on the tender ground of inexperience.

The show of implements and of agricultural machinery generally, whether silent or in motion, could only, of course, have been considered as of limited capacity if placed in contrast with the gigantic collections which this year's exhibitions have called forth throughout the country. The mere question of extent need not be used—indeed, cannot be rightly used—as the test of excellence in this particular; for whilst it would be an idle truism to say that in variety lie many of the features of general attraction, it is quite possible within small compass to bring together the chief improvements of the day in field machinery. The chief collection, both in extent and as the judges' award subsequently declared, excellence, was that exhibited by Mr. T. Standing, of Fishergate, who was awarded the first prize of £5. Quite as much space, apparently, as had been taken up by the whole of the other exhibitors had been taken by Mr. Standing, whose collection numbered about 120 implements, embracing almost every invention which has been discovered for aiding the farmer in the ready and scientific prosecution of his labours. The most prominent of the machinery—and one which at certain periods of the day certainly made itself both heard and felt, as well as seen—was an eight-horse single-cylinder portable steam engine, by Messrs. Clayton and Shuttleworth, of Lincoln, which supplied the motive power to a number of chaff cutters, grinding and kibbling mills, and other ingenious appliances for expediting labour. Close by was a large blast finishing and thrashing machine, by the same makers, with all the latest improvements, and backed by the tangible approval of many thousands of purchasers. Farther, Mr. Standing exhibited many of Bamlett's, Fell's, and Wood's mowers, reapers, and horse rakes; Richmond and Chandler's chaff cutters, and Bentall's patent for the same work; Ransomes and Sons' new double-furrow plough; the "original patent" American revolving mould-board plough, the success of which has become a "household word"; a variety of other ploughs of the best and newest construction, whilst in the lesser articles, the stand comprised pretty nearly every machine which has won the merit of sound approval throughout the whole range of inventive genius agriculturally directed. A bare inventory of the machines would far exceed the space at our disposal. Piekley, Sims, and Co.'s collection was the next in order and also in numbers; it included between forty and fifty machines for mowing, pulping, chaff cutting, and

kibbling: the second prize was awarded to this stand. Messrs. Taylor and Wilson, of Accrington, exhibited ten or a dozen capital wringing and mangling machines, and also a 2½-horse steam engine of careful construction. A stand of Messrs. J. and J. Hallmark, of Market-place, Preston, highly commended by the judges, contained several capital home washers, together with lever and spring machines; and also lawn mowers, garden syringes, and reels. Mr. Ephraim Taylor, of New Market-street, Blackburn, exhibited several compound-action churns and octagon washing machines in motion and practical use. A collection of churns, cheese vats, and tubs was shown by Messrs. Whittingham and Soa, of Friargate, Preston. Mr. W. Troughton, Church-street, had excellently displayed the resources of his establishment in his collection of grasses in pots, dried grasses, agricultural roots and seeds, and potatoes, labels, improved flower pots, lawn mowing machines, garden rollers, engines, and barrows, and a variety of other useful inventions in that direction, and coming under the head "miscellaneous articles." The number of entries was about two hundred and fifty.

There was a first-class collection of cattle in both classes, gentlemen's and tenant-farmers, and the latter ran the specimens of the amateurs a close race in many instances, whilst in others some dissatisfaction was, however, expressed by the judges at the neglect of exhibitors in certain cases to give the ages of their animals. This was remarkably manifested in the very first premium offered. The first prize was awarded to Mr. Parker's roan Royalist, a fine animal with grand points certainly; but there can hardly be a doubt that had the owner of the second prize bull, Mr. Statter, given the age he would have stood first. The show was a capital one in every way. The bulls under two years were a very fair class, but there was a considerable falling off, in point of quality, between the younger animals and the older ones. The aged bulls were decidedly the best class. There were one or two nice bull calves; but the specimens were not extraordinarily good, especially compared with the fine samples of breeding and condition which had previously paraded the ring. The prize-takers were good and promising youngsters. There was an excellent class of aged cows, and the judges experienced much difficulty in getting them sorted for the prizes. Mr. Statter was again to the front, closely followed by Mr. W. Dodgson, of Plumpton Hall. Under three years, the heifers turned out fairly, and were what may be called a good class. For the best heifers not exceeding two years, however, the quality was not remarkably good; and with regard to the calves, they were not so good as could have been wished. The tenant-farmers' bulls were an excellent lot, and it was difficult to make a selection for the prizes; but when the aged lot was left, the young bulls showed a similar falling off to that experienced in the other class. Mr. Tomlinson's calf was of more than an average merit, and Mr. Marsland's was fittingly rewarded. The remarks already made may be applied to the cows or heifers—the old ones were decidedly the best; but the display was better than ordinary of the "over two" heifers, where the competition was close, Mr. Marsland again taking the first prize with a nice roan. In the class below, the young heifers rather fell off in quality; and the calves, too, were scarcely found so good as could have been desired, although there was not much room for fault-finding. The prizes for the three best dairy cows brought out two splendid groups, each animal being veritably a picture; and the winners, Mr. Lund, of Hollingshead Fold, and Mr. Dodgson, Plumpton Hall, deserve the highest compliment. In addition to receiving the second prize, Mr. Dodgson was highly commended.

Unquestionably, the horses constituted the strong point of the show, leaving out of the reckoning the classes of lesser importance; and the collection, for a local exhibition, merited the high encomiums it received both from the judges and the visitors. In sheer point of numbers it far overtopped other classes, but even this flattering feature was surpassed by the

xcellence of quality. Five thoroughbred stallions were brought into competition, and these horses included the animals best known and most favoured in the district. The chief prize fell to Lord Hastings, belonging to Mr. Joseph Tate, of Pole-street, Preston, a fine-looking horse, with splendid legs and hocks, and altogether as good inherently as attractive outwardly. Lord Hastings has been exhibited at eight shows, and at seven has carried off the first prize decisively. Mr. Brown's fine brown horse Humdrum, with nothing at all humdrum or ordinary about it, took the second prize worthily. Messrs. Lund and Redman's roadster stallion Octavian won easily in point of quality. In the draught stallions the decision of the judges at the Royal North Lancashire meeting at Blackburn was singularly reversed, and we do not care to venture any explanation. Mr. Cooke, of Much Hoole, carried off the first prize with his Ploughboy, a very good horse, with excellent legs and superior action; and Mr. Edmundson, of Extwistle, near Burnley, had to be contented with a second place, although at the show referred to he was placed before his opponent. The brood mares were a capital show, and Mr. Jenkinson's Nateby mare, Star, fully deserved the position attained at the head of the list. Mr. Statter's mare, which came in second, is a good animal, but she has not the decided quality of the other competitor. The mares for road or field in foal were also a nice class, and Mr. Fox, of Singleton, took the prize with the handsome chestnut Pink, a fine goer. The pairs of draught horses were only moderately good, if we except the takers of both prizes, Mr. Brierley's, Middleton, which were far in advance of the rest in all particulars. The draught three-year-olds were capital, and the winning horses of both first and second prizes in the next class for other purposes. Mr. W. Jackson's Singleton and Mr. W. Coddington's Blackburn were nice blood-looking horses. The prize-winner in the two-year-olds for draught purposes is a nice bay filly belonging to Mr. Rimmer, of Farington. The "other purposes" two-year-olds were an average class, and the yearlings for draught fair, but not of first quality. Mr. T. H. Miller carried off the first prize in the yearling class for general purposes with a good brown colt, and Miss Aglionby won second honours with a lively chesnut. The colts and fillies for draught were a good show—an excellent show, in fact; the leaders being Mr. W. Harrison, Woodplumpton, with a good brown of four months, followed very closely by Mr. T. Cartmell, of Clifton, with an equally promising grey by British Ensign, three months old. In the succeeding class there were some fair colts.

There was a particularly good show of Leicesters and of long-woolled sheep, and the Southdowns were of fair character, but only limited. The Fell sheep merited warm commendation. In white-faced lambs, also, the collection was to be commended; whilst the gimmer lambs were of extraordinary merit, and ranking above an average class. Altogether, the show of sheep was excellent, and several exhibitors from a distance expressed surprise at the high character of several of the pens brought forward from the district. The whole collection was in good order and condition.

The pigs formed a fine show, considering its limited extent; but the chances of local exhibitors were altogether swamped by the porcine wonders forwarded by Mr. Peter Eden, of Salford. His two splendid boars of the large breed—without question a couple of the best animals in all England, as recent contests have proved—carried off the first and second prizes without difficulty; but Mr. Wareing, of Woodplumpton, received high commendation for a fine young boar of ten months. The result was varied in the small breed boars, Mr. Eden having to content himself with the second place, giving way to Mr. Leigh's, of Lea, fine boar Sam. The Berkshire boars were tolerably well grown, and the first-prize winner, shown by Mr. Curtis, Garstang, was deserving hearty commendation. In breeding sows, Mr. Eden went again in front for both premiums; and for the smaller kind he again took first money, but was closely followed by Mr. Leigh. The Berkshire sows were tolerably good pigs; but do not call for more particular mention.

PRIZE LIST.

JUDGES.—Cattle: R. Ormrod and J. Culshaw. Horses: W. Longton and J. Bell. Sheep and Pigs: M. Walker and G. Sedgwick. Implements: J. Harrison and D. Ashcroft.

CATTLE.

SHORTHORNS.

(Gentlemen's and Tradesmen's Class.)

Bull, two years old or upwards.—First prize, R. Parker, Burton (Royalist); second, T. Statter, jun. Commended: J. Tunstall, St. Michaels (Sir Edward).

Bull, above one and under two years old.—First prize, R. Parker, Burnley (Baron Stanley); second, T. Statter, jun.

Bull calf, under one year.—First prize, T. Statter, jun.; second, B. Bee, Goosnargh.

Cow or heifer, above three years old, and in calf or milk.—First prize, T. Statter, jun.; second and commended, W. Dodgson, Kirkham. Highly commended: J. Milner, Myerscough. Commended: J. Sykes, Poulton-le-Fylde.

Heifer, above two and not exceeding three years old, and in calf or milk.—First prize, T. Statter, jun.; second, J. Tate, Preston.

Heifer, not exceeding two years old.—First prize, T. Statter, jun.; second, J. Lund, Ingol.

Heifer calf.—First prize, T. Statter, jun.; second, J. Marsland, Bashall Eaves.

(Tenant Farmer's Class.)

Bull, two years old and upwards.—First prize, W. Tillotson, Burnley; second, J. Tunstall, Garstang. Highly commended: G. Hawarth, Darwen.

Bull, above one and under two years old.—First prize, R. Whittam, Mount Pleasant, Burnley; second, J. Banuister, Ashton. Highly commended: R. Holt, Ribbleson.

Bull calf, under one year old.—First prize, J. Tomlinson, St. Michaels; second J. Marsland, Bashall Eaves.

Cow or heifer, above three years old, and in calf or milk.—First and second prizes, J. Lund. Highly commended: W. Dodgson. Highly commended and commended: J. Milner, Myerscough.

Heifer, above two and not exceeding three years old, and in calf or milk.—First prize, J. Marsland; second, R. Blezard, Ingol.

Heifer, not exceeding two years old.—First prize, T. Marsland; second, J. Woodhouse, Lancaster. Commended: R. Blezard.

Heifer calf.—First prize, J. Lund; second, J. Marsland.

Three dairy cows.—First prize, J. Lund; second, W. Dodgson.

HORSES.

Thorough-bred stallion.—First prize, J. Tate, Preston (Lord Hastings); second, R. Brown, Lougbridge (Humdrum).

Roadster stallion.—First prize, Lund and Redman, Preston (Octavian); second, J. Butler, Treales (Iercales).

Draught stallion.—First prize, A. Cook, Much Hoole (Ploughboy); second, J. Edmundson, Extwistle (England's Glory). Highly commended: J. Gerrard, Heaps (Conqueror).

Brood mare for draught purposes, being in foal or having produced a foal in 1871.—First prize, J. Jenkinson, Nateby; second, T. Statter, Manchester.

Brood mare for road or field purposes, being in foal or having produced a foal in 1871.—First prize, T. Fox, Singleton; second, R. Hulton, Milnthorpe. Highly commended: T. H. Miller, Singleton.

Pair of draught horses, 3 years old and upwards.—First and second prize, C. W. Brierley, Middleton.

Three-year-old gelding or filly for draught purposes.—First prize, C. W. Brierley; second, T. Stratton.

Three-year-old gelding or filly, for other purposes, not being thorough-bred.—First prize, W. Jackson, Singleton; second, W. Coddington, Blackburn. Highly commended: T. Strickland, Cartford.

Two-year-old gelding or filly for draught purposes.—First prize, P. Rimmer, Farington; second, J. Wright, Tarleton. Highly commended: R. C. Richards, Kirkham; J. Deacon, Leyland.

Two-year-old gelding or filly, for other purposes, not being thorough-bred.—First prize, B. Bee, Goosnargh; second, J. Banks, Little Hoole.

Yearling colt or filly for draught purposes.—First prize, Rev. J. Pinnington, Stonyhurst; second, W. Clegg, Fairhurst.

Yearling colt or filly for other purposes, not being thorough-bred.—First prize, T. H. Miller; second, Miss E. A. Aglionby, Hawkshead.

Colt or filly foal for draught purposes.—First prize, W.

Harrison, Woodplumpton; second, T. Cartmell, Clifton. Highly commended: T. Wilson, Much Hoole.

Colt or filly foal for other purposes, not being thorough-bred.—First prize, J. Cross, Preston; second, T. Fox, Singleton. Highly commended: E. Croft, Ribbles-ton.

SPECIAL PRIZES.

By Messrs. Lund and Redman.—Colt or filly foal by the entire horse Octavian.—Prize, T. Statter, jun. Highly commended: Mrs. J. Humber, Fulwood.

By Mr. A. Cook.—Colt or filly foal by Ploughboy.—Prize T. Wilson.

By Mr. T. T. Parker.—Draught mare or gelding four-year-old or upwards.—First prize, C. Yates, Preston; second, H. Hunt, Longton.

Hunters, to carry not less than 12 stone over hurdles 4 feet high.—First prize, G. Wightman, Over Darwen (Sir Colin); second, J. Wilson, Milnthorpe. Highly commended: B. Walmsley, Preston (Never Fear); John R. Patterson, Hall Beck, near Ulverston.

Pony fencer, not exceeding thirteen hands high, over a loose bar 3 feet high.—First prize, J. R. Patterson; second, E. Birley, Clifton.

Road or field mare or gelding, four-year-old or upwards.—First prize, T. Powell, Preston; second, T. H. Miller.

Cob, not exceeding 15 hands.—First prize, S. Lecse, Preston; second, T. Fildes, Lytham.

Cob, not exceeding 14 hands high.—First prize, L. Attley, Newsham; second, J. H. Openshaw, Darwen.

Pony, under 13 hands high.—First prize, J. R. Patterson; second, T. Statter, jun. Highly commended: E. Howarth, Preston.

Pony, under 12 hands.—First prize, C. Leigh, Preston; second, J. Harding, Preston. Highly commended: J. Houliker, Blackburn.

SHEEP.

Ram of the Leicester breed of any age.—First prize, T. Seed, Clithero; second, J. Milner. Highly commended: T. Bracewell, Ribchester.

Long-wool ram of any age.—First prize, J. and R. Earnshaw, Grindleton; second, J. and W. Pinder, Waddington.

Ram of the Down breed of any age.—First prize, W. Dodgson, Kirkham; second, R. H. Willaley, Penwortham.

Ram of any breed adapted to a mountain district, any age.—First and second prizes, L. Duckworth, Ramsbottom.

Three Leicester ewes, any age.—First prize, J. and R. Earnshaw; second, J. Milner. Highly commended: J. Woodhouse, Lancaster.

Three ewes of the Down breed, not to exceed in age four shears, each having reared a lamb in 1871.—Prize, W. Dodgson.

Three shearing ewes of the Down breed.—Prize, W. Dodgson.

Three ewes of any other breed, any age, and best adapted to a mountain district.—First and second prizes, J. G. Bridge, Rawtenstall. Highly commended: R. Parker, Burton, Westmoreland.

Three half-bred ewes, bred from either lonk or blackfaced ewes, any age.—First and second prizes, W. T. Holgate, Grindleton.

Whitefaced tup lamb.—First prize, J. Woodhouse; second, H. Ball, Broughton. Highly commended: W. Jackson, Bolton-le-Sands. Commended: W. Smalley, Clitheroe.

Tup lamb of the Down breed.—First and second prizes, W. Dodgson.

Three whitefaced gimmer lambs of the Leicester breed.—First prize, J. Woodhouse; second, W. Clegg, Goosnargh. Highly commended: J. Milner, Myerscough.

Three gimmer lambs of the Down breed.—Prize, W. Dodgson.

Three cross bred gimmer lambs.—First prize, J. Howard, Newton, near Clitheroe; second, W. and T. Holgate.

Three gimmer lambs, adapted to a mountain district.—First prize, J. G. Bridge; second, J. J. Midgley, Birkett-Newton. Highly commended: R. Parker.

PIGS.

Boar of the large breed, any age.—First and second prizes, P. Eden, Salford. Highly commended: T. Warciug, Woodplumpton.

Boar of the small breed, any age.—First prize, A. Leigh, Lea; second, P. Eden. Highly commended: P. Eden.

Boar of the Berkshire breed.—First prize, L. H. Curtis, Garstang; second, Rev. J. Pinnington, Stonyhurst. Highly commended: J. Whalley, Blackburn.

Breeding sow of the large breed, in-pig or milk.—First and second prizes, P. Eden. Highly commended: J. Birch, Sefton. Commended: W. Woods, Preston.

Breeding sow of the small breed, in-pig or milk.—First prize, P. Eden; second, A. Leigh. Highly commended: Kitchen and Co., Feniscowles.

Breeding sow of the Berkshire breed, in-pig or milk.—First prize, J. Jackson, Garstang; second, J. and R. Brown, Preston. Highly commended: J. and R. Brown.

IMPLEMENTS.

Collection of Agricultural Implements.—First prize, T. Standing, Preston; second, Picketsley, Sims, and Co., Preston. Highly Commended: J. and J. Hallmark, Preston; Ephraim Taylor, Blackburn. Commended: J. Foster, Preston.

THE DINNER

was served the large room of the Red Lion Hotel, Church-street. From fifty to sixty gentlemen were present, among them being Mr. R. Townley Parker, in the chair; Hon. F. A. Stanley, M.P., L. Spencer, M.D., Mayor; Aldermen M. Myres and Rawcliffe; Mr. T. T. Parker, Mr. Charnock Richard, Mr. E. G. Melling, Mr. Wilson, jun., Mr. Rigma-den, &c.

After the usual loyal toasts, the CHAIRMAN said he had now to propose the toast of the evening—"Prosperity to the Preston Agricultural Society." He was sorry to say he did not possess—what he thought might have been afforded him—the slightest knowledge, either financially or otherwise, with regard to the exhibition that had taken place that day, and which he was quite sure had delighted many thousands. Having commended the show of pigs, mares, and ponies, and described the cows as "moderate" in his opinion, he again regretted he had no information on the matter upon which he could have addressed them with regard to the toast, which he hoped they would receive with due honours, and endeavour to induce persons with capital to promote the interests of agriculture in every way.

Mr. Alderman RAWCLIFFE replied. He said he took considerable interest in this institution last year, and had helped others to do some blindly foolish things. When a man made a blunder, he thought the best thing he could do was to confess it. At the same time, if he was so open at confessing a blunder, he hoped they would put their hands in their pockets and relieve them from the state of affairs into which that blunder had led them. He did not think that this institution should not exist in this town, though there were already established the Royal North Lancashire and several local shows in the neighbourhood; for, if they considered, there was ample room here for a very excellent show of stock. But, whilst he wished success to the institution, he hoped they would allow him to say that he was not much in favour of agricultural societies as they are now carried on. He did not wish to throw down the "apple of discord," but if any gentleman would try to controvert what he said there might be some discussion that would lead to rules being laid down for the better regulation of agricultural societies. He alluded particularly to the prizes given for horses, cows, sheep, and pigs. Now, what was the main feature that commanded the attention of the judges? Fat and weight? If that was so, they did not need judges, but merely a pair of scales and weights. What he wished to say was, that stock ought to be shown in its ordinary condition. That was his opinion. He did not want to say too much upon that point, but he thought that all stock ought to be shown at these exhibitions in its ordinary condition. If a man, a judge, could not tell what an animal would be from what it was then, he was not capable of being a judge. Then, again, he would say, the gentlemen farmers (and in this district there were a good many) had no business to be competitors. They were mostly dairy farms about here, and the most beneficial class of animals a farmer could keep on his premises were those that gave most milk and butter. First, he had to pay his rent, and he should try to lay something by besides; but if he competed with gentlemen he would do

himself harm. Therefore, they ought to be classified: the gentleman should not show against the tenant-farmer, nor the tenant-farmer against the gentleman. Suppose eight or ten people all fed up their animals for one prize; they could not all get it, and they had spent a great deal of money in feeding them, done them an injury, and sustained a great loss themselves. This was a dairy district, and he would advise the tenant-farmer, after securing a good quality of cow for milk and butter, that he should leave feeding cattle alone. He would say, give a prize to those who would put the greatest amount of manure on pasture fields. If seven or eight persons competed for that prize, only one could get it, but they would all be gainers afterwards; each would find himself handsomely rewarded at home. Mr. Rawcliffe concluded by complimenting the Chairman on his presence among them, and hoped he would be long spared to give the light of his pleasant countenance upon their proceedings.

The Hon. F. A. STANLEY, M.P., said they knew that all these meetings were called together to show various classes of animals; that some people came together for the sake of seeing what they could see, and some for the purpose of pleasant meetings, hoping to take away pleasant feelings and recollections. Now, he was of the latter class. He was sure it came home to their feelings to see the Chairman presiding. Mr. Hermon was absent on account of heavy Parliamentary duties (and they were much indebted to him for his assiduity), and he was removed from them by such a distance as could not, under present circumstances, be overcome; but, without any disrespect to Mr. Hermon, they did not wish the chair to be better filled on this occasion. They had got in it one of the most genial presidents, one of the best and kindest friends the town could have; and in proposing "The health of Mr. Parker, and long life to him," he should speak the feelings of all present.

The CHAIRMAN, after acknowledging the toast, said that a little while ago he had no small reason to complain that he did not possess the slightest report on the state of the show ground that day, that they might form some opinion of the support agriculture was likely to receive by the present meeting. Since that time he had had placed in his hands the number of entries in the several classes exhibited. He found that of the live stock there were 756 entries; implements, 250. He must say that in the matter of implements it was most desirable that a knowledge of all improvements made in them should be as largely disseminated as possible; for, as they were aware, in the labour market at this moment there was a great deficiency, labourers' wages amounting to a very serious sum. Of cattle there were 117 entries, horses 136, sheep 69, pigs 30, butter and cheese 11—he was sorry to remark that in an essentially dairy country—and lastly, the entries of poultry were 165, and

dogs 162. That was certainly a favourable report, but he had no opportunity of comparing it with that of last year. In future, however, perhaps some gentleman would have the kindness to prepare such a statement, that the chairman might be able to show the advancement made by the Society. It was not possible for him to sit down after having had his health proposed by his hon. friend, without expressing to him his own feelings, and also on behalf of the whole county, that great esteem and universal regard which the community paid to the name of Stanley. He had been proud for many years to consider that illustrious house had done honour to this country. If it were possible that he could by any means show his attachment to that noble house, he should be happy to devote the last hours of existence to it.

After several other toasts had been proposed and responded to, Mr. Alderman RAWCLIFFE proposed the health of the judges. He referred to his former observations on judges and fat stock, and said it required an expert to tell them the quality of an animal kept under such circumstances as he had mentioned. Therefore it was a matter of importance to select gentlemen for that office, as far as possible, out of the district, lest they might be accused of partiality.

Mr. BELL, one of the judges of horses, in responding to the toast, congratulated the Society on the show of horses particularly. He would advise them at future shows to have everything a little handier for the judges, who sometimes had to wait ten minutes before they could proceed.—One of the judges of cattle also replied on behalf of himself and colleague, saying the cattle were a very fine show, and there were some hard contests. The tenant farmers ought to be glad as well as the judges. Some of them had taken prizes from the gentlemen once or twice that day. He believed the best animal in the field belonged to a tenant farmer, or he was not worthy to be a judge. They had done their best as judges, and he hoped they had given satisfaction. One of the gentlemen who had spoken previously made some remarks about the fattening of stock for show. Now, it was not the duty of judges to ask what they were fattened for. If they saw a fat animal before them they did not know who had fattened it; he might be a farmer or not, and they must use their own judgment so far as they could. If they saw a nice fat animal they were sure it was a thriving animal; if they saw one come into the enclosure lean and poor, they were not sure that it might not have eaten as much food, and as good, or even better, perhaps, than the other. He hoped they would go on prospering.

A vote of thanks to the Chairman having been proposed by Mr. Jackson and agreed to, as the gentlemen were leaving the room, the proceedings terminated.—Abridged from *The Preston Guardian*.

KEIGHLEY AGRICULTURAL SOCIETY.

The twenty-ninth annual show was held under rather unfavourable auspices in regard to weather. Rain fell heavily in the morning, and although it cleared up later on, and the sun shone out for a short time, a sharp thunderstorm burst over the ground when the hunters were being tried, and the torrents of rain entirely stopped the proceedings. Happily the atmosphere again cleared, and the judges were able to finish their work. The show was held as heretofore in a field on the Skipton-road. £650 was offered in prizes and nineteen silver cups or other prizes. The total entries were about equal to last year. Notwithstanding the weather, the attendance was large. The cattle and horses, accommodated in covered sheds, surpassed anything previously seen at Keighley, both in regard to numbers and quality; the hunters, in particular, were a superb collection, one of the judges stating them to be the best lot he had seen this season at any show. The pigs were fine specimens, and so were the sheep, but the latter were fewer in numbers than are usually seen at this show. The poultry and pigeons were not so numerous as ordinarily, but the quality was up to the mark, though they were seen to great disadvantage owing to the morning's rain, which drenched the pens. The winners of firsts in poultry and pigeons were: H.

Lacy, Hebden Bridge; W. A. Taylor, Manchester; J. Sichel, Timperley; C. Sidgwick, Riddlesden; C. W. Brierley, Middleton, several, and a cup for the best game pen; J. J. Booth, Silsden; H. Pickles, jun., Earby, several; T. Mitchell, Keighley; J. Rollinson, Lindley; T. Dean, Keighley, cup for best pen; H. Beldon, Goitstoeck; H. Bowker, Keighley; T. Briden, Earby; T. E. Kell, Wetherby; J. Spence, Clayton; W. H. Sutcliffe, Keighley; G. Noble, Staincliffe; W. F. Entwistle, Cleckheaton; E. Leach, Rochdale; J. Berry, Silsden; E. Horner, Harewood, several; W. Cannon, Bradford; H. Yardley, Birmingham; J. Fielding, jun., Rochdale, several; F. Graham, Birkenhead; R. Ogden, Rochdale.—Firsts in rabbits were taken by R. and G. E. Lasam, Newark; J. Buckley, Bradford; T. Driver, Morton Banks; S. Greenwood, Hebden Bridge.—Mrs. Harrison, Old Carrhead, took first in butter.—In implements a cup was given to W. and F. Richmond, Colne, for best agricultural, and another cup was taken by John Robinson, Leeds, for hay-harvesting implements, both of these makers showing fine collections of their work. Firsts were given in roots to J. Riley, Junction; R. Petty, Sutton; and J. Kidd, Suttou. In pigs firsts were awarded to C. Roberts, Wakefield;

P. Elen, Salford; J. E. Fox, Great Horton; J. Umpleby, Guiseley; S. Reeday, Keighley; C. McDonnell, Keighley; R. E. Duckering and Sons, Kirton; C. R. N. Beswicke, Littleborough; T. Bimis, Keighley; Z. Steel, Keighley; J. Harrison, Cowling; T. Newton, Keighley; J. Reeday, Keighley; J. Shackleton, Oakworth; J. Spence, Farnhill; and D. Driver, Exley Head. The judges were:—For Shorthorns: The Rev. L. C. Wood, Singleton Rectory; W. Sandy, Holme Pierpoint, Notts; H. W. Beauford, Bedford.—Horses: J. Wilson, Wood, born Manor, Morpeth; L. Hodgson, Highborn House, Easingwold; T. Gibbon, Burnfoot-on-Esk.—Sheep; E. Riley, Kipling Cote, Beverley; W. Robson, Great Ouseburn, York.—Lank Sheep: G. Browne, Troutbeck.—Pigs: J. Smith, Henley-in-Arden; J. Culshaw, Townley, Burnley.—Poultry: Mr. Hewitt, Eden Cottage, Sparkbrook, Birmingham; R. Teebay, Fulwood, Preston.—Pigeons: F. Esquelant, Brixton, London.—Crops: H. Ambler, Watkinson Hall; J. Renton, Farnley, Otley.—Butter: W. Peacock, Malham.—Implements: H. Ambler, Watkinson Hall; J. Renton, Farnley, Otley. The following are the prize takers in cattle, horses, and sheep:—

CATTLE.

(Open to the United Kingdom.)

Short-horned bull, above two years old.—First prize, J. Outhwaite, Catterick.
 Short-horned bull, above one year old.—First prize, R. Stratton, Swindon; second, R. Parker, Burnley.
 Bull calf under twelve months old.—First prize, Lady Pigot, Newmarket; second, T. Statter, jun., Whitefield.
 Short-horned cow in milk or calf.—First prize, J. Outhwaite; second, A. Dugdale, Burnley.
 Short-horned heifer, under three years old.—First prize, Lady Pigot; second, J. How, Huntingdon.
 Short-horned heifer, under two years old.—First prize, R. Stratton; second, J. How.
 Heifer calf under twelve months old.—First prize, Lady Pigot; second, T. Statter, jun.
 Dairy Cow.—First prize, W. Bentley Allerton; second, H. Crossley, Halifax.
 Alderney or Guernsey cow or heifer.—First prize, E. Holmes, Keighley; second, R. L. Hattersley, Keighley.
 To the exhibitor of the best three Shorthorns.—First prize, J. Outhwaite; second, J. How; third, R. Stratton.

TRADESMEN'S AND FARMERS' PREMIUMS.

(Open to the district comprised within a radius of 15 miles from the Devonshire Arms Hotel, Keighley.)

Short-horned bull, above two years old.—Prize, W. Tillotson, Marsden Hall.
 Short-horned bull, under two years old.—Prize, R. Parker.
 Bull calf under twelve months old.—First and second prizes, T. Hird, Skipton.
 Short-horned cow in milk or calf.—First prize, H. Crossley; second, R. Parker.
 Short-horned heifer, under three years old.—First prize, B. Baxter, Elslack Hall; second, H. Crossley.
 Short-horned heifer, under two years old.—First prize, B. Baxter; second, H. Crossley.
 Heifer calf under twelve months old.—First prize, T. Hird; second, J. Duckett, West Morton.

HORSES.

Coaching Stallions.—First prize, Stirck Brothers, Kildwick; second, P. Fort, Keighley.
 Roadster stallion.—First prize, J. Gill, Silsden; second, J. and S. Cockshott, Cringles.
 Draught stallion.—First prize, J. Forshaw, Burley-in-Wharfedale; second, J. Edmondson, Haughton Extwistle.
 Three-year-old roadster gelding or filly.—First prize, J. Ellis, Beeston; second, J. W. Mills, Guiseley.
 Two-year-old roadster gelding or filly.—First prize, J. F. Crowther, Mirfield; second, J. Keighley, Sandbeds.
 One-year-old roadster gelding or filly.—First prize, P. Parker, Carrhead; second, J. Scott, East Bierley.
 Draught brood mare.—First prize, T. Statter; second, L. Freer, Halifax.
 Roadster brood mare.—First prize, H. Mason, Bingley; second, E. Holmes, Keighley.
 Draught horse or mare.—First prize, H. Glover, Son, and Co., Bradford; second, W. Laycock, Keighley.

Nag or roadster.—First prize, E. Salt, Shipley Bay; second, H. Mason, Bank Field.

Cob, not to exceed 15 hands.—Prize, E. Charlesworth, Bradford.

Pony, not to exceed 13½ hands.—First prize, A. Sutcliffe, Burnley; second, T. Statter, jun.

Horse or mare in single harness.—First prize, B. Smith, Manningham; second, J. Smith, Bradford.

Lady's horse or mare.—First prize, W. M. Spence, Weston; second, A. Dugdale.

To the exhibitor of the best hunter.—First prize, J. B. Booth, Catterick; second, J. M. Tattersall, Musgrave; third, E. Nesfield, Scarbro'.

To the exhibitor of the best leaper.—First prize, H. Johnson, Spofforth; second, B. Nicholson, Sturton Grange; third, T. Ingle, Knottingley.

SHEEP.

(Open to the United Kingdom.)

LONGWOOLLED SHEEP.

Leicester or any other longwoolled ram, two shear or aged.—First, second, and third prizes, T. H. Hutchinson, Catterick.

Leicester or any other longwoolled ram, one shear.—First and second prizes, T. H. Hutchinson.

Leicester or any other longwoolled tup lamb.—First prize, T. H. Hutchinson; second, R. Burr, Ripley.

Pen of three Leicester or any other longwoolled ewes, two shear or aged.—First and second prizes, T. H. Hutchinson.

Pen of three Leicester or any other longwoolled ewes, one shear.—First and second prizes, T. H. Hutchinson.

Pen of three Leicester or any other longwoolled ewe lambs.—First prize, T. H. Hutchinson; second, M. Lamb, Otley.

Leicester or any other longwoolled ewe lamb.—First prize, R. Surr; second, M. Lamb.

(Open to the district comprised in a radius of 15 miles from the Devonshire Arms Hotel, Keighley.)

Leicester or any other longwoolled ram, one shear.—First and second prizes, M. Lamb.

Leicester or any other longwoolled tup lamb.—First prize, G. Greaves, Otley; second, M. Lamb.

Pen of three ewes, any age.—Prize, M. Lamb.

Leicester or any other longwoolled ewe lamb.—First prize, W. Dawson, Otley; second, M. Lamb.

LANK SHEEP.

(Open to the United Kingdom.)

Ram, two shear or aged.—First prize, B. Dobson, Ilkley; second, W. Riley, Oakworth.

Ram, one shear.—First prize, J. B. Sedgwick, Riddlesden Hall; second, B. Dobson.

Tup lamb.—First prize, B. Dobson; second, J. Dinsdale, Exley Head.

Pen of three ewes, two shear or aged.—First prize, J. G. Bridge, Rawtenstall; second, J. Dinsdale.

Pen of three ewes, one shear.—First and second prizes, J. G. Bridge.

Pen of three ewe lambs.—First prize, B. Dobson; second, Smith and Hanson, Otley.

Ewe lamb.—First prize, B. Dobson; second, Smith and Hanson.

Pen of three ewe lambs, first cross from Lank ewes.—First prize, J. Gill, Silsden; second, B. Baxter, Elslack Hall.

Ewe lamb, first cross from Lank ewes.—First prize, M. Lamb; second, J. Gill.

A floral and horticultural exhibition was held in a marquee adjacent to the show ground. There was a nice collection of plants, flowers, fruits, and vegetables; the latter being of remarkably superior quality.

FOOD OF THE HOPOE.—Carrion, beetles, larvae, caterpillars, ants, and many other kinds of insects are devoured by the common hoopoe in large numbers, its long beak enabling it to search for its victims in any hole or crevice into which they may have crept. Large beetles are killed by repeated blows, and by crushing them against the ground until the wings and feet have been broken off. The morsel is then tossed aloft and dexterously caught and swallowed. The young birds are at first unable to perform this rather difficult feat, and therefore require to be fed by those who may wish to rear them.—*Cassell's Book of Birds.*

THE DUTY OF FARMERS.

At a meeting of the Wigton Farmers' Club, Mr. John Grainger in the chair, a paper was read by Mr. J. C. Grainger, of Wiggonby, on "The Duty of Farmers."

Mr. GRAINGER said: Young men should be taught to *do*, as well as to know when a thing was *done*. It was an easy thing to take a farm and put it into good condition, if a man had plenty of money in his pocket, but this was quite a different thing from making it pay. Every farmer ought to learn to plough, sow, reap, &c., well, and thoroughly well, but some mental calculation was required also, in order that a system of farming might not be followed which did not pay. Turning more to the education question, so far as it bears on the requirements of the farmer, I presume you are all aware that there is some talk of establishing an agricultural college in and for the north of England. A most valuable paper on this subject has recently been read at the Hexham Farmers' Club by the Rev. Mr. Dwaris. As much that he states coincides with my own views, I take the liberty of quoting some of the chief points: "Let," he says, "farmers' schools be made good, and not too dear. The farmer would pay a reasonable sum towards the board of his children, and a reasonable contribution towards their tuition, say £20 a-year for board and £7 10s. as remuneration for the teachers. In order, however, that it might be done well at these rates, several conditions are requisite. It is only through large numbers and good management that the best teaching and a proper diet could be secured at these prices. Then for so large a school buildings of considerable dimension and some dignity, ample grounds for recreation, are eminently desirable; and to these conditions we must add the means of exciting emulation and of rewarding merit in such a laborious and painful pursuit as the discipline of the mind, by prizes and certificates and honorary distinctions of all kinds.

Fame is the spur which the clear spirit doth raise,
To spurn delights and live laborious days.

These are the conditions of a school which the farmers could support for themselves." He goes on to say that the school should be built on the border of two counties, in a healthy district, and of easy access to Northumberland, Durham, and Cumberland. To give prospect of success to such a school as I have supposed to be desirable, at a cost to the farmer of not more than £27 10s., it seems to me that the following advantages must be first secured to it: (1) Buildings free of rent; (2) a subsidised tuition; (3) some special privileges to the farmer class; (4) a form of government which shall command public confidence. It would be a great benefit if a school such as has been described could be built, and I think it might clearly be done. The cost of the building once ascertained, the money might be raised by shares, say of £100 each. Each farmer subscribing might have certain extra privileges, while non-subscribers' children should pay five pounds per annum extra. Leaving the question of education for that of taxation, I think it as much the duty of farmers to look after their pockets and interests in that line as any we have spoken of. And in what way can this be done better than by free discussion at our meetings? The opinions expressed find their way to the press, and thus indirectly (if no more direct action is taken) influence the government in power. I know many outsiders think our meetings are so much time lost, useless in fact, but without such and other kinds of meetings it is very probable that their pockets would suffer considerably more than they do at present. If I remember right, one of our own members would be amongst the first to read a paper on local taxation; the question has also been ably discussed at Brampton. In almost every house, at one time or another, one hears something said about excessive taxation, or the unequal manner in which the taxes are raised, plainly showing that the shoe pinches.

Mr. WRIGHT thought the paper was very difficult to understand.

Mr. HETHERINGTON agreed with what was said about having to serve an apprenticeship to farming.

Mr. WRIGHT said it was not necessary to be able to plough or work; they could get men to do that. A farmer required a good head-piece.

Mr. M'NECHAN would suggest to the chairman and the meeting whether farmers were not the "best abused" set of men going. Almost every lecturer and speaker had a fling at them, and they were spoken of as if they were half a century behind any other trade or profession, whereas he believed the opposite was the case.

Mr. ROSS said that Mr. Grainger's paper was above his comprehension. When a lecturer treated upon so many subjects it was difficult to carry them all in one's head, so as to reply to them. Farmers had certainly to direct their attention to all kinds of things, vegetables, and animals. They had to acquire the experience, so that if they looked at a plant or field which was not doing well they would know what was wanted; a man of letters would not know this. He thought the paper was very good, but it embraced too many subjects.

Mr. GRAINGER said it was quite possible to introduce too many subjects. What he desired was to impress upon their minds the benefit of a thorough analysis of soils, and also to direct their attention to watching the pockets of the rate-payers, because he thought taxation was not enough looked after.

The CHAIRMAN thought the paper in many respects a good one, and much approved of that part where he spoke of an agricultural college. If such a thing were established he thought he should send a son, and asked Mr. Norman if it would not be cheaper a good deal at £27 10s. per year than where he was at Cirencester.

Mr. NORMAN said it cost four or five times as much.

MORPETH CHAMBER OF AGRICULTURE.—At a meeting, Mr. T. J. Ward in the chair, Mr. Thos. Lawson, of Longhurst Grange, said the subject of that day's discussion was county rates and county boards, and he might congratulate the rate-payers of Northumberland on the progress their efforts had made on these questions. He well remembered the supercilious looks with which the advocates of county reform were greeted forty years ago, but such reception never chilled Northumbrians, and by ward meetings, county meetings, and more lately by chamber meetings, they had steadily urged on Parliament the desirability of placing the county-rate under the control of county boards, elected by, and responsible to the rate-payers, and in the present session of Parliament a bill had been introduced by the present Ministry for this purpose, but unfortunately it formed part of a measure that was not so highly approved, and had been withdrawn. He moved that the following petition be agreed to and be signed by the chairman on behalf of the meeting and sent for presentation to the House of Commons by the Hon. H. G. Liddell, M.P., to the effect "That a large local tax, under the name of county-rate, is annually levied on your petitioners, and has of late years much increased in amount. That your petitioners do not possess any direct control over the expenditure of such rate; your petitioners, therefore, pray your honourable House to pass a law for the election of a financial board in each county, and to place the expenditure of this rate for county purposes under the control of such board. Your petitioners further pray that the county-rate assessment basis be so amended as to include all the property ability of the county, and that the assessment be made on the lettable value of all property within the county;" this being seconded, was carried unanimously. Petitions for a uniform standard, agricultural statistics, and repeal of the Malt-tax were signed, and the deputy-secretary (Mr. John Aynsley) was directed to prepare one on turnpikes and highways, according to the resolution of the last meeting of the Chamber.

THE BIRMINGHAM HORSE SHOW.

The gathering in Bingley Hall at Birmingham is one of the last of the pleasant meetings and greetings of the show season; but all happiness has an end—hence the chief pleasure of its next beginning. Dear, dear, what a place it is, that Bingley Hall! fresh with deal planking, red cloth, and advertising placards, gorsed bails, and the vague smell of horses, suggestive of coming wonders: the brown tan laid down so level in the circus; the company coming in and taking their places; the judges chatting and looking carelessly about, as if they didn't want to begin, and knew all about it beforehand! What a sight was that which burst upon us when the string of two-year-olds came dancing in! Well might a free-list subscriber say that the reserved seats were the places to see from, and wonder they were not much dearer. Then the show itself, how like Astley's! Had we not the horses which little Jacob believed from the first to be alive, and the ladies and gentlemen of whose reality he could be by no means persuaded, even to the forlorn damsel that made Barbara cry, and the tyrant who made her tremble, for was not the one admirably represented by a young lady in a riding habit, and the other by the lithesome, obliging man in brown holland, whose word is law in the regions of Bingley? Again, the military man in boots was not without his fellow, and there was any number of ponies ready to take the part of the "famous one," which reared on his hind legs when he saw the murderer, and wouldn't hear of walking on all fours again until he was taken into custody; as there were further plenty of equestrians eager to outshine those great heroes, famous for their exploits on the Brentford, York, and Edmonton roads. In fact everything was delightful, splendid, and surprising, even to the old gentleman who applauded every verdict and beat his umbrella on the floor until it was nearly worn down to the gingham, although he made but a poor substitute for that gloriously happy trio—Jacob, Kit, and Barbara's mother. Our sketch of Bingley Hall is taken from the *Old Curiosity Shop*, with a little assistance from harlequin and his wand, who, in one of his freaks, turned the gas into two-year-olds and made judges of the fiddlers. But harlequin has been very active throughout the show season, not only among the horses but with the Shorthorns, sheep, and pigs, as with one stroke of his wand he has upset all the decisions of a former meeting; and then, skipping away to another gathering, with a crack sets them as they were; while at a third assembly he so jumbles and knocks them about that honest John Bull begins to doubt whether he is playing his part at an agricultural show or a pantomime, and turns about as suspiciously as if he expected to be crammed into an oven or bonnetted as the policeman.

Devoting part of the day to the mountebank business may have something to do with the falling off of the show at Bingley, as it was not a strong one, and many a well-known exhibitor was not down in the catalogue or in the flesh, while there was scarcely a dealer of any note in the Hall; but Horncastle fair and Wolverhampton races being on may have caused a thinness in the gathering. Then, in consequence of the death of Mr. Major Richards—a kind, obliging steward of the ring—Mr. Westley Richards did not send any of his Leicestershire cracks. The judging generally commences here with the thorough-bred stallions, but this year the two-year-olds were the first in, mustering thirteen or

fourteen strong, the contest for the colours being between a chestnut gelding by General Hess, a loose-going colt, that through the awkwardness of his attendant did not give a good show. He has a nice head and neck, with lengthy withers, having plenty before the saddle. His middle is good, with the exception of that lightness in the girth peculiar to his sire; then he has rather a short quarter, with good limbs, large joints, but at present stands a trifle stiff or back at the knees. The second is also a chestnut, one of the big Angelus' stamp, of fair form, but a disher and coarse; while the third, by Lifeboat, is a deep wiry-looking brown colt, well put together, and the commended Lorna, by The Lawyer, is a nice lengthy filly, with a round barrel, capital back, and looking all over like going, though of no great substance below the knee. The three-year-olds were good. The Knight, by the Knight of Khars, is a very stylish nag; but when highly commended last year as a two-year-old we said he was not quite right in his shoulders. The second, a chestnut by Lifeboat, is a nice-looking, good-topped filly with deep, well laid shoulders, but light below the knee; while the third was Luna by Laughing Stock, a very nice filly, and a first at Wolverhampton; but we think now, with her style and action, she is more likely to be valuable for the park than a hunter. The Banker, a first three-year-old at Wolverhampton, and again in a class of twenty-one at York, was dismissed, together with a nice bay horse by Ratcatcher, of Mr. Mills', Thetford, which beat Major Barlow's Beckford in Norfolk, and a real varmint light-weight hunter, Master Whillier by Tim Whillier. But this is all waste of time, as the riding benches say that "you cannot tell anything about them without you get on their backs"; and as they have not, we shall still poll for the Banker.

"Must get on their backs, or you can't tell anything about them."—As we write this it is the hour of night when churchyards yawn, and we look nervously over our shoulders expecting to see the ghost of Lord George, or get a crack on the head from John Gully, as such a sweeping assertion does away with all the honour and glory of the Turf, as far as owners and trainers are concerned, and at the same time makes a mighty knowing eard of the bow-legged lad with mouth big enough to accommodate the largest of Tenby oysters, and a brain that would go in an egg cup. Then what think ye of such a statement, you full-blown lovers of whipcord and ginger, that buy a score of horses in a day from merely seeing them run up and down a market place? And you patrons of the leash, or judges of foxhounds, do you think it possible to tell whether a dog goes strong and well without getting on his back? No—ride 'em, ride 'em—and ride the four-year-olds the two gallant officers did and no mistake, giving Major Barlow's prize horses such a bucketing that made them lather and blow most fearfully. As the nags in their distress panted, in the oppressive atmosphere of the Hall, for a Suffolk zephyr, the Major and Beckford's jockey looked on, but not in anger we hope; while poor Tregothnan, as he sobbed and sighed, if of a philosophical turn of mind, like Mr. Pickwick in the Fleet, must have thought from the first that "it was not the place to bring a young 'un to," and, perhaps with Mr. Weller, nor an old 'un either. The tug of war was between Tregothnan, the four-year-old prize horse at Islington, and at Wolverhampton,

Beckford, of Guildford renown, and second to his stable companion at Wolverhampton; and Misfortune, who again had the ill-luck to play third to them as she did at Wolverhampton. She is a nice mare, of breed and a good goer, but a little shelly in her middle and a trifle slack in the loin; but with all this we like her much. Beckford brings his hind-legs under him, strong and well, which Tregothnan did not; still we prefer Tregothnan. But this is an oft-told tale, as we have described these horses over and over again. Tregothnan is a fine looking horse in his stall, while Beckford promises to furnish into a very useful good stamp of nag. There are persons, and some sportsmen of note, who are too lazy to come and see the horses judged and in action, but come round the stalls when the prizes are over the horses' heads, walk up to the animals, look over their backs, feel their legs and so on, and then form an opinion as to which is the best, and some are like town-criers in giving it out, "He's the best!" Now, these gentlemen always remind us of the old lady that bought a grand piano of a respectable auctioneer, and when she got it home found there were no insides, and consequently no go, but she soaled herself by placing it in one corner of the room, where it fitted to a T, and asking her friends whether it was not a handsome bit of furniture? What a lot of people run their hands down the legs of the grand piano at a horse show! Now Squire, alias Genial Boy, as your mistress prefers to write it, you are qualified for a hunter not over fifteen two; let us have a look at you. What can we say about a head like that? why, that it is good enough for anything, and that you are as neat and clever throughout; as when Mr. Elliott took hold of your head, you were ready to fly from under him. But we have seen you before, my lad; and how came you qualified last year, in the hunters exceeding fifteen two? High-heeled boots, of course; for we recollect writing of you then, "While one really nice horse and a goer, Mr. Dilke's Genial Boy, comes in for a commendation." The second, Dublin, is nice enough, but not over-stout; while Mr. Barker, of Ingatestone, with his two Romford prize horses, gets highly commended for Tom, the Rataplan horse, who bears the stamp of his sire in many points. Lallah Rookh was in this class—a little mare by Laughing Stock, that played third to Bird on the Wing, and next to Loiterer at Wolverhampton. Here he comes! Loiterer never showed better than he did at Waketield; and it was there we gave a description of him, when in all his glory, with the 100-guinea prize ribbons that Captain Skipworth and Mr. Elliott ordered to be pinned to his head. We have watched him minutely in at least eight shows up to the wretched performance in the ring at Birmingham, palpable to any one, and the judges gave him the prize regardless of the well-known lines:

If I know'd a donkey wot could'n't go,
Do you think I'd acknowledge him?

Oh, no no.

Mr. Elliott thinks we have been too hard on the horse, while many think we have not been hard enough; but let *The Birmingham Post* have its say. "He stands 15½ hands high, but does not look it; and in the ring behaved anything but creditably, considering his reputation. Judged from his leaping performances and canters, many might be apt to pronounce him a wretch to go and a brute to leap. His mouth, however, was evidently very tender, from the way he threw up his head when the groom pulled the reins, showing that most careful handling by one familiar with him is necessary. We need not here enumerate all the prizes this splendid horse has gained in his lifetime." The horse has never bridled, and as to his groom he is a quick clever fellow in the saddle, for not fine horsemen

like Captain Skipworth and Mr. Elliott can keep Loiterer's head down. Nor could Mr. Boulton at York, even when he allowed him to walk away with the reins on his withers. Open the gates—make way for the grand piano! The third horse, Melton, is a blood-like animal with a good forehead, but high on the leg, with the hind ones rather straggling, in fact he is not well put together; still he can move, but rather high and charger-like. Paddy Byrne, from the same stable, pleased us better, being a stout hardy compact little horse of breed, on a short leg that looked like a stayer. There were several others worthy of notice, Borderer in the hunters up to 15 stone is not at home in a circus, as he wants room to gallop, which is his best pace; and we do not envy the Master of the Rufford his feelings if he saw his pet with Dick Webster up trying with a couple of persuaders to get him over that bit of gorse.

Rode he on Borderer? Tell me, gentle friend,
How he went under him?

Middling, very middling; but he takes it in style at last, and Richard was himself again. Then, Romeo, Romeo, wherefore do they give hunter prizes to brougham horses, Romeo? for with your beefy shoulders you are nothing else, and we do not see why a judge should be saddled with the reputation of having given a prize to a brougham horse as well as a "gig horse" if he really did not fancy him, and upon good authority, we know, sweet Romeo, you are no fancy of Mr. Elliott's. The third was Loxley, and although a little scrambling in his canter we verily believe the last should have been first, judging by his performance in the circle, together with his well-placed head, neck, shoulders, and hind-leg action, so good and hunting-like. We remember him well at Islington and Wolverhampton, and he improves as you become better acquainted with him, as anything good is sure to do.

Then came the thorough-bred stallions, but what a falling off was there! The entry was Laughing Stock, Paul Jones, Count Boulate, Brennus, Whiby, Gem of the Peak, and Carlton; but of these only that deformity, to our eye, Laughing Stock, Gem of the Peak, and Paul Jones were in the Hall. Gem of the Peak is a black, and a neat made horse throughout, but fired where curbs arise, and has a pedigree that almost makes one doubt his being an aristocrat, by Master Sykes, dam by Sir Colin Campbell, grandam by Joe Lovell. Paul Jones by Buccaneer, out of Queen of the Gipsies, by Chanticleer, better known as the Steam Engine of Chester Cup fame, has a plain head and neck, strong muscular shoulders, deep girth, but is rather tapering and shelly in his middle, with good quarters, well let down in his stifle, and a rare length of second thigh, with great leverage in the hocks, which are nicely placed; in fact, he is more useful than ornamental. So much for the thorough-bred stallions generally, a very interesting class!

Messrs. Thurnall, Elliott, and Stevenson went to work with the hacks and roadsters on Wednesday, and were not long in coming to a verdict in favour of Rosalina and the Penian, in a small class exceeding fifteen hands high. In the next lot of park hacks or roadsters not exceeding fifteen hands, Princess Louise, a strong, lengthy, very useful bay, with park action, but not remarkable for beauty, won with the assistance of Dick Webster; while the rather common-looking, good-going, weight-carrier, Alonzo, played second to her, but a horse that was first in this class when much better represented last year. The best looking of the others were Mr. Millward's Hilton, Mr. Darby's Prince, Mr. Everitt's gelding, Mr. Whittington's Salt-Box, Mr. Smith's Robin Hood, and Mr. Kenrick's Jenny Jones. The weight-carrying hacks not exceeding 15½ hands were very poor, Danly being a coarse vulgar fellow, and Land

Agent very raw, but if schooled in time he may make a very neat hack, if his neck be not too weak, as well as a trifle too short. Picton moved, but is better adapted for harness purposes. In the weight-carrying hacks not exceeding 14½ hands, Mr. Frisby, who is well known for his steppers, won with Dunstan, a strong cobby fashionable horse, not unknown to the prize-ring, but with a little too much flourish in his action, as we should think, to be pleasant riding. The second to him was a stale-going grey, but the best goer was Mr. Barling's rather vulgar-looking Wasp. Men think anything good enough to put their dear little lovey-doveys on; but it seems there is a sweet little cherub that sits up aloft to look after their necks, as they seldom meet with an accident. The first prize was about the only one with any spring in him, and which really went like a lady's horse. He is a chesnut by Oxford, out of Sylvia by Teddington, and has a wicked eye, as seemingly half inclined to be sulky with the lady in green who looked very natty on him. The second was a well-made brown by Glenalvon, but not a pleasing goer; while many of the others reminded us more of a four-poster than a lady's palfrey. In those under fifteen hands, The Hart, only a commended one last year, is a pretty hack; Lady Lovelace is of fair form, and moved well, but was evidently new to the circus; while a neat grey cobby hack of Mr. Millward's would do quite as well for grandpapa as grandmamma. In the harness horses, Mr. Frisby, from the little village, had it all his own way, for all his pots turned to gold, and deservedly too, for he must go to long prices for such animals. Dewdrop, fifteen two, is a grand stamp of harness horse, and a good goer. Thau the Empress, fourteen three, with fine town action, no one could wish for anything better; as with Eclipse, a very handsome little horse of the same height, as a partner they went together like the Siamese twins, and had never been separated, distancing all in pairs. The second to Empress in single harness, Gipsy, is a nice gig mare, with good useful action that looked like bowling along, as did Mr. Thomas' Kitty and Mr. Tharmes' bay. Mr. Tharmes' browns, although they did not stand a chance in the pairs, faired better as a tandem, and with a first-rate whip went round the course in style, turning first one way and then the other, and cutting a figure of eight like some professor in skates. This accomplished, Jehu, in a second act with a pony tandem, came in for considerable applause. The agricultural stallions were Mr. Addison's Garabaldi, Mr. Heath's Young Prince, Mr. Tomlinson's Young Lofty, Mr. Manning's Young Champion, Mr. Corfield's Shropshire Friend, and Mr. Middleton's Rutland Hero, a very useful, deep, well-formed horse. The celebrated Clydesdale Young Lofty and the Northamptonshire Young Champion we have had over and over again, and a description to our readers would be more tedious than riding a jaded horse or listening to a jarring wife; but Rutland Hero, we believe, beat Young Champion in the spring, as he should have done here.

PRIZE LIST.

HORSES.

JUDGES.—The Hon. Colonel Cholmondeley, Nantwich.

J. M. K. Elliott, Towcester.

Captain Skipworth, Brigg.

Thoroughbred stallions for getting hunters.—First prize, £30, C. and J. Moffatt, Kirklington Park, Carlisle (Laughing Stock); second, £10, W. H. Logan, Tamworth (Gem of the Peak); third, £5, W. E. Everitt, Finstall, Bromsgrove (Paul Jones).

Hunters, exceeding 15½ hands high, equal to 15 stone, 5 years old and upwards.—First prize, £40, T. H. D. Bayly, Ollerton, Notts (Borderer); second, £10, T. Percival, Wansford (Romco); third, £5, G. Van Wart, Edgbaston (Loxley).

Hunters, exceeding 15½ hands high, without condition as to weight, 5 years old and upwards.—First prize, £40, S. J. Welfit, Louth (Loiterer); second, £10, A. Newman, Winchcombe, Cheltenham (Walton); third, £5, T. Percival (Mellon). Highly commended: T. Percival (Paddy Byrne).

Hunters, not exceeding 15½ hands high.—First prize, £20, Mrs. C. F. Dilke, Maxtoke Castle, Colehill (Genial Boy, late Esquire); second, £10, F. S. P. Wolferstan, Tamworth (Dublin).

Hunters, four years old.—First prize, £30, Major Barlow, Woodbridge, Suffolk (Beckford); second, £10, Major Barlow (Tregothman); third, £5, C. Cook, Taddington, Winchcomb (Misfortune). Commended: Captain Heygate, Buckland, Leominster (Trumpeter).

Three-year-old colts and fillies for hunting purposes.—First prize, £20, Major Barlow (The Knight); second, £10, E. Phillimore, Presbury, Cheltenham (chesnut filly); third, £5, Major Barlow (Luna).

Two-year-old colts or fillies for hunting purposes.—First prize, £15, J. Goodliff, Stilton, Hunts (chesnut gelding); second, £10, J. M. Tattersall-Mnsgrah, Beverley (chesnut gelding); third, £5, J. Watson, Harlebury, Worcester (brown gelding). Commended: F. D. Lea Smith, The Grange, Hales Owen (Lorna).

HACKS, HARNESS HORSES, AND PONIES.

JUDGES.—J. M. K. Elliott, Towcester.

Major Stevenson, Leominster.

H. Thurnall, Royston.

Hacks or roadsters, exceeding 15 hands high.—First prize, £15, J. Gilman, Birmingham (Rosalina); second, £5, G. J. Mitchell, Burton-on-Trent (Fenian).

Park hacks or roadsters, not exceeding 15 hands high.—First prize, £15, L. Turner, Leicester (Princess Louise); second, £5, G. Wilkes, Birmingham (Alonzo).

Weight-carrying hacks, exceeding 14½ and not over 15½ hands high.—First prize, £15, H. Wiggan, Harborne, Birmingham (Dandy); second, £5, J. Moffat, Carlisle (Land Agent).

Weight-carrying hacks, not exceeding 14½ hands high.—First prize, £15, H. Frisby, 13, James-street, Buckingham Gate, London (Dunstan); second, £5, G. W. Shillingford, Eynsham, Oxford (Grey).

Ladies' hacks.—First prize, £15, W. Tyler, Friday Bridge, Birmingham (Unit); second, £5, T. Jones, Shrewsbury (Tommy).

Ladies' hacks, not exceeding 15 hands high.—First prize, £15, R. N. Hooper, Cowbridge (The Hart); second, £5, W. Wood, Burton-on-Trent (Lady Lovelace). Commended: R. Milward, Thurgarton, Southwell (Petronel).

Harness horses exceeding 15 hands high.—First prize, £15, H. Frisby, 13, James-street, Buckingham Gate, London; second, £5, J. A. Browning, Edgbaston (May Bell).

Harness horses exceeding 14 and not over 15 hands high.—First prize, £15, H. Frisby (Empress); second, £5, J. Gray, Sutton Coldfield (Gipsy). Highly commended: S. Tharme, Wolverhampton.

Pairs of horses in harness.—Prize, £20, H. Frisby (Eclipse and Empress). Commended: J. Watson, Birmingham (Hector and Prince).

Tandem horses 15 hands high or upwards.—Prize, £5, G. Tharme, Birmingham.

Ponies in harness not exceeding 14 hands high.—First prize, £10, G. Tharme; second, £5, W. H. Logan, Tamworth.

Ponies not exceeding 14 hands high.—First prize, £10, H. J. Wilde, Bridgnorth; second, £5, J. Blakeway (Queen Bee).

Ponies in harness not exceeding 13 hands high.—First prize, £10, H. Gameson, Birmingham (Beauty); second, £5, L. Turner, Leicester (Beauty). Highly commended: T. Mabbutt, Birmingham (Jessie).

Ponies in saddle not exceeding 13 hands high.—First prize, £10, W. Lock, Worcester (Henwick); second, £5, W. Tyler, Birmingham (Bobby).

Ponies in harness, not exceeding 12 hands high.—First prize, £10, F. A. Grew, Birmingham (Taffy); second, £5, F. Bower, Birmingham (Jimmy). Highly commended: J. J. Horton, Birmingham (Kitty).

Ponies, not exceeding 12 hands high, to carry children.—

First prize, £10, J. Goodliff, Stilton, Hunts; second, £5, C. Myring, Walsall (Jane).

Pairs of ponies in harness.—Prize, £10, Mrs. C. F. Dilke (Champagne Charlie and Tommy Dodd).

Tandems: Ponies under 14 hands high.—Prize, £5, C. Myring, Walsall (Jane and Jenny). Commended: F. Bower, W. Tyler, and Messrs. Grew and Gameson, Birmingham.

AGRICULTURAL OR DRAY HORSES.

JUDGES.—J. J. Burberry, Stratford-on-Avon.

H. Lowe, Tamworth.

Stallions.—First prize, £30, H. Tomlinson, Blythford, Rugeley (Young Lofy); second, £10, J. Manning, Ordingbury, Wellingborough (Young Champion); third, £5, T. Middleton, Lyddington, Uppingham (Rutland Hero).

THE WOOL-GROWING CAPABILITIES OF NEW SOUTH WALES.

TO THE EDITOR OF THE JOURNAL OF THE MELBOURNE AGRICULTURAL SOCIETY.

SIR,—There are two things the wool-growers of this colony require to know: 1st, the sorts of wool that they can grow to the greatest perfection on their runs, taking the soil and climate into consideration; and 2nd, the wools which are most in demand and likely to be so in the London market. I have good hopes that definite information with respect to question No. 2, will, before long, be obtained through the inquiries which are now being made by the society in London and elsewhere; and the best thing which we can do in the meantime is to endeavour to solve the question No. 1, and ascertain, as far as possible, the wool-growing capabilities of the different classes of country in the colony. These can only be ascertained by a free interchange of ideas on the subject, and a well-sustained discussion carried out by those who can give their own experience and bring forward practical proof in support of their opinions. With a view, therefore, of evoking this discussion, I will here offer, as shortly and concisely as I can, an opinion of the wool-growing capabilities of the different classes of country we possess, and I shall not be very sorry should it be proved that the views I put forward are not correct; for, in that case, the true capabilities of the various districts would be established, and the object aimed at in putting this classification of country before your readers, and the wool-growers generally, will be fully attained. In dealing with my subject I will, with a few exceptions, which I shall notice, adopt the classification proposed by the wool committee in their report, which appeared in the Society's journal of February last.

The alterations I propose are the taking of the portion of New England lying on the west side of the coast range and the police district of Queanbeyan out of the coast and mountainous district, and the county of Hume, with the eastern portions of the counties of Mitchell and Bourke, the county of Bland, and part of the county of Gipps, out of the intermediate district, and including them in the "western slopes."

The wool committee divided the colony into five districts, but there are actually only four classes of country, the Merriwa and Mudgee districts being the same sort of country as the Western Slopes, and only separated from the latter district as a matter of policy, to increase the number of new exhibitors. There are thus, then—taking them according to their capabilities for growing fine wool—1st, the Western Slopes district, including Merriwa and Mudgee; 2nd, the Coast and Mountainous; 3rd, the Intermediate; and 4th, the Salt Bush. And to enable those who have not seen the proposed districts laid out on a map of the colony to have a correct idea of the country included in each of these districts, I will here run roughly over their boundaries.

I. THE WESTERN SLOPES (INCLUDING MUDGEES AND MERRIWA).—This district, so far as it is in this colony, is bounded on the north by Queensland; on the east, commencing at the Queensland border, near Tenterfield, by the coast range southerly to its junction with the Liverpool ranges; thence by those ranges westerly to the head of Coulson's Creek; thence southerly, leaving Merriwa a few miles to the west, the boundary crosses the Goulburn River, thence still southerly to the head of the Carpetree River, leaving Keen's Swamp on the west; thence westerly to the Turon River, and by that river to its junction with the Macquarie; thence southerly, passing near Gulgong, Blayney, and Rockley, to the ranges at the sources of the Wollondilly; thence westerly,

south-westerly, and westerly, leaving Bolong on the east and Binda on the west, to Crookwell; thence southerly, leaving Pomeroy on the east, to Bau Bau, on the coast range, and by that range to the head of the Queanbeyan River; thence westerly by Michalego, crossing the Murrumbidgee, Couradigbee, and Tumut Rivers, towards the Tarcutta Hill, leaving Tumut and Adelong on the south; and thence southerly to the Murray River, at the junction of the Gingellick Creek; on the south by the Murray; on the west, the boundary starting at the western side of Boomoonoonoo Head Station, on the Murray, runs northerly to the Billibong Creek, about twelve miles below Gunambill Head Station; thence north-easterly by the Boree Creek, to the Murrumbidgee, below Kokibitoo, about twenty-five miles above Naranderra; thence north-easterly to Booroolong, on the Yeo Yeo Creek; thence to the Lachlan River, about fifteen miles below Forbes; thence, crossing the head of the Bogan to the Macquarie River, about eight miles below Dubbo; thence north-easterly to the Castlereagh, at its junction with the Wallanburrawang Creek; thence by the Castlereagh to its junction with the Barrone Creek, and by that creek easterly to its source; thence easterly to the head of the Brigalow Creek; thence northerly to the Namoi River, at Turrawan; thence by that river to the junction of the Brigalow Creek; thence northerly and north-easterly to the Gwydir River, about fifteen miles below Morree; and thence north-easterly and northerly to the Queensland border, about sixteen miles west of Bengalla. The country included in this district, "the Western Slopes," is considered the pick of the colony for wool-growing; it is, in fact, as good as any in the world, being sound, well grassed and watered, and possessing a temperate climate, in which the fleece grows all the year round without check, the climate being neither too hot in summer, nor too cold in winter. It is this district the very finest wools can be and are grown, either combing or clothing, according to the taste or fancy of the owner, or the breed of sheep with which he began, many of the growers of the best wool in this district having both combing and clothing sheep on their runs.

II. THE COAST AND MOUNTAINOUS.—This district, so far as it is New South Wales, is bounded on the north by Queensland; on the east by the sea; on the south by Victoria and the Murray River; and on the west by the eastern boundary of the Western Slopes, including Mudgee and Merriwa. There are also in many parts of this district tracts of first-class wool-growing country, but it is, as a whole, rather high-lying and too exposed, and the feed generally too coarse to produce the very finest descriptions of wool, unless the sheep had shelter-sheds to protect them during the very cold weather of winter; and that, of course, has not been attempted, except in the case of a few stud flocks. In this district, too, both combing and clothing wool can be grown; but it would seem that in the higher lying portions of it combing is more profitable than clothing.

III. INTERMEDIATE.—This district is bounded on the north by Queensland; on the east by the western boundary of the Western Slopes; on the south by the Murray River; on the west, the boundary starts from the Murray at its junction with the Murrumbidgee and runs northerly about 53 miles; thence it turns north-easterly, on a line with, and about 12 miles distant from the Lachlan River, to a point on the western boundary of the Wellington Pastoral district, about 12 miles north-east from Murrin on the Lachlan; thence by that boundary north-easterly across the Bogan, about six miles north of Mount Hopeless to the Mara Creek, and by that creek to the Darling River; thence by that river upwards to its junction with the Barwin

River, and by that river to the Queensland boundary at the point of commencement. This is a remarkably sound class of country. The climate, though hotter than that of the Western Slopes, is thoroughly healthy for sheep, perhaps the most healthy in the colony; and the feed, which is a mixture of salt bush and grass, very nutritious, too much so in fact, for the production of the very finest wools. The climate also appears to be too warm to admit of the growth of very fine and very dense wools at a profit. Its speciality, therefore, taking the district as a whole, seems to be a sound combing wool, ranking from fair to very good. On the eastern side of this district there are tracts of country in which good clothing wool can be grown, but they are of no great extent; and even there, I believe, combing wool pays better than clothing. It can, I think, be seen, that while a clothing wool, with a very fine and delicate fibre and short staple, could not altogether withstand the heat of such a climate as that of the Intermediate District, but would to some extent lose its yolk and vitality, a good lengthy combing wool, of fair fineness of fibre, would do so, both from the long staples protecting each other and the comparative stoutness of the vesicles of the fibres withstanding the heat and retaining the yolk better. Besides, the tendency of wool, so long as it is sound, is to increase in length of staple and stoutness of fibre in hot climates, while it loses in density and fineness; and the grower should work, as far as possible, with and not against nature. If the explanation here given of the process of deterioration in the fleece in hot climates be correct, this deterioration would, with respect to combing and clothing wools of the same value, go on very much faster and to a greater extent in the latter than in the former; for in wools of these two classes of the same value the fibre is considerably stouter in the combing than in the clothing. Then again, to have anything like the same weight of wool per sheep, the fleece, in the case of the clothing sheep, must be comparatively high in density, and density is far harder to be got and maintained in a hot climate than length. It has been adduced as a reason for growing clothing wool in comparatively hot climates like that of some parts of this and the Salt Bush Districts that soundness is not so requisite in clothing wools as in combing. Now this, looking at the subject from a grower's point of view, is a mistake; for if wool be to any extent unsound he suffers a loss, and where the wool is thoroughly so, a very heavy one. Thus, if only a portion of the staple be unsound through a break in the fibre, the unsound portion is a loss to the manufacturer, working up, as it does, into "noils;" and he cannot, of course, buy such wool but at a heavy discount. If, again, the whole staple be unsound, the deduction must be larger, as such wool cannot be worked up into any but the lowest class of goods. A profitable wool, whether it be combing or clothing, therefore must be sound; and to produce a sound wool in a climate anything beyond temperate, the grower must increase the thickness of the fibre with every increase of heat till he finds out how far he requires to go in that direction to secure a thoroughly sound staple, but no farther, or rather scarcely as far, for it is well known that the tendency of sound wool in a hot climate is towards coarseness as well as length. If the clip should become too coarse the grower could rectify that by introducing finer combing rams into his flocks. If necessary to do so, there is ample room to increase the stoutness of

the fibre in hot districts without making it anything like so coarse as that of the long-woolled breeds in England, the wool of which sells at remunerative prices. The wool it is here recommended to grow in the hot country would, therefore, if sound, bring a better price than these English wools, and being more dense would not weigh so very much less per fleece. Thus, with comparatively heavy fleeces and fair prices for the clip, sheep of this class would yield a good return in wool, to say nothing of their being heavy weights when fattened.

IV. SALT-BUSH.—This district is bounded, so far as it is in this colony, on the north by Queensland, on the east by the western boundary of the Intermediate district, on the south by the Murray River, and on the west by South Australia. The climate is hotter, again, than that in the Intermediate district, and the moisture less, while the soil is dry, sandy, and dusty, the grass scarce, and the feed principally herbs and salt-bush. If it be the case that it would be unprofitable to grow clothing wool in the Intermediate district, much more would it be so, for the reasons adduced, to attempt it in this; for the fleeces of that class of wool would be only half the weight they ought to be, and the wool harsh, thrifless, and unsound.

If my premises are correct, the following are the conclusions with respect to wool-growing in this colony at which I arrive: 1. That a fleece, to be profitable to the grower, must be sound. 2. That the sheep which produce the very finest wools require a climate such as that of the Western Slopes, which is neither too hot in summer nor too cold in winter. 3. That if the climate be, as it is in the more exposed portions of the Coast and Mountainous district, colder than this happy medium, the stoutness of the fibre must, unless the sheep be housed in cold and wintry weather, be increased, and a stronger class of sheep kept, the increase of the stoutness of the fibre being in this case required on account of the cold; for if the sheep be not housed, with every degree of coldness of climate beyond a medium temperature their size and stamina must be increased; and we know that with every increase of size of frame, beyond a fixed standard, must come increased stoutness of fibre—*i. e.*, to a certain extent, coarseness. 4. That if the climate be hotter, as it is in the Intermediate and Salt-bush districts, than in country like the Western Slopes, the thickness of the fibre must, for the reasons already adduced, in that case also be increased to keep it sound. 5. That the necessity for this increase of the stoutness of the fibre on account of the climate being too cold may to some extent be obviated by fencing in and turning out the sheep in well-sheltered paddocks; and where the flocks are small, it can be so to even a greater extent by housing them. 6. That little or nothing can be done to obviate the disadvantage of too great heat beyond having the camping and watering places for the sheep, where practicable, near to shade. There are, however, many portions of the hot country where there are neither trees nor scrub, and shade would require to be made by planting; but it is scarcely to be expected that the Crown tenants, under their present tenures, will go into improvements of that description. 7. That it seems necessary, therefore, where the climate is too hot, to increase the stoutness of the fibre with every increase of heat, and to trust to the length and soundness of staple and weight of fleece, combined with heavier carcase, to make wool-growing pay in that class of country.

ALF. BRUCE.

LAND LEGISLATION IN AUSTRALIA.

The agricultural statistics recently issued from the Registrar-General's office must have sadly disappointed those hopeful spirits who still expected to see something of that great development of the agricultural industry which our legislators and politicians used to boast they had secured for the colony of Victoria. Some three or four years ago, we had Cabinet Ministers starring it, or stamping it, at provincial gatherings, and assuring the public that as the only obstacle to the almost unlimited cultivation of cereals was removed by the very liberal land law they had enacted, the colony would now, to a certainty, take a high position as a great exporter of corn. And while we were to supply the mother country with bread,

the facility with which land could be procured here was to attract from it a large accession to our population. These prophetic visions were always received with great applause by the auditors, and the ministers used to accept the incense of adulation with an engaging frankness which showed it to be all the more grateful to themselves from the happy consciousness that they had unquestionably earned it. We took occasion at the time to point out that there were economical difficulties in the way which could not be removed by Act of Parliament, even when combined with the sacrifice of millions sterling out of the public purse involved in the Esau-like disposal of the choicest blocks of the lands of the colony, their

own and their children's heritage, to the lowest instead of the highest bidder. The Opposition organs professing strong free-trade principles could descent learnedly on the dwarfing and blighting influence of Government fosterage of, or interference with, particular branches of industry in questions connected with the tariff or manufacturing interests, but had not the heart to apply their own principles to agriculture, which they seemed as desirous of promoting and "encouraging," by Government bounties, as the most thorough-going protectionist. Time, which tries all things, has, amongst others, put to the test our notable land system. We should sorely think that Opposition members can be altogether displeased that the result should be so entirely in accordance with their theory as free-traders, though decidedly unfavourable to their practical efforts as land-legislators. Consistent protectionists, however, cannot be expected to derive the same amount of consolation from this fact. These gentlemen practically maintain that the many should always suffer on behalf of the few, or in other words that the general public should be taxed and otherwise victimised for the benefit of each particular section of producers or would-be producers. This theory, wrong-headed as it is, still appears, when viewed in a particular aspect, to possess some traits which should deserve respect. It might be regarded as an attempt to carry out the Christian precept of bearing one another's burdens, and it might be urged that if all are taxed for the benefit of each, each would receive back as much as he had to pay for the support of others. One great objection to this system of mutual spoliation is, that those engaged in the staple industries, the producers of exports, cannot share in the profits, but bear all the losses. The value of their produce, depending on a foreign market, cannot be increased by local taxation, but can be seriously diminished through the enhanced price of all the articles they require in exchange. Now the production of exports is the great source of national wealth; the very fact of any goods being exported shows that the country has some special facility or advantage over others in producing them. Such industries are hardy plants, requiring nothing from the State, but contributing largely to the revenue both directly and indirectly. Their merits are consequently tolerably recognised by all civilised monarchies; but with democracies the feeling appears rather different. As some mothers are said to entertain the greatest affection for their most sickly, rickety, or deformed children, so our democracies exhibit a strong preference for those industries which the greatest amount of fostering and constant assistance can only keep alive in a feeble unhealthy state, while the self-supporting members of the family are continually being called on to minister to the wants and pampered appetites of the favourites. Perhaps they are ambitions of the title of "maternal democracy" in opposition to that of "paternal despotism." On behalf of the mining interest Mr. Joseph Jones protests, not unreasonably, against a system of taxation which prevents the working of much auriferous ground that could be made to pay if miners were not debarred from getting full value for their gold by protective taxes. He might, however, have complained further that mining had been discouraged, through the miners having been incited and indeed bribed by the State to give up producing gold, in order to seize the best lands occupied by the other great producing interest, and so diminish as much as possible the production of wool and mutton, in the vain hope of creating a great export of wheat. Our legislators, in their wisdom, clearly reversed the whole proverb, and considered a bird in the bush worth two in the hand. Unfortunately, too, their attachment to favourite theories is not of so half-hearted a nature as to be amenable to mere reason, or to yield readily, if indeed at all, to the teachings of experience. Protectionists are never much at a loss to explain away any little apparent failure in the practical working of their principles. They look through a microscope at any points that can be made to seem favourable to themselves, and, with their very eccentric ideas as to the relations between cause and effect, even in the most signal failures, they can always find some room for congratulation, if it is only that things are no worse than they find them, when the adverse circumstances or the machinations of the enemies of the people are taken into con-

sideration. Their remedy—a little more protection in this, that, or the other direction—is as invariable as Dr. Sangrado's prescription of phlebotomy and cold water, and about as efficacious. If the patient still suffers it only shows he has not had enough of it. As protection really means increased taxation of the general public, an extra price on articles of consumption to some, and deprivation to others, the two specifics must be allowed to have many points of resemblance. The agricultural element being a special favourite, and appearing to have fallen into rather a languishing condition, to give it relief the patient has been bled from both veins and arteries, or, at least, both in income and capital, by Custom House and Land Office practitioners, so that if there be any virtue in bleeding the body corporate, from the extent to which this has been effected, agriculture should have, by this time, arrived at a state of wonderful development and robust strength. It is now half-a-dozen years since the Amending Act was passed. All preliminary difficulties should long ago have been cleared away, so that the public, or even the minority, have now some right to inquire what equivalent they have received for the sacrifice of so much of their own and their children's property at a price far below its market value. It would seem only reasonable to ask—What average export of breadstuffs may we expect to derive from the "millions of acres, admirably adapted for the growth of cereals," thrown to the selector? What distribution of the population among the country districts has been effected by the formation of happy homesteads and rising townships on the agricultural areas? and also, What fresh influx of population, whether by sea or overland, has been attracted to the colony by a desire to participate in the advantages of our land system? This last question is, unfortunately, rather too easily answered; for a glance at the census returns shows that during the last three years our whole population has only increased by 6½ per cent., while during the three previous years the rate of increase was 9½, and during the three years before that it was 12¾ per cent. As regards population, therefore, it would appear that the Land Act has had anything but a beneficial effect. A little further progress in this direction would put us in the way of emptying the colony instead of filling it. The census returns do not indicate any great expansion of population in country districts, but on the contrary, they show it to have been accumulating at the metropolis and suburbs to the extent of over 212,000 out of a total of 739,000. This is a ratio so disproportioned to the population of all the rest of the colony, as to awaken the most serious apprehensions that a state of things so unhealthy can only result in a severe monetary crisis. Characteristically enough, it has been proposed by some of the free and enlightened to remedy this evil by throwing open some fresh land for selection—their faith in the nostrum appearing rather strengthened by the entire failure or contrary effect of previous applications. The true reason of this gravitation of the people towards Melbourne is probably to be found in the rate of wages of nearly all descriptions of labour being higher than the country districts can well afford to pay, so that they can only employ a very limited quantity. The metropolis, where all the great accumulations of capital are concentrated, would appear to be the only part of the colony rich enough to hold out much prospect of work, at present rates, to the unemployed in country districts. Unless the real producing interests, which our legislation has so seriously embarrassed, are favoured with another gleam of sunshine, the capital also will soon find itself unable to provide work at current rates for the numbers wanting employment. In this case, unless wages come down to the level the country can afford to give, great distress, scarcity of money, and depreciation in the value of property are quite likely to ensue.—*The Melbourne Economist*.

THE AGRICULTURAL HALL COMPANY. — Mr. Robert Leeds has been elected Chairman of this Company in the place of the late Mr. John Clayden. Mr. Leeds also succeeds Mr. Clayden as Chairman of the Nitro-phosphate Company.

WHEAT-GROWING IN AUSTRALIA.

The *Sydney Morning Herald* and its friendly contemporary the *Sydney Mail* are drawing mournful pictures of the condition of South Australian farming. It appears that off and on for years our farmers, if not the colony itself, have been shivering on the brink of bankruptcy, and that at no period was the danger more imminent than now. Wheat-growing, upon which we have so long trusted, is to be our ruin. The harvests of golden grain, instead of increasing our national wealth, as we have fondly hoped they were doing, have been luring us on to destruction. The cereal surpluses in which we have trusted are but a snare and a stumbling-block—an unfailing source of impoverishment. The fancied profits of farming are in reality losses, worse still, they are *ignes fatui*, beguiling the unwary into adopting a pursuit which has nothing but failures before it. The cardinal fact upon which our Sydney contemporaries build their doleful conclusions is that the average of our wheat crops perversely keeps below fourteen bushels to the acre. They have settled it in their mind that 5s. is the normal price of wheat per bushel, and that the land must produce over fourteen bushels at that rate or bear the sentence of unprofitableness. Following out their hypothesis on the basis of last year's returns, they satisfy themselves that "the few are gainers by wheat-growing, while the many are losers. In a country where the average is 15 bushels, a great many growers will produce 20, some 30, a few 40 bushels per acre, and, of course, a larger proportion will be below 20 bushels. But the gain of the few is so neutralised by the loss of the many that the country must be written down a loser by the contractor. We cannot resist the impression that she makes us a present of her working capital with every bushel of wheat when the average yield and the price per bushel do not exceed what has been stated." This piece of information is as disinterested as it is gratuitous, for it is admitted that it would be an ill day for New South Wales when South Australia gave up wheat-growing, because she can buy it cheaper of South Australia than, considering the liability of the plant to blight, she can grow it herself. In a question so intimately concerning the chief producing interest in the colony, it is worth while tracing to their source the arguments upon which the *Herald* and *Mail* found their belief in the unprofitableness of South Australian wheat production. The *Herald* was the first to enter the field as a critic, and spoke to the following effect: "In order to gain an accurate conception of this case, it is necessary to ascertain the average cost of producing an acre of wheat. The operations of ploughing and harrowing, reaping and harvesting, cannot be estimated at lower than 50s., the seed would not cost less than 10s., nor the rent less than 6s., which would bring the cost by the acre to £3 6s. This expenditure is open in many ways to increase, but scarcely admits of reduction. In the next place, no one will take exception to 5s. as the average price per bushel: at any rate, it is not too low. Well, five times 13 make 65; so that 13 bushels per acre, at 5s. a-bushel, will just return to the grower the cost of cultivation, minus 1s. per acre. If he gets 14 bushels he will be repaid, and pocket 4s. per acre for his year's trouble, which will be little enough encouragement to repeat the process. Supposing, then, that wheat cannot be grown at a profit unless 14 bushels be the yield, when the price is 5s. per bushel, it is clear that a heavy loss is sustained by the colony when the average yield per acre is only 11½ bushels. The loss is about 9s. per acre. Therefore an area of 604,701 acres would return less £272,114 19s. than the money expended upon it. The loss would be about 10d. per bushel, so that if 5,915,664 bushels are available for export, they will involve the country in a loss of £209,111 on these conditions. If wheat should be at 6s. per bushel, then 11½ bushels per acre will just repay the grower his outlay with 3s. in addition. Just at present the market is better; but usually the price is often below than above 5s. per bushel, so that it would be perfectly safe to conclude that when the average of South Australia is below 14 bushels, a loss is sustained more or less

in proportion as the yield recedes from that standard." The writer in the *Mail* might by the uninitiated be thought to have some special sympathy with his editorial brother of the *Herald*, for he endorses and follows up his argument in the most amicable way. "Perhaps," he says, "somebody may be inclined to question one premise upon which this calculation is made—that is to say, the cost of cultivation, &c. Of course, in a matter of this sort it is difficult to arrive at averages, for the Government does not require to know what the crop has cost. If they did, it is probable that they would receive replies as varied as those which reach us from the sugar-growers respecting cost of cultivation. Very few cultivators are accustomed to enter into any calculations at all; and when they are asked to compute the expense of any operation, ten to one they omit their own labour totally. They would leave out of sight the rent, saying that, 'being freeholders, they paid no rent.' Nothing would be charged for wear-and-tear, nor for interest on capital. And, further, a difficulty would be experienced in coming at the value of a pair of horses for a day's ploughing. It is therefore very probable that a good many cultivators, on beholding the expenses of putting in and harvesting a crop of wheat laid at 66s. per acre, would exclaim against it as much too high. We believe it would be found to be more rather than less were all the expenses taken into account; and although it may be sometimes less, it is generally, in our opinion, much more. From a reference to the South Australian journals we perceive the expense often put down at 75s. per acre, the labour consisting of nothing beyond ploughing, harrowing, sowing, and harvesting, the other expenses being confined to seed and rent. Had the above estimate included carriage, as it might have done, since the price obtained is what obtained at the port of delivery, it would have been somewhat increased." With all respect for the Sydney commentators, we beg leave to question their calculations and dispute the results. To place the cost of putting in the seed and reaping the harvest at 75s. an acre is, so far as our ordinary crops are concerned, a gross exaggeration. Take the case of a freeholder—and the bulk of South Australian farmers are, or up to this time have been, freeholders. He buys his land at say £2 an acre—a high average. He puts in a crop, attends to it, harvests it when ripe, and carries it to market, and the whole expense will very slightly exceed 50s. an acre. If he is fortunate enough to reap 14 bushels per acre, and can obtain 5s. a bushel for it on the mill, he realises a handsome profit. This is not a mere matter of theory, for it has been proved over and over again in the experience of South Australian agriculturists. Not only have they refused to starve on 14 bushels to the acre and 5s. per bushel, but they have continued to eke out a livelihood on much smaller returns. The advantage which the majority of our cultivators here have is, that both the climate and the character of the arable land permits of the free use of machinery. Moreover, the large extent of coast-line, and the proximity of our tilled territory to the sea, afford facilities for shipment of which few wheat-growing countries stand possessed. We have satisfaction in being able to assure our contemporaries that, so far from 14 bushels per acre being an unprofitable yield, it is one that, if vouchsafed yearly, would secure for our farmers a position of comparative affluence. It is a succession of such seasons as we have had of late, with averages of five or six bushels to the acre, that prostrates the wheat-growing interest. In ordinary times farmers with their teams can add somewhat to their income by doing other than farm work during slack times; but when year after year the labour and expense of putting in a crop receives five bushels to the acre as their recompense, the whole business becomes monotonous and disheartening. In one respect we can most heartily agree with *The Herald* and *Mail*. Cultivators of the soil do not pay half as much attention as they should to the science of farming. In a new country, where land is plentiful, labour scarce, and the processes of husbandry necessarily primitive, it is only natural that dependence should be placed rather on the extent of the area

under crop than on the artificially enhanced fertility of the soil. But the time for this description of agriculture has gone by here, and something like a rational system should be inaugurated. *The Herald* compliments the farmers of the Burra on the supposition that they have by judicious treatment maintained the richness of their lands against the exhaustive effects of frequent cropping; but the compliment is undeserved, for the county of Burra, although long settled, has but recently taken its place amongst wheat-growing localities. In the meantime, so long as we can obtain New South Wales orders for wheat at 6s. or 7s. a bushel, and so long as Providence grants us an average of from 12 to 14 bushels per acre, there is no danger of the colony, agriculturally considered, collapsing into insolvency. We do not pretend, like the Californians, to be able to produce wheat at 1s. 6d. a bushel, but we can grow it in ordinary seasons at a much less cost than 5s. a bushel.—*The Adelaide Observer*.

O B I T U A R Y .

DEATH OF MR. HENRY TRETHERWY, SEN.

This eminent agriculturist died at Grampound, in Cornwall, on Tuesday, July 25th, at the ripe age of eighty-four, having worn hale and active almost to the very last. For upwards of half a century there have been few men better known or more respected in the West than Mr. Tretthewy. As an agent for some extensive estates, his liberal management was such as to give equal satisfaction to, and to establish a mutual feeling of confidence between, owner and occupier; and, as has been said of him, good farming, good tenants, and lasting improvements have followed in his footsteps. As a land valuer and referee, Mr. Tretthewy stood equally high, while as a judge of Devon and Hereford cattle he was continually called upon to act at the meetings of the Royal Agricultural Society of England, the Bath and West of England, and the Royal Cornwall Society; although he eventually abandoned these two breeds for the Shorthorn, which he introduced into Cornwall. To Henry Tretthewy, moreover, is the credit due of being the first man who ever employed steam power in the practice of agriculture. It is just upon sixty years since an engine, by Trevithick, was placed at Trevithin, at the cost of £70, where it was used for thrashing, chaffcutting, and corn-bruising; so that Mr. Tretthewy must be regarded as one of the pioneers of his time, as he was not without honour in his own country. In the autumn of 1865 a testimonial, consisting of a portrait, by Knight, R.A., together with six massive silver salvers, and a tea and coffee service, also of solid silver, was presented at a dinner at Truro; one of the salvers bearing the following inscription: "To Henry Tretthewy, of Grampound, from a large number of landowners, yeomanry, and friends, as a mark of their high esteem, and in grateful acknowledgment of the substantial services he has rendered to agriculture, particularly in his native county of Cornwall." On this occasion the chairman, Mr. P. P. Smith, said: "Of all the eminent agriculturists in Cornwall, and there are many, Mr. Henry Tretthewy has, by general consent, been considered to be the greatest living benefactor to the interests of agriculture in his native county. His reputation, however, is not confined to Cornwall, for it extends to every portion of the kingdom in which agriculture is cultivated as a science. Mr. Tretthewy's career has been one of unblemished honour: it has been fraught with useful lessons to all; and he would never have attained his present position if he had not kept steadily before him the maxims of self-reliance and self-help."

Mr. Tretthewy was born on October 29th, 1786, and

by birth and breeding a true Cornishman, where the family is of very long standing. He leaves three sons—Mr. Henry Tretthewy, of Silsoe; Mr. William Tretthewy, who remains in Cornwall; and another son, Alfred, established in North Wales.

MR. JOSIAH PARKES, the eminent Agricultural Engineer, died at Freshwater Bay, in the Isle of Wight, on Wednesday, August 16, in the 79th year of his age. At one period Mr. Parkes took a very prominent part in advocating the more thorough drainage of land, and he may be regarded in this way as one of the pioneers of agricultural progress. He wrote and spoke with much effect, and deservedly earned the compliment of being elected an honorary member of the Royal Agricultural Society of England.

MR. RICHARD STRATTON, of Burderope, Swindon, and formerly of Broad Hinton, died at Winchester on Tuesday, Aug. 22, after a long illness, aged 62. Mr. Stratton was celebrated for his Shorthorn herd, which he cultivated with much care; as the prize lists of the Royal, the West of England, and other Societies have for many years past testified to the merits of his stock. Mr. Stratton also occasionally acted as a judge of Shorthorns at the Great Meetings of the three kingdoms, although from his being so continually an exhibitor not so frequently as he otherwise might have done. He was a highly honourable conscientious man, and his loss will be much felt, not merely by his friends, but in the agricultural world.

The death of Mr. WILLIAM WEDD TUXFORD took place on Friday, the 11th of August, 1871, in his 90th year. Mr. Tuxford was the head of the firm of Tuxford and Sons, the agricultural implement makers of Boston. We take the following from the *Stamford Mercury*: After the passing of the Municipal Reform Act, in 1835, the popularity of the deceased was strikingly manifested in the large majority by which he was elected to the Town Council. In the discharge of the important duties devolving upon him in this position he displayed the same conscientious independence and integrity of action as had characterised him through the whole of his political life. The deceased founded the well-known firm of Tuxford and Sons, general engineers and iron-founders, of Boston; but had previously established a scientific reputation as inventor of a process for "reeling" wheat, &c., by machinery. The firm soon acquired a wide-spread notoriety by the introduction of portable steam-engines, combined thrashing-machinery, and other high-class engineering productions. For many years the Royal Agricultural Society of England awarded their first prizes to Messrs. Tuxford and Sons' portable steam engines, and only a month ago it awarded the prize to the firm for their novel and improved windlass for steam cultivation, so that it may fairly be said the deceased died in harness, with honours upon him. In conclusion we may observe that Weston Tuxford, deceased's father, claimed to be a descendant on the maternal side of the Weston family mentioned in Pishey Thompson's *History of Boston*. In this the following record in connection with the Hospital of St. John of Jerusalem, formerly existing in Boston, occurs: "Two rather noted Knights of St. John of Jerusalem were connected with Boston. One was Sir Wm. Weston, the last Lord Prior of England, and holding that office at the time of the dissolution of his order in 1540. He was the son of Edmund Weston, of Boston. Henry 8th offered Sir William such portion of the goods and chattels belonging to the priory of Clerkenwell as he might appoint and a pension of £1,000, but he refused to receive it, and died on the very day the priory was suppressed." The remains of Mr. Tuxford were deposited in the family vault in St. Nicholas' church-yard, Skirbeck, on the 15th inst.

The death of Mr. HENRY HUMPHREY, of Amberley, near Arundel, Sussex, took place on Sunday, the 13th August, in the 69th year of his age. The deceased was well known and highly respected among the Southdown flockmasters, having always taken the greatest interest in the breeding and rearing of these sheep, on which his opinion and advice were not lost, as may be seen in the flock of his eldest son, Mr. Henry Humphrey, of Ashington.

OXFORDSHIRE DOWNS.

At the Winchendon Ram Sale, Mr. TREADWELL said perhaps he never had a lot with such good heads and colours. He had always been good with heads, and he believed that was a good starting point. Some persons liked big sheep and some small; but he never saw sheep too big for him if they were good. Some people liked sheep with a lot of wool, and some with little; but he never had too much wool for himself, if he did for other people. He always kept his sheep pretty fat. Mr. Gladstone said last year he would show the farmers how to fatten their sheep, and allowed them to steep barley for feeding purposes. He thought he had done right. He steeped his barley this year, and had the exciseman pay him a visit. He gave some of that barley to his sheep, and he believed it was one of the best things they could use. He and his brother-farmers had been subject to a great deal of annoyance from Mr. Gladstone and his friends; but in this case he must say that Mr. Gladstone had done some good.

Mr. COOK said he cultivated a very barren spot in Bedfordshire; but his sheep this year had gone into the market, and were well up to the mark. He had sent tegs into the market, which, he was assured by the butchers, weighed sixteen stone. Mr. Treadwell had supplied him a tup which had answered all his expectations. He (the speaker) was a farmer, and lived on a farm where his forefathers had for 490 years, and perhaps the family was in as good a position now as they were in the time of Charles and of James, and the rest of them; and since he had had a tup from Mr. Treadwell, he was able to compete with any of his neighbours. They were very badly-off for keep in Bedfordshire this year as they had very little clover or grass; but he was glad to see, as he was coming along the road from Aylesbury, that they had abundance of grass in that neighbourhood. It must be a very great gratification to them to know that they had kept enough to go on to Michaelmas. They did not know, as he had known the last two years, what it was to have to keep stock without any provender for them on the land. He was glad to see that they had an abundance.

Mr. R. J. NEWTON said it had been his lot, he did not say it boastfully, to be called upon, on more than one occasion, to judge sheep at the Royal Society, and that duty he always undertook, he would not say with diffidence, but with a determination to use whatever knowledge he possessed on the subject, with a view to arrive at a just and proper conclusion. It might be expected that he was going to make some remarks with respect to the merits of the Oxfordshire sheep, but he had not much special knowledge of that class of sheep; and he never yet gave a decision which he was not prepared to give his reasons for. He had expressed the opinion at Wolverhampton, and that opinion he would repeat, that the old sheep exhibited by Mr. Longland at Wolverhampton Show was, to his mind, the model of what a sheep ought to be. He was of good size, of excellent formation, capital quality of flesh, had good wool, and was of the proper colour. It was gratifying to see the breeding of sheep taken up in the spirit it was by the young farmers of the district. Speaking of Mr. Longland's sheep he forgot to mention that the first-prize shearing exhibited by Mr. Treadwell at Wolverhampton Show was by him; and the editor of *The Mark Lane Express* remarked that the Oxfordshire Down breeders did well to take their line of breeding from that sheep.

SHEEP SALES AND LETTINGS.

THE HOLME PIERREPONT LEICESTER FLOCK.—Mr. J. M. POTT offered for sale by auction on August 10 the flock of Leicester sheep, the property of Mr. Sanday, jun., Holme House, Nottingham. The flock, which is a portion of that which has made the name of Mr. William Sanday famous, consisted of 13 rams, 65 ewes, 20 shearing ewes, 36 ram-lambs, and 35 ewe-lambs. There was a good attendance. Before the sale commenced a luncheon was provided, at which Mr. Torr, of Aylesby, presided. Mr. Pott, in introducing the flock, said he had been looking round among those who, like himself, had been cultivating the beautiful neutral tint which it took more than 50 years to acquire, those grey hairs which

young men in all classes of life sought so anxiously to obtain, to see whether he could trace any faces who were present here six or seven and twenty years ago, when he had the honour to sell the flock from which this was descended—that of the late Mr. Burgess. He was here at the beginning to sell the first of the flock, and he was now here at the last. He then offered the flock, and the following is a return of the sale:

SHEARLING RAMS.

By A Y, dam by M M, g. d. by C N, g. g. d. by Y N, g. g. g. d. by G, g. g. g. d. by T, g. g. g. g. d. by A.—Mr. Mead, 35 gs.

By A Y, dam by H, g. d. bred by Col. Inge.—Mr. Massey, 20 gs.

By A Y, dam by M M, g. d. by X X, g. g. d. bred by Mr. Buckley.—Mr. Cranfield, 11 gs.

By A Y, dam by D X, g. d. bred by Col. Inge.—Mr. Cranfield, 12½ gs.

By A Y, dam by S T, g. d. by S C (prize ewe at Salisbury), g. g. d. bred by Mr. Buckley.—Mr. Birchall, 14 gs.

OLD RAMS.—THREE-SHEAR.

By Quid, dam by M M, g. d. by X X, g. g. d. by W X, g. g. g. d. by L N (dam of L X).—Mr. Langdale, 36½ gs.

TWO-SHEARS.

By L X, dam by S T, g. d. by C S (prize ewe at Salisbury), g. g. d. bred by Mr. Buckley.—Mr. Allen, 10 gs.

By D X, dam by M M, g. d. by W X, g. g. d. by No. 3.—Mr. Mann, 16 gs.

By L X, dam by H, dam bred by Col. Inge.—Mr. Harrison, 10 gs.

By L X, dam by M M, g. d. by X X, g. g. d. by G N, g. g. g. d. by A Y (dam of 90-guinea sheep).—Mr. Marshall, Rempstone, 8½ gs.

By L X, dam by X X, g. d. by G N, g. g. d. by A Y.—Mr. Messenger, 10 gs.

By L X, dam by M M, g. d. by X X, g. d. bred by Mr. Buckley.—Mr. Spencer, 9½ gs.

SIX-SHEARS.

By M M, dam by C X, g. d. by Y X, g. g. d. by G.—Mr. Cresswell, 32 gs.

The remainder of the lots made fair prices.

MR. MANSELL'S SHROPSHIRES.—The high position obtained by Mr. Mansell's rams at the Wolverhampton meeting, caused a large attendance at Adcot Hall. The first ram was a two-shear, Major, winner of first prize at R. A. S. 1871, by Conservative, bred by Mrs. Wadlow, which was also the sire of many of the best lots. It was purchased for Mrs. Beach, at 59 guineas; the second, also a two-shear, and winner of second prize at Oxford R. A. S., being let to Mr. C. Byrd, at 40 guineas. Mr. Kemp Bourne gave 32 guineas for a three-shear, which had been let in previous years to Mr. Coxon and Mr. Firmstone, at 40 and 45 guineas. Then followed the shearlings headed by the Wolverhampton second prize ram True Type, by Murgis, which was hired by Messrs. Masfen and Keeling at 71 guineas; Mr. C. Byrd taking the next at 40 guineas, at which figure a shearling was hired for Lord Bradford; and Mr. May secured a shearling for the season at 31 guineas. Other shearlings made 37 guineas (to Mr. Bostock), 25 guineas, and 20 guineas down to 5½ gs. the average for the forty-three being close on £20. The ewes did not make as much as was anticipated; four pens going to Lord Chesham at 67s. 6d. to 92s. 6d., each, two to Mr. German at 90s. and 92s. 6d., and others to Messrs. Felton, Roberts, Jukes, and Price, at from 80s. down to 60s. The average was about 72s. 6d. Mr. Cureton presided at the luncheon; and Mr. Preece conducted the sale.

THE FREEFORD SHROPSHIRES.—Mr. Coxon's sale was entrusted to Mr. Preece, and opened with Concor, R.A.S. prize sheep, which was let for the season for 101 guineas to Mr. German. No. 2, winner of first prize at Oxford R. A. S. used last year by Mr. German, went to Mr. Barnwell at 24 guineas; and the other aged sheep made from 16 guineas down to 10 guineas. The first shearing ram by Mansell's Mansion 3rd. goes to Hamilton, Duaboyne, at 41 guineas; and another by Commander, to Lord Howe, at 31 guineas. Others sold at 24 gs. 20 gs. 19 gs. 16 gs., down to 6 guineas; the average being £17 4s. The ewes ranged from 135s. to 60s., several pens making 100s. or upwards.

THE OXFORD RAM SALES.—At these annual sales nearly 800 rams and other sheep changed hands. The auctioneers were Messrs. Jonas Paxton and G. Castle, J. and W. Seroggs, Franklin and Gale, and Mr. J. A. Mountford. There was a large attendance of farmers and breeders from this and the neighbouring counties. The principal buyers were the Duke of Marlborough, Sir H. W. Dashwood, Bart., Messrs. H. Barnett, M.P., J. Treadwell, G. Wallis, Longlands, J. Bryan, E. Harper, Gerring, Hunt, Denchfield, Lane, Case, H. Stilgoe, Franklin, Eagle, N. Stilgoe, Wiggins, Cheeseman, C. J. B. Marsham, G. T. Drake, Barlow, Gomm, Athawes, Woodley, Webster, Brookes, Mumford, A. Hopcraft, Mayford, Shepperd, Dover, Lencars, White, Lough, Chas. P. Duffield, G. Drake, A. Gillett, Peacock, James, Holliday, Bolton, Lyford, Moulder, Shrub, J. Waters, Marriott, Latham, Bliss, Rayer, Walker, Horley, W. Fenmore, R. Haynes, A. Willesdon, Brown, Fritchett, W. Shipton, Swain, Hone, Freeman Hobbs, Frampton, J. Gale, Hitchman, Phillips, P. Slatter, J. Greaves, H. Horwood, W. Chillingworth, Daniels, Ing, Budeock, Kimble, E. Harper, Johnson, C. Edmonds, Allin, F. Davenport, Fisher, Parrott, Cook, Strange, Syder, Filcher, Woodward, Farebrother, Walford, Kingham, Hammans, Reynolds, Gny, Humphries, Boulton, Conling, Heath, Clifford, Glemsford, Crook, Budd, J. T. Gale, W. Parsons, &c. The first lot disposed of by Messrs. Paxton and Castle consisted of 45 Oxfordshire Down ram lambs, the property of Mr. Blake, of Botley. These realized an average of £6 16s., the highest price being 11½ guineas. The next consisted of 40 Oxfordshire Down shearlings, the property of Mr. Joseph Roberts, of Curbridge. These sheep fetched remarkably high prices, the average being £16 19s., and is the highest average for this class of sheep that was ever obtained. The highest priced sheep was sold to Mr. Treadwell, of Winchendon, for 42 guineas. The next highest was sold to Mr. Wallis, of Shilford, for 41 guineas. Mr. Longlands purchased one at 33 guineas, and two were sold to Mr. Baldwin and Mr. J. Bryan for 28 guineas each. The Oxfordshire Down shearing rams, the property of Mr. G. Wallis, realised an average of £13 11s. 6d.; the highest figure was 21 guineas, the buyer being Mr. Hobbs, of Maiseyhampton, and one was sold to the Duke of Marlborough for 13½ guineas. The 16 Cotswold ram lambs belonging to Mr. C. Gillett, of Lower Haddon, fetched an average of £7 12s. 3d. The highest figure reached was 13 guineas, the purchaser being Mr. C. Duffield, of Marcham. Mr. G. Drake, of Biguell, purchased one at 11 guineas, and Mr. Brooks, Fyford, one at 10 guineas. Twelve Oxfordshire Down shearing rams, the property of Mr. W. H. Hunt, Charlbury, were disposed of at an average of £12 14s. 6d. The best was sold to Mr. Richard Eagle, Northmore, for 18 guineas, and one to Mr. Prickeitt, for 13½ guineas. The Oxfordshire Down shearing rams, the property of Mr. C. Gillett, of Coote House, realized an average of £10 The highest figure was 15½ gs., the buyer being Mr. Budeock, of Abingdon. The Oxfordshire Down ram lambs belonging to Mr. J. S. Parker, of Illey, averaged £6 5s. 9d. One was sold to Sir Henry Dashwood for 13 gs., and one to Mr. Allin, Littlemore for 10 gs. Thirty-nine Oxfords, the property of Messrs. W. and T. Franklin, of Ascot, were disposed of at an average of £6 8s. 10d. The highest figure was £15 10s., the purchaser being Mr. Joseph Gale, of Cuddesdon; Mr. Franklin, of Cunmor, purchased one for £11 10s. The Cotswold ram lambs belonging to Mr. W. H. Gillett, of Southleigh, averaged £5 2s. 6d. each. Mr. Bolton, of Fystock, purchased the best for 8½ gs. The Cotswold shearing rams, bred by Mr. Lord, of Eynsham. One was sold to Mr. G. T. Drake for 15 gs., Mr. Barlow bought one for 13½ gs., and Mr. C. J. B. Marsham one for 12½ gs. The Cotswold ram lambs, the property Messrs. West, of Blethington, averaged £4 6s. 6d. The highest figure was 7 gs., the purchaser being Mr. Walker of Yarn-ton. Messrs. Franklin and Gale submitted about 50 Oxfordshire Down ram lambs, the property of Mr. H. Gale, of Cuddesdon, and they averaged £6 3s. 3d. each, the highest price being 16 gs., and the lowest 3½ gs. Mr. J. T. Gale, of South Minster, Essex, purchased the highest priced sheep; they also sold 250 ewes and theaves, and 100 ewe lambs, the property of Mr. W. Parsons, of Elsfeld, being the whole of his breeding flock of Oxfordshire Downs. The ewes and theaves made from 52s. to 73s. per head, and the lambs from 35s. to 70s. Messrs. J. and W. Seroggs offered 35 Oxfordshire Down ram lambs, and eight shearlings, belonging to the executors of the late

Mr. F. Pratt; they realised an average of 8½ gs. Mr. J. A. Mumford submitted about 20 Oxfordshire Down ram lambs, from the flock of Mr. J. K. Shrimpton, of Easington. The average of this lot was £4 4s., the best lamb fetching 6 gs., the purchaser being Mr. Mumford, of Boarstall.

SHEEP SALE IN SUFFOLK.—Mr. R. Bond sold 2,000 lambs and sheep by auction, at Sutton, when the attendance of purchasers was large. 140 half-bred lambs from Mr. A. Smith's Rendlesham farm, sold at 41s., 40s., 36s. 6d., and averaged from 36s. to 37s. each; 80 crones from the same consignor averaged 35s. 6d.; 85 crones sent by Mr. R. Welton averaged 44s.; 350 half-bred lambs from Mr. W. Borrett's, of Tunstall, commenced at 31s., and averaged 30s. 9d.; 140 consigned by Mr. W. Toller, of Gedgrave, averaged the same money; 350 blackfaced ewe and wether lambs from Mr. J. S. Clarke, of Eyke Rookery, commenced at 31s. 6d., 30s., and averaged 26s. each; 80 crones from the same farm averaged 31s.; 80 Down lambs and 40 crones from Butley Abbey sold freely, the latter averaging 44s. 6d., and blackfaced lambs 29s. 6d.; 70 blackfaced shearing ewes sent by Mr. Joseph Smith, of Hasketon, averaged 68s. 6d., the purchasers being Mr. Robert Welton and Mr. C. K. Cordy; shearing blackfaced rams, also sent by Mr. J. Smith, sold at from £4 10s. to £8 8s.; 70 blackfaced refuse wether lambs from Mr. W. Walker's, Ferry Farm, Sutton, averaged upwards of 25s.; fat sheep, consigned by Messrs. R. and A. Crisp, of Gedgrave Hall, averaged 62s. 6d.; 200 half-bred lambs, 32s. 9d.

THE COLD HARBOUR RAMS.—Messrs. Franklin and Gale disposed of, by auction, at Ilsey sheep fair, a lot of Hampshire Down ram lambs, from the flock of Mr. A. de Mornay. The trade was not so brisk as expected. A ram was let from September the 1st to November the 1st, at 24½ guineas, to Mr. Wilson, of Newbury; and another sold for 20 guineas to Mr. Boardman; Mr. Hatt, of Cadwell, was the purchaser of 13½. The lowest price was £4 14s. 6d.; the average about £6 6s. 6d. A few older sheep were sold at an average of £6 13s.

BULBRIDGE RAM SALE.—At the annual sale and letting of Hampshire ram lambs and rams, the property of Mr. James Rawlence, of Bulbridge. Messrs. Ewer and Winstanley, of Salisbury, were the auctioneers. The following were among the prices realised:—For the season: 60 gs., Mr. Morrison, Fonthill; 51 gs., Mr. Olding; 36 gs., Mr. Moore, Littlecott; 21 gs., Mr. D. Chen and Mr. Syms, Sherborne. For a month: 21 gs.; Mr. Kirby, 20 gs., Mr. Walter, Bearwood. The average was over £22 a head. At the ram lamb sale the following were among the prices obtained:—Single: 30 gs., Mr. Melsome, Maddington; 27 gs., Mr. Walter; 17½ and 17 gs., Mr. W. Cordery, Hazley; 17 gs., Mr. Ferris, Manningford; 14½ gs., Mr. Canning; 14 gs., Mr. Milton, Wiveliscombe; 13½ gs., Mr. Allen, Pyt House; and for a pair Mr. Cordery gave 19½ guineas. The average of the 81 lots was over £10 6s. a head. Of two-tooth rams the highest figure given was by Mr. Dibben, Bishopstone, 37 gs. The average was £13 16s. 6d. There were seven two-tooth rams for sale, one of which went for 17gs. to Mr. Syms, Sherborne, and another for 15½ gs. to Mr. Lovell, of Northampton. The total amount realised was over £1,600.

THE MARKSHALL SHEEP LETTING.—The annual letting of Mr. T. Allen's long-wooled rams was held at Markshall, near Norwich. The ram lambs offered made from £3 to £3 12s. each, the shearlings from £5 to £14 5s. each, and the two-shear sheep from £5 5s. to £6 each. The averages were: Ram lambs £3 5s. 5d. each, shearlings £7 15s. 9d. each, and two-shears £5 12s. 6d. each.

THE MARHAM COTSWOLDS.—At Mr. T. Brown's annual letting 80 ram lambs, 80 shearlings, and 10 two-shear sheep were let by Mr. Simpson. The prices made for the lambs varied from 4½ to 21 gs.; for the shearlings, from 6½ to 34 gs.; and for the two-shears, from 6 to 10½ gs. The average for the lambs was £7 0s. 3d.; for the shearlings, £10 14s.; and for the two-shears, £7 16s.

THE WEST DERHAM LONG-WOOL SHEEP.—Mr. Hugh Aylmer's annual letting took place on Friday, July 28. All the lambs were let. 100 lambs realised from 5 to 20 guineas, averaging £6 10s. 3d.; 80 shearlings from 6½ to 30 guineas, average £10 3s. 9d.; and 10 two-shears from 5½ to 10 guineas, average £6 15s.

THE MIDDLE ASTON COTSWOLDS.—The fortieth sale of the Middle Aston rams, with which the name of the late Mr. Cother is inseparably connected, took place at Hopcraft's Holt. There was a large gathering, and the weather was exceedingly favourable. Many of those present had, doubtless, come to secure some of the Middle Aston blood, it being the last opportunity they would have of doing so. There were sold nine old sheep and 55 shearhogs. The highest price was 33 gs., bought by Mr. W. Lane, of Broadfield; the lowest, 5½ gs., and the average £11 17s. 6d. The purchasers were Messrs. Fletcher, Rollright; Holloway, Baynard's Green; Chalcote; Gibbons, Tackley; Checkley, Broghoro'; Platt, Broghoro'; Newton, Campsfield; R. Phillips, jun., Biester; Cantrill, Stoke near Windsor; Joseph Gibbs, Ascot; Mertin Gibbs, Ascot; Pettipher, Rollright; Westover, Dun's Tew; W. Mansfield, Hethe; Mather, Chadlington; Edgington, Merry's Court; C. T. Eve, Sandford; G. Garne, Churchill; Gregory, Enstone; C. Gillett, Tangley; R. Abraham, Little Tew; Kimber, Tracey Farm; J. Wady, Warkworth; Hewer, Fair Green; Gurrier, London; Savage, Sarsden; Chamberlain, Alderbury; T. Berridge, Pimlico Farm; T. Root, Beaconsfield; J. Greaves, Swalcliffe; S. Smith, Somerton; Patullo, Aynhoe; R. Berridge, Somerton; Adkins, Rousham; W. Edwards, Over Norton; Guy, Chipping Norton; R. Hall, Barford; Craddock, Lineham; and Stone.

MR. C. WATERS'S RAMS.—The sale of Hampshire Down ram lambs, the property of Mr. Charles Waters, of Down Farm, Salisbury, took place at the Market-house, Salisbury, Mr. John Waters being the auctioneer. The sale comprised 56 ram lambs. The prices realized were 16½ gs., 13½, 12½, 12, 10, 9, 8 gs., &c., down to 3 gs., at which price one lamb only was sold.

MR. W. CHILLINGWORTH'S OXFORDSHIRE DOWN FLOCK.—This flock was submitted to public competition on Thursday, July 27, by Messrs. Franklin and Gale. The ewes and theaves were first disposed of. The highest bids were 30½ guineas for a pen of five, knocked down to Mr. Underwood; 26½ guineas for two ditto, to Mr. Hanbury and Mr. Cooling respectively; and 25½ guineas for two ditto, bought by Mr. H. Gale, of Cuddesdon, and Mr. T. Shrimpton, of Crendon, respectively. The 79 lots produced £1,449—an average of £18 7s. per pen, or £3 13s. 4d. per sheep. A few pens of ewe lambs were bought in at 12½ guineas, but the remainder exceeded that amount, ranging as high as 19 guineas—a purchase of Mr. Longlands, Mr. Hobbs coming next with 15 and 16 guineas. The 30 pens fetched £428—an average of £14 5s. per pen, or £2 17s. for each ewe lamb. The biddings for the ram lambs were spirited; Mr. Parker, of Headington, led with 2½ guineas; Mr. Hanbury secured another at 20½ guineas; Mr. Bradford one at 15 guineas; while to Mr. Latham and Mr. Hewitt's biddings the hammer fell at 13½ guineas. Double figures were of frequent occurrence. The 65 ram lambs produced £515, or £7 18s. 6d. the average. The total sum realized for the 605 was about £2,300.

MR. J. TREADWELL'S OXFORDSHIRE DOWNS.—The annual sale of shearing rams from the flock of Mr. Treadwell took place at the Model Farm, Upper Wynchendon, and was by far the most successful that has yet taken place. The attendance, as well as the prices, were better than ever known before. One ram, at 33 gs., was purchased by Mr. Bryant. The others ranged from nine to eighteen guineas. The highest figure ever reached previously was 27 gs. The sheep, 58 in number, sold at an average of £11 6s. 9d. each. The sale was conducted by Mr. Mumford.

COTSWOLD RAMS.—At the first annual sale of Mr. Wm. Lane, of Broadfield, fifty-four sheep were sold at an average of £18 2s. 6d. There was a large attendance of agriculturists, including breeders from Norfolk and other distant counties. On the following day the sale at Mr. Robert Garne's, at Aldsworth, was held. Fifty sheep were sold and four let, making an average of £19 1s. 1d. There was a large company. One shearing ram was let to Mr. J. Brown, of Norfolk, for 82 guineas. On Tuesday there was held the annual sale at Mr. James Walker's, of Northleach. Thirty-eight sheep were sold, and realised an average of £17 13s. 2d. Mr. George Fletcher's sale was held on Wednesday, at Shipton, near Cheltenham, and drew together a large company. The prices realised were not so high as was expected. The average of

the 47 rams offered was 12 guineas. Mr. W. Lane, of Broadfield, purchased one at 51 guineas. Mr. E. Fowler at 41 guineas, Mr. Mace at 30 guineas, Mr. Jas. Walker at 25 guineas, Mr. Pope at 20 guineas, Mr. Smith, of Sherborne, at 19 guineas, and Mr. Craddock at 18 guineas. The lowest priced one was 6 guineas. Mr. James Villar officiated as auctioneer.

MR. SCHWANN'S HAMPSHIRE DOWNS.—This flock was sold at North Houghton Manor by Mr. John Waters, of Salisbury. For ram-lambs the highest prices for single lambs were from 16½ gs. down to 10½ gs., and four pair from 15 gs. down to 10 gs., the average of the ram lambs being £5 15s. 3d. each. The chilver lambs realised from 76s. down to 43s. per head, the average being 49s. 3d. per head. For two-teeth ewes the prices were from 86s. down to 55s. per head, this age averaging £3 3s. 6d. For four-teeth ewes from 102s. down to 58s. per head, averaging £3 6s. 5d. The six-teeth ewes brought from 88s. down to 56s. per head, and the average was £3 6s. 7d. Full-mouthed ewes from 65s. down to 49s. per head, averaging £2 17s. 8d. Amongst the purchasers were Mr. J. Moore, Mr. Warwick, Mr. Olding, Mr. Barton, Mr. Taunton, Mr. F. Budd, Mr. G. K. Budd, the Marquis of Winchester, Mr. C. Saunders, Mr. Carpenter, Mr. George Edney, Mr. C. Stone, Mr. M. H. Marsh, Rev. T. Best, Mr. Lunn, Mr. Bone, Messrs. Tory, Mr. Twynam, Mr. Ringer, Mr. Kirby, Mr. Courtney, Mr. White, Mr. Crook, Sir Fowell Buxton, Mr. Lewis, Mr. Titt, Mr. Neate, Mr. Sprake, and Mr. Friend.

MR. COLE'S HAMPSHIRE DOWNS.—Lot 1 was let for a month at 9 gs., Lot 2 for the same time 8 gs., others made 6½ gs. and 5 gs., one only being let under, viz. 4½ gs. The ram-lambs for sale then followed. Lot 13 made 15 gs., lot 15 8 gs., others made from 7½ gs. down to 5 gs., no animal being sold under that sum. The principal purchasers were Messrs. Parham, Raxworthy, Rogers, Stiles, Jefferys, A. Jefferys, John Coles, Duffosse, Mace, Pullen, Collings, Dyke, Croom, Baker, Hinton, Britten, Millard, Carpenter, Scott, Seaine, and Weaver.

MR. DIBBEN'S HAMPSHIRE DOWNS.—Messrs. Ewer and Winstanley, of Salisbury, put up to sale by auction, at Salisbury, about 100 ram-lambs and rams, the property of Mr. E. Dibben, of Bishopstone. There were six lots of rams to be let until the 1st of September, and one ran rapidly up to 62 gs., at which point the ram jumped over the hurdles and knocked down two or three of the bystanders. Still the biddings went on, and eventually it was knocked down at the extraordinary price of 70 gs. to Mr. Budd, at Hatchwarren, Wiltshire. The other five went at the following prices: 7½ gs., Mr. Jones; 9 gs., Mr. R. Coles; 9½ gs., Mr. Barton; 8 gs., Mr. Olding; 8 gs., Mr. Jones. Lambs sold as follows: 11½ gs., Mr. Blake, Chitterne; 12 gs., ditto; 14 gs., Mr. Coles; 6½ gs., Mr. Brown, Stockton; 6½ gs., Mr. Jones; 7½ gs., Mr. Jonathan Taunton, jun.; 6 gs., Mr. Edwards; 11½ gs., Mr. E. Pimekney; 23 gs., Mr. J. Fleetwood; 17 gs., Mr. Olding; 11 gs., Mr. Pern; 10½ gs., Mr. Pimekney; 24 gs., Mr. W. Taunton.

MR. E. HANDY'S COTSWOLDS.—Mr. J. Villar sold at Sierford, 50 Cotswold rams, which made an average of £12. The average last year was £10 8s. 5d. for the same number of sheep. At Coates, Messrs. Moore and Hill sold 41 shearing rams for Mr. Henry Howell, which realised an average of £9 12s. 7d. Last years average was £10 11s. for 27 sheep.

THE YORKSHIRE LEICESTER RAM SHOWS.—The season has commenced well, and there is promise of a revival from the extreme depression (mainly caused by drought and numerically small flocks) of last year. The inaugural show, that of Mr. James Hall of Scorbrough, near Beverley, has been held under successful circumstances. The shearlings averaged 8½ gs., the highest being £32, to Mr. Jordan, of Eastborne. The two-shear sheep averaged £8, and the aged sheep 8½ gs. per head. The 86 sheep let brought a total of £722, or an average of £8 8s. all round.

Lord Chesham has sold the whole of his draft ewes to Mr. Richard Millard, Thurgarton Priory, Notts, and his lordship has selected a ram-lamb from the flock of Mr. Thos. Nock, of Sufton Maddock, at 35 guineas, being one of the pen of five which obtained second prize at the Wolverhampton meeting.

SALE OF THE WESTDEAN (MR. PINNIX'S) SOUTHDOWN FLOCK.—On August 24th one of the best bred flocks of Southdowns in existence was brought to the hammer by Messrs. E. Wyatt and Son, the well-known auctioneers of Chichester. The flock in question was that of the late Mr. J. A. Pinnix, of Whetdean, a pretty village five miles from Chichester, and which must not be confounded with the village of the same name near Eastbourne, also a noted sheep-breeding locality. Though the flock of Mr. Pinnix was so well bred, it was not a celebrated flock in the popular sense of the word, such as Lord Walsingham's, the Duke of Richmond's, Mr. Rigden's, &c., simply because Mr. Pinnix always abstained from exhibiting at agricultural shows; but among breeders no flock was more celebrated for excellence, and, as was justly remarked by the auctioneers, "The testimony to the excellence and quality of the flock being fully appreciated by Southdown breeders, has been evinced these many years past by the fact that in letting rams no breeder has been more successful, or let so many annually." Under these circumstances it is not surprising that a large number of the leading flock-masters of Sussex and neighbouring counties, as well as others from greater distances, should have repaired to Westdean on Thursday, when the flock was sold, in spite of the unfavourable weather. After the sheep had been keenly scrutinised an adjournment took place to luncheon. At the conclusion of the repast Mr. Wyatt, who conducted the sale, made a few introductory remarks and then proceeded to business. Yearling Ewes: Lots of five two-tooth ewes were sold to Messrs. Heasman at £6 10s., 85s. and 65s.; to Mr. Clark (for the Duke of Richmond) at £5 5s.; to Mr. Fowler (Whitchurch) at 8s.; to Mr. Harris (Donnington) at £5 and 75s.; and to Mr. Carew Gibson at 75s. Lots of ten ditto were sold to Mr. Green (of Herefordshire) for 80s., 72s. 6d., and 70s.; to Mr. Gorham (Cackham) at 67s. 6d.; Mr. J. Wyatt (Nutbourne) 65s. and 60s.; Mr. Sparkes (Wittering) at 63s.; Mr. Gibson at 60s.; Mr. Woodbridge (Goodwood) a-57s. 6d. and 67s. 6d.; and Mr. Disbury at 65s. Two-year-old Ewes: Lots of five 4-tooth ewes were sold to Mr. Fookes at 90s.; Mr. Gibson 84s.; Mr. Homer (Atthillhampton) 60s.; Mr. G. Pittis (Wymering) 75s.; Mr. Stone (Lancing) 67s. 6d.; and Mr. Whitcheer (Stoughton) 65s. Lots of ten were sold to Mr. Woodbridge at 62s. 6d.; to Mr. R. H. Ellman (Laudport) 67s. 6d. and 63s. 6d.; Mr. Fookes 73s. 6d.; Mr. S. Beard (Rottingdean) 75s. and 67s. 6d.; Mr. Green 72s. 6d. Lots of twelve were bought by Mr. Gorham at 70s., and Mr. Disbury 67s. 6d. Three-year-old Ewes: Lots of five 6-tooth ewes were bought by Mr. Carew Gibson at 90s. and 77s. 6d.; Mr. Fowler 85s.; Mr. Fookes 80s.; Mr. Dearing (Lodsworth) 75s.; and Mr. Padwick (Thorney) 70s. Lots of 10 were bought by Mr. Homer at 70s., Mr. T. Harris 75s., Mr. G. Drewitt (Oving) 77s. 6d., Mr. Stone 70s., Mr. Green 75s. and 70s., Mr. Woodbridge 67s. 6d., Mr. J. Saxby (Northeast) 70s., Mr. Davis (for Lord Dacre) 67s. 6d. Full-mouthed ewes: Lots of five were sold to Mr. Green at £7 10s., Mr. Woods (Crows Hole) £6, Mr. Woodbridge £5 5s., Mr. Stone 77s. 6d., Mr. Disbury 70s., Mr. Carew Gibson £5 5s. Lots of ten were bought by Mr. Fookes at 72s. 6d., Mr. Porter (Foxholt) 72s. 6d. and 70s., Mr. Marshall (Godalming) at 72s. 6d., 67s. 6d., and 65s., Mr. Dearing 70s., Mr. R. Lucas (East Marden) 67s. 6d. and 62s. 6d., Mr. Davis (for Lord Dacre) 70s., Mr. Woodbridge 65s., Mr. Stone 67s. 6d. Broken-mouthed ewes: Lots of six were bought by Mr. Bird (Sutton) at 77s. 6d., and Mr. Dearing at 67s. 6d. Yearling rams: A yearling ram, by a son of No. 10, a Goodwood sheep, Mr. T. Cooper, Norton, 32 guineas; ditto, Mr. Barclay, Leatherhead, 21½ guineas; ditto, by T. Ellman's No. 3, Mr. T. Harris, 23 guineas; ditto, by a Westdean sheep, son of No. 10, from Goodwood, Mr. Tickner, Boreham Street, 15 guineas; ditto, by a Westdean sheep, No. 6, son of No. 10, from Goodwood, Mr. Green, 14 guineas; ditto, by No. 9, a grandson of T. Ellman's No. 16, Mr. Stone, 15½ guineas; ditto, ditto, Mr. Styers, 17½ guineas; ditto, ditto, Mr. Green, 10½ guineas; ditto, ditto, Mr. Styers, 11½ guineas; ditto, by the same as lots 1 and 2, Mr. Woods, 12 guineas; ditto, by lot 79 in this sale, grandson of Mr. T. Ellman's No. 2, Mr. Richards, Wimbourne, 15 guineas; ditto, by No. 6, a Westdean sheep, son of No. 10 from Goodwood, Mr. Richards, 12 guineas; ditto, ditto, Mr. Hodson, West Blatchington, 21½ guineas; ditto, ditto, Mr. Ashby, Eastdean,

near Lewes, 16 guineas; ditto, ditto, Mr. Elliott, Houghton, 13 guineas; ditto, ditto, Mr. Hipkin, Racton, 12 guineas; ditto, ditto, Mr. Tickner, 20 guineas; ditto, by lot 64, son of No. 10 from Goodwood, Mr. Hipkin, 15 guineas; ditto, by No. 10 from Mr. J. Pinnix, Walderton, Mr. Homer, 28½ guineas; ditto, ditto, Mr. Fookes, 20 guineas; ditto, ditto, Mr. Whicher, Stoughton, 15½ guineas; ditto, by No. 10, a Goodwood sheep, Mr. R. H. Ellman, 10½ guineas; ditto, ditto, Mr. J. Saxby, Northeast, Lewes, 10½ guineas; a yearling ram, by No. 10, a Goodwood sheep, Mr. Ashby, 23 guineas; ditto, ditto, Mr. Hodson, 14½ guineas; ditto, ditto, Mr. R. H. Ellman, 15 guineas; ditto, by a Westdean sheep, Mr. Hodson, 19 guineas; ditto, ditto, Mr. Richards, 15 guineas; ditto, by No. 10, a Walderton sheep, Mr. Richards, 16½ guineas; ditto, by No. 8, a Westdean sheep, son of No. 10 from Goodwood, Mr. Ashby, 30 guineas; ditto, by No. 3, a Westdean sheep, son of No. 10 from Goodwood, Mr. T. Harris, 11½ guineas; ditto, ditto, Mr. T. Harris, 12½ guineas; ditto, by No. 10, a Walderton sheep, Mr. Fookes, 13 guineas; ditto, ditto, Mr. Woodbridge, 12½ guineas; ditto, by a Westdean sheep, Mr. Styers, 11 guineas; ditto, by lot 64, son of No. 10 from Goodwood, Mr. Woods, 20 guineas. Two-year-old Rams: A two-year-old ram, by lot 64, son of No. 10 from Goodwood, Mr. Barclay, 44½ guineas; ditto, son of lot 70, a Walderton sheep, Mr. Stening Beard, 14 guineas; ditto, son of No. 10 from Goodwood, Mr. Carew Gibson, 52½ guineas; ditto, Mr. J. Saxby, 12 guineas; ditto, Mr. Wheeler, 17½ guineas; ditto, Mr. Fookes, 20 guineas; ditto, Mr. Parlett, Bury, 15 guineas; ditto, Mr. King, Westburton, 18½ guineas; ditto, Mr. J. Saxby, 20 guineas; ditto, Mr. Tickner, 15½ guineas; ditto, Mr. J. Saxby, 14½ guineas; ditto, ditto, Mr. Ashby, 29 guineas; ditto, by No. 4, a Westdean sheep, Mr. S. Beard, 21 guineas; a two years old ram, by lot 64, son of No. 10 from Goodwood, Mr. Tickner, 13 guineas; ditto, by No. 5, a Westdean sheep, Mr. Disbury, 11½ guineas; ditto, by a Westdean sheep, Mr. Styers, 11 guineas; ditto, ditto, Mr. Green, 20 gs.; ditto, ditto, Mr. Wheeler, 18 gs.; ditto, by No. 3, son of No. 10 from Goodwood, Mr. Woodbridge, 15½ guineas; ditto, ditto, Mr. Woods, 21 guineas; ditto, by No. 5, a Westdean sheep, Mr. Parlett, 10 guineas; ditto, ditto, Mr. Saxby, 14 guineas; ditto, by lot 64, son of No. 10 from Goodwood, Mr. Fletcher, 8 guineas; ditto, by No. 10 from Goodwood, Mr. Fletcher, 10½ guineas; ditto, by No. 3, son of No. 10 from Goodwood, Mr. Saxby, 11 guineas; ditto, ditto, Mr. Turner, 8 guineas; ditto, by No. 10, a Walderton sheep, Mr. Davis, 13½ guineas; A two-year-old Ram, by No. 10, from Goodwood, Mr. Clark, for the Duke of Richmond, 41 guineas; ditto, ditto, Mr. Green, 24½ guineas; ditto, by son of T. Ellman's No. 2, Mr. Barclay, 14 guineas; a three-year-old ditto, by No. 5, a Westdean sheep, by Mr. T. Saxby, 10 guineas; a five-year-old ditto, by No. 12, a Westdean sheep, Mr. Lamb, 8 guineas; a four-year-old ditto, by T. Ellman's No. 16, Mr. Cote, 7½ guineas; ditto, a Walderton sheep, son of No. 12, Westdean, Mr. W. Fogden, 9 guineas; a five-year-old ram, by T. Ellman's No. 16, Messrs. Heasman, 25 guineas; a three-year-old ditto, by No. 5, a Westdean sheep, Mr. W. Hipkins, 8½ guineas; ditto, by No. 1, a Westdean sheep, Mr. Porter, 9 guineas; ditto, by T. Ellman's No. 2, Mr. J. Saxby, 11 guineas; a four-year-old ditto, by No. 12, a Westdean sheep, Mr. H. Hipkins, 8 guineas; a three-year-old ditto, by No. 10, from Goodwood, Mr. Ashby, 10 guineas; ditto, Mr. Ashby, 27 guineas; ditto, Mr. Humphry, 23½ guineas; a four-year-old ditto, by a Westdean sheep, son of T. Ellman's No. 2, Mr. Drewitt, 11 guineas; a five-year-old ditto, by a Westdean sheep, son of T. Ellman's No. 16, Mr. J. S. Turner, 18 guineas; a four-year-old ditto, by No. 10, from Goodwood, Mr. Heasman, 7 guineas; ditto, Mr. Cote, 9 guineas; a three-year-old ditto, by a Westdean sheep, Mr. H. Hipkin, 11 guineas; ditto, by No. 2, a Westdean sheep, grandson of T. Ellman's No. 16, Mr. Bird, 11½ guineas.

THE SCOPWICK RAMS.—The celebrated flock of long-wool Lincoln rams, belonging to Mr. C. Clarke, of Scopwick, was submitted to public competition on August 24th by the Messrs. Briggs. As a breeder Mr. Clarke has long occupied a foremost rank, and for many years he carried off the principal prizes at the annual meetings of the North Lincolnshire Agricultural Society. Latterly, however, he had retired from the list of exhibitors, being content to rest on his well-earned laurels, and the estimation in which his flock has been held

has been proved from the fact that it has been resorted to, at the private lettings, by the principal ram-breeders of the county. When it was announced some time ago that Mr. Clarke had determined to sell the whole of his rams by auction, in consequence of his intention to retire from his position as a ram-breeder, regret was very generally expressed. Notwithstanding the unfavourable weather, considerably more than a hundred of the leading ram-breeders and agriculturists of this county attended the sale on Thursday, and buyers were also present from Yorkshire and Nottinghamshire. The sheep were penned in a field adjoining the house, and a choicer selection of animals has rarely, if ever, been offered for competition. They were not in show condition, but their quality and symmetry were undeniable. The pick of the lot was undoubtedly lot 39, a magnificent two-shear, which, after a spirited competition between Mr. Caswell, Mr. Gunning, Mr. W. F. Marshall, and Mr. T. Kirkham, of Biscathorpe, fell to the bid of the latter gentleman (who used him last year), at 150 guineas. This sheep had a splendid carriage, with fine skin, and beautiful head. There were thirty-three shearlings. Mr. Byron secured No. 7, a very useful sheep, for £38 17s.; Mr. Clarke, of Ashby, No. 9, a grand sheep, with beautiful coat, and a splendid mover, for £63; and Mr. Lister, No. 22, for £49 7s. Mr. C. Clarke (Ashby) became the fortunate possessor of No. 43 (a magnificent two-shear, with nice coat and beautiful flesh), for £65 2s.; the following lot was knocked down to Mr. Kemshall at £42; and Mr. Banyard secured Lot 58 (the last of the two-shears), at a like figure. The three-shear and aged sheep were wonderfully good, the best in a prime lot falling to the bid of Mr. J. S. Caswell at £59 5s. This was a wonderfully good sheep, used at Scopwick last year. Mr. Paddison, of Ingley, bought Lot 61, a grand up-standing sheep, which he used last year, for £67 4s.; Mr. Smith secured Lot 59 for £46 4s.; and two others were knocked down at £31 10s. each. Sixty-nine sheep were offered, and one was withdrawn, the 69 realizing an aggregate of £1,639 11s. 6d., being an average of £23 15s. 1d. The 33 shearlings averaged £19 15s. 6d.; the 25 two-shears, £24 2s.; and the 11 three-shear and aged sheep, reached the extraordinary average of £32 13s. 9d. Such a result is almost unparalleled in the history of ram-breeding in this county, and we trust such substantial appreciation of his skill as a breeder will induce Mr. Clarke to reconsider his determination, and to devote his skill and experience to the improvement of a breed of sheep which have no rivals as producers of both wool and mutton.

THE HIGHFIELD RAMS.—The annual gathering of Leicester ram breeders was held at Mr. Stamper's, Highfield House, Nunnington, North York. The letting was brisk; the highest shearing was taken at £20 5s. by Mr. Tinsley, of Malton, the average price being nearly £8 each. The two-shear sheep brought a strong competition. The prize sheep at the Ryedale show let to Mr. Greenwood, of Swarcliffe Hall, for £31 10s., and the lot averaged 10 gs. per head. The aged sheep averaged about £7 per head; the general average throughout the day was over 8 gs. per head, only three being turned back. Mr. E. Olding's Hampshires: This sale took place at Court House Farm. The highest lots fell as under: To Mr. Dibben 25 gs., Mr. C. Waters, Durnford 21 gs.; both these being lambs let for the season only; Mr. Moore, 16 gs.; Mr. Squarey, 13½ gs.; Mr. M. H. Marsh, 12 gs. and 10½ gs.; Mr. Gay, 10 gs.; Mr. W. Long, 9 gs. The average of 58 lambs let was £7 10s. 8d. each.

MR. OLDING'S RAM SALE.—Mr. Edmund Olding's annual ram sale took place last month, at his farm, Court House, Lower Woodford. These rams were selected from the improved Hampshire Down sheep, descended from the well-known flock which was brought to great perfection by Mr. Olding during the time he resided at Ratfin Farm, near Amesbury. The stock was in excellent condition. Before the sale the company partook of a substantial luncheon provided by Mr. and Mrs. Olding, the chair being taken by Mr. W. Long, and the vice-chair by Mr. C. Edney. The company afterwards adjourned to the ring, and Mr. Waters commenced the sale. It seemed to be the general opinion that the lambs were well brought out, excellent as to being well-woolled up, and very true to the old colour and quality of the Ratfin flock. Notwithstanding the short attendance only very few lots passed the sale ring without competition, many persons having purchased more largely than they

intended on account of the excellent character of the stock. The highest lots fell as under: To Mr. Dibben, lot 3, 28 gs.; to Mr. Charles Waters, of little Durnford Farm, lot 4, 21 gs., both these lots being lambs let for the season only; to Mr. Moore (who competed keenly for all the best lots), lot 50, 16 gs.; lot 16, 14½ gs.; to Mr. Squarey, lot 40, 13½ gs.; Mr. M. H. Marsh (Ramridge House), lot 56, 12 gs.; and lot 55, 10½ gs.; to Mr. Gay, lot 20, 10 gs.; to Mr. W. Long, lot 10, 9 gs. Messrs. Cossins, of Somerton, Mr. Miles, Wexcombe, and Mr. Green, Salterton, also each purchased several lambs at very fair prices. The average of 58 lambs sold and let was £7 10s. 8d. each.

SALE OF HAMPSHIRE DOWN SHEEP.—The above sale took place at Bradwell, near Wolverton, at the residence of Mr. W. G. Duncan, of Bradwell house. This is the second year of this kind of sale, and the result has proved satisfactory in both instances. The breed is not much known in this district, although it is a very useful one, as it is much more hardy than many other breeds, and on cold rough land it will do well when other sheep would degenerate. After luncheon the company adjourned to the meadow, Mr. Goodwin mounted the rostrum and commenced the sale. The bidding generally was not brisk, and the prices, in the majority of cases, were not so high as last year. The following is a return of the sale:—Sheep: Three ewes, £4 5s. per head, Mr. Bull, Newport. Three ewes, £3 8s. per head, Mr. Bull. Three ewes, £2 19s. per head, Mr. Linnell, Great Brickhill. Five theaves, £3 7s. per head, Mr. Craddock, Bradwell. Five wether lambs, £2 9s. 6d., Mr. Checkley, Tyringham. Five ditto, £2 6s. 6d., Mr. Checkley. Five ditto, £2 6s., Mr. H. E. Bull, Tickingford-park. Five ditto, £2 5s. 6d., Mr. J. Townsend, Tyringham. Five ditto, £2 7s. 6d., Mr. H. E. Bull. Two wether lambs, £2 6s. per head, Mr. Checkley. One Hampshire Down ram lamb, £3 12s. 6d., Mr. Mills, Newport. One Hampshire ditto, £4, Hon. Percy Barrington, Westbury. One Hampshire ditto, £4 5s., Mr. Linnell, Paulerspury; ditto, £5 2s. 6d., Emerton; ditto, £4 12s. 6d., Goosey, Wavendon; ditto, £3 15s., Franklin, Ilaversham; ditto, £5 5s., Holdham, Fenny Stratford; ditto, £12, Checkley, Tyringham; ditto, £3, Walker, Stony Stratford; ditto, £11, Clode, Great Linford; ditto, £9 5s., Captain Borlase Tibbits, Barton Seagrave; one shearing Hampshire Down ram, bred by Mr. W. King, Hungerford, £14, Major Levi, Woughton-on-the-Hill; one Hampshire Down ram lamb, £3 2s. 6d., Craddock, Bradwell; ditto, £3 2s. 6d., W. Pike, Castlethorpe; ditto, £12 5s., Thompson, Hanslope; ditto, £4 15s., Linnell, Great Brickhill; ditto, £4, Price, Newport, Pagnell; ditto, £4, Pike, Hanslope; ditto, £3 12s. 6d., Pike; ditto, £6 10s., Ratliffe, Hanslope; ditto, £4 5s., Pike; ditto, £4 2s. 6d., Ward, Newport Pagnell. Aldermys: A grey and white cow, four years old, in-calf, to calve October 23rd, £21 5s., Hon. Percy Barrington; a brown and white heifer, 18 months old, in-calf, £13, J. Clode; a self-coloured heifer, 18 months old, in-calf, £14 15s., Whiting, Castlethorpe; two steers, 21 months old, £15 15s. each, Pike; two ditto, 19 months old, £14 5s. each, Pike; a barren heifer, 2½ years old, £10, Atkinson, New Bradwell; a barren cow, £10 10s., Linnell, Great Brickhill; a ditto, £11 10s., J. Townsend; a ditto, £11 10s., Mills, Newport; a self-coloured bull, 20 months old, a pure-bred Dauncey, £15 5s., John Fontaine; a ditto, £11 10s., Walker. A number of pigs were also sold, making good prices.

MR. HORLEY'S SHROPSHIRE FLOCK.—The Fosse flock was founded upwards of twenty years ago, principally upon the old flock of Mr. Masfen, of Norton Canes. With the exception of a few of Mr. G. Adney's, no ewes have been purchased since its original foundation, but sires have been selected from the flocks of Mr. Byrd, Mr. Coxon, Mr. Evans, Mr. Crane, Mr. Randall, Mr. Keeling, Mr. Masfen, and other breeders, when, although no very high prices were reached, the sixty-six rams averaged slightly over £10 10s. each. The ram lambs secured customers for the sixty at from 50s. to 105s. each. The shearing ewes numbered one hundred. The two best pens made 90s. and 105s. respectively, the others going at 80s., 75s., down to 70s. the lowest price paid. The general average was about 77s. 150 older ewes were offered, and 120s., 115s., and 100s. per head were paid for the best pens. The general run was 80s. to 85s., the average running close to the last named price. The ewe lambs ranged from 60s. to 80s., averaging nearly 70s. Mr. R. H. Masfen presided at the luncheon; and Mr. Preece was the auctioneer.

THE SHROPSHIRE SALE AT SHREWSBURY.

—At Mr. W. G. Preece's thirty-sixth annual sale, a large number of rams from some of the most noted flocks in the kingdom were submitted. The attendance was scarcely so large as usual. The first lot was a three-shear ram by Young Patentee the Prime, which was sold for 10 guineas. A two-shear, by Lord Warden, was let for 14 guineas; and a shearing, by Conservative, for 5 gs. Eight lots, belonging to Mr. Edwards, of Oxon, were disposed of. Thirty-five rams, the property of the executors of the late Mr. Crane, of Shrawardine, and Mr. Edward Crane, of Forton, were next submitted. A shearing ram by Crosswood Hero, dam by Duke of Newcastle, was let for 41 guineas; and another by Crosswood Hero, dam by Plymouth 2nd prize, for 41 guineas. The whole made a fair average. The Rev. C. P. Peters sold two shearlings for 5½ and 6 guineas, respectively; and 41 rams belonging to Mr. John Evans, of Uffington, stood next in the catalogue. A three-shear, Favourite, by Non-pariel, was knocked down at 16 guineas, a two-shear by the same sire for 26 guineas, and another for 24 guineas; and then a shearing, Prond Salopian, by Cardinal, dam by Young Emperor, was let for 50 guineas. A shearing by Cardinal, dam by Chieftain, fetched 40 guineas, and others were purchased at 24 guineas, 21 guineas, and so on; the average being about 15 guineas. Mr. Thornton, of Pitchford, disposed of a three-shear ram, by Volunteer, for 18 guineas, and a two-shear for 17 guineas. Mr. T. Horton, of Iarnage Grange, sold 13 rams at a moderate average, the highest figure being 16 guineas for a shearing by Pirate, by Corsair, a first prize R.A.S.E. The Hon. E. Kenyon obtained 16 guineas for a two-shear by Packington 2nd; but sold four other rams at lower figures. Mr. Joseph Crane, of Calcott, made an average of over 12 guineas for five rams. Mr. Fenn, of Stonebrook House, Ludlow, and Mr. Harding, of Bicton House, offered five rams, all of which were sold; and a two-shear ram, their property, was let for 20 guineas. Mr. G. Allen, of Knightley Hall, Staffordshire, had fifteen lots, and only three were passed. A two-shear ram, by Fatback Patentee, was let for 50 guineas, and a shearing, by the same sire, for 17 guineas. Another shearing was sold for 27 guineas. Fifteen of Lord Chesham's rams were disposed of; and a shearing by the Duke of Manchester, realised 36 guineas. The next highest price was 21 guineas for a shearing, by Kenyon's ram. Mr. E. Bostock, of The Hough, Stafford, sold five rams, a shearing by Horton's Duke of Kent, making 20 guineas; and Mr. M. Williams, of Dryton, disposed of two rams. Mr. Andrews, of Nobhill, sold two rams, and let one for 10 guineas; and Mr. J. Pulley, of Lower Eaton, Hereford, sold sixteen; but the highest figure was 10 guineas. The last rams sold were the property of Mr. Wainman, of Whiteley Manor, Newport, Salop. Nearly 1,000 ewes were sold on Friday, at an average close upon £4 each; these being sent by the following breeders: Messrs. Crane, Evans, Horton, Fowler, Fenn and Harding, Williams, Edwards, Bowen and Jones, Minton, Payne, Lee, Everall, Pickering, Preece, Holder, Nevett, Bridgeman, Jones, Wood, Morris, Bather, and Capt. Lovett. In several instances as high figures were paid for ewes from an ordinary farmers flock as for the drafts from the most noted ram breeders, but a few show pens realised as high as £10 10s. per head.

THE SHROPSHIRE SHEEP SALE IN BIRMINGHAM, BY MESSRS. LYTHALL AND CLARKE.—The first of this year's sales of Shropshire sheep was held on July 27, in Bingley Hall, Birmingham, when, considering the early period of the season for which this was fixed, it passed off remarkably well. About 150 sat down to luncheon under the presidency of Mr. G. A. May, of Elford Park. Among them were the agents for the Marquis of Exeter, Earl Ducie, the Earl of Warwick, Lord Willoughby de Broke, and Captain Oliver, while Messrs. Mansell, T. Horton, Horley, J. Evans, C. R. Keeling, Masfen, C. Byrd, W. Yates, T. Nock, J. Beach, W. Baker, E. Lythall, J. Stubbs, and other ram-breeders were present. Although no extravagant prices were realised, most of the stock made its value, some of the ewes in particular selling at high figures. Some four or five Irish gentlemen were present, who bought nearly £500 worth of stock, and purchases were also made for Devonshire, Worcestershire, Lincolnshire, Nottinghamshire, Gloucestershire, Leicestershire, Staffordshire, Warwickshire, and Shropshire. A list of the principal prices follows: Mr.

Yates' ten rams, 5½ to 13gs.; average £11 4s. Mr. Nock's fourteen rams, 6 to 20gs. Lord Willoughby de Broke's rams, 6 to 11gs. Mrs. Beach's twelve shearlings averaged £17 14s. Mr. Pilgrim's four rams averaged 10gs. Mr. H. J. Sheldon's rams ranged from 6½ to 8½gs. The Marquis of Exeter's rams ranged from £4 to £5. Mr. Stubbs' shearing ram fetched 43gs., Mr. Z. Walker's ram 5 gs. Mr. Lort's five rams averaged 5½gs. W. Picken's ten rams ranged from 5½ to 8gs. Mr. Yates' five ewes ranged from £2 10s. to £2 15s., Mr. Pilgrim's two ewes 6gs., Mr. Nock's five ewes £3 3s. to £3 6s., Mrs. Beach's ewes £4 10s. to £7 7s., W. Lort's ewes £2 18s. to £3 10s., E. Lythall's eight ewes £2 15s. to £3 14s., Lord Willoughby de Broke's six ewes £4 12s. 6d. to £5, J. H. Lee's six ewes £2 13s. to £2 16s., James Dugdale's five ewes £2 4s. to £2 18s., T. Walker's three ewes £3 14s. to £3 15s., J. Tolefree's six ewes £2 11s. to £2 19s., Isaac Downing's eight ewes £2 7s. to £2 9s., Z. Walker's four ewes £2 9s. to £2 16s., and Mr. Wilday's twenty ewes £2 10s. each. Mr. Lythall's fourteen rams ranged from 5½ to 11gs., averaging £8 11s.

SALE OF SHROPSHIRE SHEEP.—Mr. German, of Measham Lodge, near Ashby-de-la-Zouch, held his annual sale of Shropshire sheep on Wednesday, August 16th, when 44 rams and 165 ewes were disposed of. The last three years the sheep from this flock have been sold at the Ashby-de-la-Zouch Smithfield, but from the fact of the spirited determination of the proprietor to raise his flock equal to any in the country, and the confidence the public have shown in purchasing his rams on previous occasions, induced him to hold his sale this year at the Measham Field farm. After luncheon business was commenced in a most spirited manner by Mr. J. German, of the firm of Davenport, German, and Allen, Ashby-de-la-Zouch, commencing with a grand two-shear ram, which was let to Mr. Rose, Ash, near Derby, at 21 guineas; No. 2, a three-shear ram, sold to Mr. Geo. Moore, 17 gs.; No. 3, was let to Mr. Geo. Astle, at 17 gs.; No. 4, Mr. W. Princess, 19 gs.; No. 5, the first shearing, was let to Mr. G. Fulton, Shardlow, at 21 gs. (this sheep was highly commended at the Royal Agricultural Society, Wolverhampton, and took first prize at the Leicestershire Agricultural Show at Leicester); No. 6, Mr. Orme, 14 gs.; No. 7, Mr. Singlehurst, Kingstone, 17 gs.; No. 8, Mr. George Moore, 18 gs.; No. 9, Mr. Sale, 10 gs.; No. 10, Mr. Barber, Bestwood Park, 9 gs.; No. 11, Mr. J. W. Faux, 12 gs.; No. 12, Mr. Singlehurst, 14 gs.; No. 13, Mr. Booth, 16 gs.; No. 14, Mr. Gardner, 21 gs.; No. 15, Mr. Everard, Narborough, 14 gs.; No. 16, Mr. Sale, 8½ gs.; No. 17, Mr. Fowler, 11 gs.; No. 18, Mr. G. Sale, 7½ gs.; No. 19, Mr. Oakey, Packington, 13 gs.; No. 20, Mr. Hatchett, Lockington, 14 gs.; No. 21, Mr. Edge, Stretton, 23 gs.; No. 22, Mr. Alcock, Burbage, 18 gs.; No. 23, Mr. Webster, 8 gs.; No. 24, Mr. Garner, Willesley, 16 gs.; No. 25, Mr. Henson, Burton Lodge, 13 gs.; No. 26, Mr. Geo. Dewes, Willesley, 15 gs.; No. 27, Mr. Sale, sen., 8 gs.; No. 28, Mr. Startin, 8 gs.; No. 29, Mr. Clare, 8 gs.; No. 30, Mr. H. E. Goodall, 16 gs.; No. 31, Mr. Smith, Rangemoor, 17 gs.; No. 32, Mr. Ratcliff, 11 gs.; No. 33, Mr. Thirby, Packington, 9 gs.; No. 34, Mr. T. Ratcliff, 10 gs.; No. 35, Mr. Booth, Tarnhorn, Stafford, 21 gs.; No. 36, Mr. Wood, Clifton, 18 gs.; No. 37, Mr. Eaton, Derby, 10 gs.; No. 38, Mr. F. Walker, 7½ gs.; No. 39, Mr. John Thompson, 10 gs.; No. 40, Mr. Lilley, Swepton, 9 gs.; No. 41, Mr. Barber, 8 gs.; No. 42, Mr. W. Ball, 6½ gs.; No. 43, Mr. Booth, Tarnhorn, 12 gs.; No. 44, Mr. Princess, 10 gs.; the average price of the rams being £15 each. The competition for the ewes was most spirited, prices ranging from 60s. to 102s. 6d. per head, or an average of 75s. per head. The purchasers were Mr. W. H. Clare, Mr. Sawidge, Mr. Fulton, Mr. Barber, Mr. G. F. Brown, Mr. Alcock, Mr. Edge, and Mr. Fowler.

MR. R. H. MASFEN'S SALE.—In consequence of harvest operations being in progress, this annual sale on the 18th was not quite so numerous attended as the celebrity of the Pendeford flock has generally ensured; nevertheless there were many of the principal flockmasters and representatives of large landed proprietors present. The stock submitted by Mr. W. G. Preece comprised 60 superb Shropshire rams and about 100 stock ewes, all in capital condition. The bidding for many of the best animals was very spirited, as the prices realized for them will denote: No. 1, Preserver, a magnificent animal, was knocked down to Mr. Coxon for 29 gs. No. 3,

Noble, 30 gs., Mr. Sanday, of Holm Pierrepont. No. 4, Marcus, 28 gs., Mr. G. Wilkes, of Knowle. No. 5, Comus, 23 gs., Mr. Horley. No. 7, My Lord, 25 gs., the agent of Sir John Chetwode. Nos. 9 and 24, the agent for Lord Hatherton, for 13 gs. and 11 gs. respectively. No. 10, Chieftain, 23 gs., Mr. S. Leather, of Delamere Forest, Cheshire. No. 11, Rupert, 32 gs., Mr. G. T. Forrester, of High Ercall, Wellington. Nos. 26 and 27, at 20 gs. and 16 gs. respectively, were purchased by the agent of Mr. John Peel, of Middleton. No. 49, The Colonel, was let for 20 gs. to Mr. Mansell, of Addcott. No. 6, a Two Shear, was purchased by Mr. H. Rogers, of Wolgarstone, for 13 gs. No. 8, The Baron, and 32, The Peer, bought for 20 gs., by the agent of Mr. H. C. Vernon, of Hilton. No. 46, a Shearling, and No. 8, Two Shear, knocked down for 20 gs. to Mr. Webster, of Bisilton Hall, near Albrighton. Of the other older rams, No. 1, Rob Roy, a Two Shear, was let to Mr. John Crane, of Shrewardine, for 30 gs. No. 3, Cantab, let to Mr. Wall, of Shustock, near Coleshill, for 21 gs. The ewes were a superb collection. Lot 1 was purchased by Mr. Stubbs, of Preston Hill, for the remarkably good price of £5 each. Lot 2 was, however, superior, both in form and build, and after some spirited bidding they were secured by Mr. Bradburne, of Pipe Place, near Lichfield, at £6 5s. each. The average price realized by the rams was £13 7s. 5d. each, and for the ewes, £4 1s. 10d.

MR. J. H. BRADBURNE'S SHROPSHIRE.—This sale of 40 rams and 140 ewes took place at Pipe Place, Mr. Preece being the auctioneer. The shearlings, 28 in number, were first disposed of, lot 1 being sold to Mr. Crisp for £10 10s., lot 2 to Mr. Barnes for £7 17s. 6d., lot 3 to Mr. Thorneloe for £11 11s., lot 11 to Mr. Barnes for £13 13s., lot 13 to Mr. Fair for £14 14s., lot 22 to Sir A. Rothschild for £14 14s. In the two-shear rams lot 1 realised £16 16s., being bought by Mr. James; lot 5, £15 15s., bought by Mr. Kitson; and lot 6 to Mr. Booth for £10 10s. The ewes averaged 65s. each. Seven show theaves were sold to Mr. Murray—five at £7 5s., and two at £4.

SHROPSHIRE RAMS.—Two shearing Shropshire rams and several ewes have been selected by Mr. W. G. Preece, of Shrewsbury, from the flock of Mr. J. H. Bradburne, of Pipe Place, Lichfield, to the order of Messrs. Redfern and Alexander, of Great Winchester-street Buildings, London, for shipment to Australia. The prices were 25 gs. each for the rams, and 5 gs. each for the ewes.

THE HAGLEY SALE.—On Monday, Aug. 21, the annual sale of pure Shropshire Down rams and ewes took place at the Lyttelton Arms Hotel, Hagley, by W. B. Woolridge (of the firm of Messrs. Oates, Ferrus, and Woolridge, of Stourbridge). The animals were selected from the flocks of Mr. W. C. Firmstone, Hagley; Mr. John Harward, Winterfold; and Messrs. E. Webb and Sons, of Kinverhill. The attendance was moderate. Previous to the sale about 200 partook of an excellent dinner provided in a large room at the hotel. Of Mr. W. C. Firmstone's lot the first was purchased by Mr. R. Cox for 13 guineas. Of the nine one-shear rams, by Beach's No. 1 offered the highest price realised was 10½ guineas. Mr. J. Harward's included sixteen one-shear rams, six of them being by Caractacus the 2nd, nine by a ram of Mr. Crane's, and one by a Montford ram, and a three-shear ram, Caractacus the 2nd, by Caractacus. The six by Caractacus fetched 52 guineas, the nine 6½ guineas, and the Montford sheep 7 guineas. A sharp competition took place for Caractacus, which was knocked down to Messrs. Webb for 17½ guineas. Forty ewes, belonging to Mr. W. C. Firmstone, realised £11 15s. A similar number, belonging to Mr. John Harward, were sold for £119 10s. The whole of the animals sold realised over £500.

RUGELEY ANNUAL SHEEP SALE.—This important sale took place last month in the Smithfield at the Shrewsbury Arms Hotel. About 1,000 sheep were disposed of; prices being high and varying from 50s. to 75s. per head for ewes, rams averaging £5 10s. each. The principal contributors were Lord Bagot, Messrs. T. B. Horsfall, B. Bond, Nichols, Parton, Burgess, Harvey, Stubbs, Holland, Woolley, Brown, &c. The sheep offered for sale were of a remarkably good class, still upholding the high position for which this district is noted. The purchasers were numerous, including several continental buyers. The sale was conducted by Mr. Henry Quinton.

THE ANNUAL SHEEP SALE AT HOVE.—Mr. Ridden's annual sale of Southdown ewes, and letting and sale of rams, took place last month, and was, as usual, largely attended, not only by agriculturists of the home county, but also by many well-known breeders and flockmasters from distant shires. The great skill and care with which Mr. Ridden has bred his flock, the enormous expense he has incurred in procuring the best blood in the world, and the high character of the sheep he offers for sale, are too well known to need any comment. After luncheon the company returned to the pens, and Mr. Drawbridge, the auctioneer, briefly addressed them. He stated it was a legitimate sale, and he hoped there would be spirited biddings and high prices. The sale realised £600 10s. The following prices were made: Ewes: Five full-mouthed ewes, £3 12s. 6d., Mr. Smith, Paddockhurst; five ditto, £3, Mr. Hart, Beddingham; five ditto, £3 15s., Mr. Smith; five ditto, £3 10s., Mr. Smith; five ditto, £4, Mr. Harris, Norrington, Chichester; five ditto, £3 17s. 6d., Mr. Smith; five ditto, £5 7s. 6d., Mr. Harris; five ditto, £3 12s. 6d., Mr. Butler (for Hon. Mrs. Talbot, Winchcombe); five ditto, £3 15s., Mr. Butler; five ditto, £3 3s., Mr. Hart; five ditto, £2 12s. 6d., Mr. Clarke (for Duke of Richmond); five ditto, £2 12s. 6d., Mr. Porter; five ditto, £2 17s. 6d., Mr. Porter; five ditto, £3, Mr. Porter; five ditto, £2 17s. 6d., Mr. Smith; five ditto, Mr. Clarke; five shearing ewes, £2 12s. 6d., Mr. Porter; five ditto, £3, Mr. Butler; five ditto, £3 5s., Mr. Butler; five ditto, £3, Mr. Smith. Rams for letting: Four-years-old, by the second prize ram at Battersea, not let; three-years-old, by a grandson of Archbishop, £16 16s., Mr. Smith; two-years-old, by 40, £13 2s. 6d., Mr. Gillespie, Bolney; two-years-old, by ditto, dam a Goodwood ewe, not let; two-years-old, by 40, obtained the second prize at Wolverhampton, £23 2s., Mr. Gorringe, Kingston; one-year-old, by Mr. Henry Webb's, a grandson of Reserve, £27 6s., Lord Newbury; one-year-old, by ditto, £15 15s., Lord Hylton; one-year-old, by a grandson of Mr. Webb's 21, £16 5s. 6d., Mr. Smith; one-year-old, by grandson of reserve, not let; one-year-old ditto, £10 10s., Lord Hylton. Rams for sale: two-years-old, by a son of Plampo, £17 6s. 6d., Mr. Field, Ashurst Park, Tunbridge Wells; two-year-old, by ditto, £11 11s., Mr. J. Moon Stevens, Winscot, North Devon; two-year-old, by ditto, £10 10s., Mr. Oldham; one-year-old, by a son of 40, his dam a Goodwood ewe, £22 1s., Mr. Bradshawe, Belgrave, Leicester; one-year-old, by Grandson of Webb's 21, not sold; one-year-old, by a son of Young Elegance, £14 3s. 6d., Mr. Harris; one-year-old, by ditto, £13 2s. 6d., Mr. Harris; one-year-old, by Grandson of Webb's 21, £13 2s. 6d., Mr. Lane; one-year-old, by ditto, £11 11s., Mr. Drummond, Cadland, Southampton; one-year-old, by Grandson of Reserve, dam a Beddingham ewe, £10 10s., Mr. Porter; one-year-old, by ditto, not sold; one-year-old, by ditto, £10 10s., Mr. Lane; one-year-old, by Son of 40, not sold; one-year-old, by ditto, £18 7s. 6d., Lord Sudeley, Gloucestershire.

GALLOWAY V. SOMERSET CHEESE.—About two years ago the dairy farmers of Galloway, through Mr. David Guthrie, secretary of the Stranraer and Rhins of Galloway Agricultural Society, challenged the cheesemakers of Somersetshire to a competition for £200. The challenge was refused, and several Somerset newspapers passed severe strictures on the Galloway farmers for their presumption. A few weeks ago Mr. Guthrie received the programme of a great cheese show, to be held at Frome, Somersetshire, on the 27th September, and as one of the classes at the show is open to the United Kingdom, and a sweepstakes for a cheese of any make or size, open to the world, competition was apparently invited from this side of the border. A meeting of the dairy farmers in the Rhins district of Wigtownshire, numerous and influentially attended, has been held in the Town Hall, Stranraer—Colonel McDonall of Logan presiding—for the purpose of taking into consideration the propriety of entering for the cheese show at Frome. After some discussion it was resolved that Wigtown as a county should not take part in the competition. It was also resolved that Mr. Guthrie, representing the dairy farmers of Wigtownshire, should offer a challenge to the Somersetshire cheesemakers similar in terms to that given two years ago.

SALE OF THE FARNLEY HERD,

THE PROPERTY OF THE LATE MR. F. H. FAWKES, AT FARNLEY HALL, OTLEV, ON TUESDAY, AUG. 1, 1871.

BY MR. H. STRAFFORD.

Few herds have been better known to the public, through the past to the present generation, than the Farnley, and it may also be said that few herds have done more good in their time to the stock of the country. Its rise took place fully forty years ago. Mr. Whitaker, who lived hard by, required milk for his numerous mill hands, and gradually established a large herd of Short-horns, which were as good milkers as they were beef-growers. The Americans soon found this out, and Col. Powell, with two or three importing companies, bought scores of good cattle from Burley and Greenholme. Mr. Fawkes paid ten guineas apiece for some calves, and these, with the bulls Norfolk and Sir Thomas Fairfax, laid the foundation of the Farnley herd. Two cows from Mr. R. Booth's Studley herd were added to it in 1834, and some from Mr. B. Wilson and the Duke of Buccleuch's, and thus started the herd grew into a fine stock. Bulls bred at home were used, and several were and have been exhibited at the Royal and Yorkshire shows, as the public well know, with great success. These animals were generally conspicuous for their substance and fine roan colour, and it was a rare occasion that a white was shown; consequently, they were in great demand, and eventually led up to periodical auctions where good prices were obtained for good stock dispersed. Twenty years ago the averages were among the highest of the time, but the enormous increase in the value of pure Short-horns within the last five years make these prices appear low now. Twelve or thirteen years ago two bulls were bought, Royal Oak from Mr. Wetherell and Lord Cobham, a white of the Gwynne tribe, though slightly bred away from the strain by the later crosses. This bull left some fine stock, which, as the price-list shows, fetched most of the best prices on Tuesday last. A sale—so recently as the spring of last year—reduced the herd to about 35 head, and these were brought to the hammer soon after the death of Mr. Fawkes, on the day prior to the Yorkshire Show. Scarcely a week before the sale, Mr. Fawkes' brother and successor also died. Mr. Strafford, when introducing the sale, took the opportunity of paying a little tribute of respect to the memory both of Mr. Whitaker and Mr. Fawkes, men whom he had known for 40 years, and who had done much good in their generation. The cattle were brought out in a manner creditable alike to Mr. Scott the bailiff, and Robinson the herdsman. The cows were of a good old stamp, not large or coarse in size, but neat, short-legged, and of good quality, with nice horns and countenances; they were certainly the best part of the herd. The competition was very brisk for most of the lots, but especially for those by Lord Cobham. The rich Farnley colour had been kept up, but not the substance, many of the young things coming out with bad backs and flat sides. Lord Darlington, the first bull, fetched only beef price, and the second one was not offered. Ninth Lord, the roan yearling shown at Wolverhampton, made the top price, going, after sharp bidding from Mr. Stanton, who bought several of the heifers to go to Canada, for 150 gs., to Mr. Barnes, of Australia. So another old stock has been dispersed; but we trust that the heir of Farnley will not let the historic repute of the estate die; for those who visited the Hall to see the marvellous Turner gallery, rarely left the place without seeing the herd, which, in its way, graced and beautified the park and lovely estate as

much as the glowing landscapes ornamented the walls of the comfortable old mansion.

COWS AND HEIFERS.

- Blue Belle by Reformer (18687), out of Blue Bonnet.—Mr. G. Wentworth, Woolley Park, 41 gs.
- La Belle by Royal Oak (16873), out of La Bonne.—Mr. G. Hargreaves, 43 gs.
- Isabella by Royal Oak (16873), out of Beauty.—Mr. G. Wentworth, 56 gs.
- Lady Valentine by Lord Cobham (20164), out of Vanity.—Mr. G. Wentworth, 85 gs.
- Lady Maggie by Lord Cobham (20164), out of Magnolia.—Mr. A. Metcalfe, 51 gs.
- Lady Fairy by Lord Cobham (20164), out of Fairy Queen.—Mr. W. Thompson, 50 gs.
- Lady Beatrice by Lord Cobham (20164), out of La Belle.—Mr. W. Thompson, 65 gs.
- Revival by Reformer (18687), out of Valerian.—Major Greenwood, 41 gs.
- La Brilliant by Reformer (18687), out of La Bonne.—Mr. Stanton, Canada, 34 gs.
- Lady Beaujolois by Lord Cobham (20164), out of Blue Belle.—Mr. R. E. Oliver, 60 gs.
- Flitch of Bacon by Friar Bacon (21780), out of La Bonne.—Mr. Wellcock, 40 gs.
- Her Lassie by Thorndale Lad (23066), out of Her Ladyship.—Mr. R. England, 39 gs.
- Thorndale's Balm by Thorndale Lad (23066), out of Friar's Balsam.—Mr. R. E. Oliver, 50 gs.
- Vervain by Lord Montgomery (26686), out of Revival.—Mr. G. Wentworth, 41 gs.
- Betty Bacon by Friar Bacon (21780), out of Lady Betty.—Mr. Stanton, Canada, 42 gs.
- First Duchess by Reformer (24930), out of Lady Valentine.—Mr. G. Wentworth, 65 gs.
- Lady Isabella by Lord Cobham (20164), out of Isabella.—Mr. G. Wentworth, 47 gs.
- Second Duchess, by Reformer (24930), out of Lady Margery.—Mr. Stanton, Canada, 51 gs.
- First Lady, by Lord Darlington (26633), out of Valerian.—Mr. Clarke, 36 gs.
- Second Lady, by Lord Darlington (26633), out of Lady Beaujolois.—Mr. Stanton, Canada, 41 gs.
- Third Lady, by Lord Darlington (26633), out of Leap in the Dark.—Mr. G. Hatfield, 36 gs.
- Fourth Lady, by Lord Darlington (26633), out of Her Ladyship.—Mr. G. Wentworth, 25 gs.
- Fifth Lady, by Lord Darlington (26633), out of Flitch of Bacon.—Mr. G. Wentworth, 20 gs.
- Lady of Lorne, by Lord Cobham (20164), out of Blue Belle.—Mr. T. Barber, 40 gs.
- Lady Belle, by Lord Cobham (20164), out of La Belle.—Mr. Hargreaves, 36 gs.
- Third Duchess, by Reformer (24930), out of Isabella.—Mr. G. Wentworth, 35 gs.
- Sixth Lady, by Lord Darlington (26633), out of Lady Maggie.—Mr. G. Wentworth, 42 gs.
- Seventh Lady, by Lord Darlington (26633), out of La Brilliant.—Mr. Ellis, 21 gs.

BULLS.

- Lord Darlington, by Duke of Darlington (21586), out of Anemone.—Mr. Bates, 46 gs.
- Eighth Lord, by Lord Darlington (26633), out of Reaction.—Mr. G. Wentworth, 23 gs.
- Ninth Lord, by Lord Darlington (26633), out of Lady Wallace.—Mr. Barnes, Australia, 150 gs.
- Tenth Lord, by Lord Darlington (26633), out of Revival.—Major Greenwood, 41 gs.
- Eleventh Lord, by Lord Darlington (26633), out of Lady Beatrice.—Mr. H. Ripley, 55 gs.
- Third Duke, by Reformer (24930), out of Lady Fairy.—Mr. T. Shutt, 26 gs.
- Fourth Duke, by Reformer (24930), out of Revival.—Mr. G. Wentworth, 25 gs.

SUMMARY.

	£	s.	d.		£	s.
28 Cows	46	4	9	.....	1,294	13
7 Bulls	54	18	0	.....	384	6
35 Averaged...	£47	19	5	.....	£1,678	19

REV. J. D. JEFFERSON'S SHORTHORNS, AT YORK
ON THURSDAY, AUGUST 3RD 1871.

BY MR. THORNTON.

This herd, which has been bred for many years at Thicket Priory, about ten miles from York, has been thinned down by occasional sales, which have always been held near the city. The cattle-plague sadly mowed down the herd in 1866, and this year, the herd having outgrown the place, about 37 head were brought to York and sold on the second day of the show. The cattle were not in good condition for sale, and several were of short descent, being bred from stock that had been reared at Thicket for their great dairy properties. Two or three lots, however, of fashionable pedigree pulled up the average to £32 10s., and considering the stock, the sale was not only largely attended, but went off well.

COWS AND HEIFERS.

Julia, by Ranter (18666), out of Lady Jersey.—Mr. W. Angerstein, 65 gs.
Teresa, by Veteran (13941), out of Twinua.—Mr. G. Long, 21 gs.
Bertha, by Ranter (18666), out of Lady Bertha.—Mr. G. Barton, 27 gs.
Jessica, by Duke of Waterloo (21616), out of Julia.—Sir W. C. Trevelyan, 33 gs.
Selina, by Lord Waterloo (24475), out of Lady Selby.—Mr. E. Morrell, 32 gs.
Lady Eastthorpe, by Duke of Waterloo (21616), out of Lady Emma.—Mr. E. Crawshaw, 50 gs.
Jessy, by Duke of Waterloo (21616), out of Julia.—Sir W. C. Trevelyan, 34 gs.
Tulip, by Duke of Waterloo (21616), out of Teresa.—Mr. B. Lucas, 27 gs.
Duchess of Waterloo, by Earl of Jersey (23838), out of Countess of Waterloo.—Mr. T. Wilson, 160 gs.
Lady Newby Wiske, by Eastthorpe (vol. xviii., p. 564), out of Newby Belle.—Mr. L. Learmouth, 36 gs.
Alice, by Duke of Waterloo (21616), out of Amy.—Mr. R. Bleazard, 27 gs.
Countess of Eastthorpe, by Duke of Waterloo (21616), out of Lady Emma.—Mr. C. Barroby, 36 gs.
Viscountess Jersey, by Duke of Waterloo (21616), out of Lady Jersey.—Mr. W. Angerstein, 77 gs.
Lady Sedan, by Duke of Waterloo (21616), out of Lady Selby.—Mr. R. Bleazard, 25 gs.
Daisy Bud, by Duke of Waterloo (21616), out of Daisy.—Mr. W. Gonder, 22 gs.
Amine, by Duke of Waterloo (21616), out of Amy.—Mr. E. Crawshaw, 17 gs.
Michaelmas Daisy, by Viccrov, out of Daisy Flower.—Mr. R. Bleazard, 28 gs.
Seraphine, by Lord Newby Wiske (26606), out of Selina.—Mr. Harrison, 17 gs.
Bella, by Earl of the Valley, out of Miss Bertha.—Mr. R. Bleazard, 18 gs.
Miss Selby, by Lord Waterloo (24475), out of Lady Selby.—Mr. J. H. Cattley, 9½ gs.
East Vale, by Earl of the Valley, out of Lady Eastthorpe.—Mr. C. L. Tunnard, 15 gs.
Lady Villiers, by Earl of the Valley, out of Jessica.—Mr. T. Wilson, 22 gs.
Ada, by Lord Waterloo (24475), out of Amy.—Mr. S. W. Tinker, 15 gs.
Nymph, by Lord Waterloo (24475), out of Lady Nicety.—Mr. J. Knowles, 27 gs.
Veronica, by Lord Waterloo (24475), out of Verona.—Mr. J. Brigham, 19 gs.

BULLS.

Earl of the Valley, by Lord Waterloo (24475), out of Lady of the Valley.—Mr. F. Danby, 35 gs.
Nettle, by Lord Waterloo (24475), out of Lady Nicety.—Mr. W. Taylor, 21 gs.
Lord Newby, by Lord Waterloo (24475), out of Newby Belle.—Mr. W. Nicholson, 26 gs.

Count Jersey, by Duke of Waterloo (21616), out of Lady Jersey.—Mr. T. Craig, Australia, 57 gs.
Valerius, by Duke of Waterloo (21616), out of Lady of the Valley.—Mr. J. Theaxted, 31 gs.
Velocepede, by Duke of Waterloo (21616), out of Verona.—Mr. Kirkpatrick, 18 gs.
Lord Jersey, by Earl of the Valley, out of Countess of Jersey.—Mr. E. Morrell, 28 gs.
Vatican, by Duke of Waterloo (21616), out of Lady of the Valley.—Mr. W. White, 16 gs.
Nimrod, by Duke of Waterloo (21616), out of Newby Belle.—Mr. T. Stamper, 12 gs.
Edward, by Duke of Waterloo (21616), out of Lady Emma.—Mr. J. S. Lockwood, 11½ gs.
Jaques, by Lord Waterloo (24475), out of Julia.—Mr. Clarke, 20 gs.

	SUMMARY.		Total.
	Average.		
25 Cows	£35	5 2	£881 9 6
11 Bulls	26	5 11½	289 5 6
36	£32	10 5	£1,170 15 0

SALE OF LORD FEVERSHAM'S
SHORTHORNS,

AT DUNCOMBE PARK, ON THURSDAY, AUGUST 10TH.

BY MR. STRAFFORD.

The foundation of this herd was laid more than fifty years since by purchases from Messrs. Charles and Robert Colling, Major Bower, and Mr. Parrington; while from time to time, as opportunity has offered, animals from other good herds have been introduced. The stock offered included several descendants of Mr. Mason's No. 13 at the Chilton Sale, a few from Lord Ducie's Chaff by Duke of Cornwall (5947), and the Knightley strains were represented by Polygenova, whose dam, Polytint, was bred at Fawsley, and Hospitality. For upwards of twenty years Mr. Bates' bulls and their descendants have principally been used, viz., Cleveland Lad (3407), Second Cleveland Lad (3408), Second Earl of Beverley (5963), Fifth Duke of Oxford (12762), the Royal winner at Chester and at the Yorkshire Show in 1858; Gloucester (12950), the first prize bull at the Paris International and at the Yorkshire in 1856; Skyrocket (15306), the Royal winner at Leeds in 1861, and at the Yorkshire in 1862; Orestes (22443), and latterly Manchester (26798), who was himself in the sale.

BULLS.

Manchester, roan, calved August 26, 1866, by Orestes (22443), out of Mint.—Mr. Cattley, Stearsby, 45 gs.
Capri, red roan, calved August 4, 1867, by Veteran (25361), out of Coral.—Mr. Newton, Overton, 30 gs.
Hospitality, roan, calved August 20, 1867, by Potentate (22537), out of Harebell.—Rev. Mr. Danby, Stamford, 35 gs.
Pylades, white, calved August 19th, 1868, by Orestes (22443), out of Festive.—Mr. T. Brookes, Thirsk, 33 gs.
Colonist, roan, calved January 7, 1869, by Orestes (22443), out of Columbia.—Major Staplyton, 53 gs.
Coriolanus, red, calved November 12, 1868, by Orestes (22443), out of Coral.—Mr. Burt, Grantham, 37 gs.
Chancellor, red, calved July 17, 1869, by Orestes (22443), out of Charmer.—Mr. Taylor, Malton, 31 gs.
Corinthian, roan, calved October 8, 1869, by Orestes (22443), out of Coral.—Mr. J. Newton, 33 gs.
Colonist 2nd, red roan, calved February 12, 1870, by Orestes (22443), out of Columbia.—Sir H. Johnstone, 55 gs.
The Sarr, red and white, calved June 27, 1870, by Orestes (22443), out of Sylvia.—Mr. Mowbray, 21 gs.
Sedan, roan, calved September 25, 1870, by Orestes (22443), out of Sweetbriar 2nd.—Mr. Priestman, 30 gs.
Cicero, white, calved January 23, 1871, by Manchester (26798), out of Cecilia.—Mr. Elliott, 24 gs.
Colonist 3rd, roan, calved February 9, 1871, by Orestes (22443), out of Columbia.—Hon. E. Lascelles, 47 gs.

Victorious, red and white, calved February 11, 1871, by Coriolanus, out of Victoria.—Rev. W. Prest, Appleforth College, 17 gs.

COWS AND HEIFERS.

Sympathy, roan, calved December 18, 1865, by Photograph (20492), out of Soprano.—Mr. Hodgson, Highthorne, 35 gs. Pearl, white, calved in 1866, by Next of Kin (20405), out of Whitethorn.—Mr. R. H. Bower, Welham Hall, 26 gs.

Royal Celia, roan, calved January 26, 1868, by Royal Cambridge (25009), out of White Lily.—Mr. Cattley 35 gs.

Peppermint, red, calved in January, 1868, by Orestes (22443), out of Mint.—Hon. E. Lascelles, 40 gs.

Magdala, red, calved April 29, 1868, by Vesuvius (21017), out of Miriam.—Mr. Coverdale, 31 gs.

Leoline, red, calved April 7, 1868, by Orestes (22443), out of Leonora.—Hon. E. Lascelles, 33 gs.

Siren, roan, calved September 28, 1868, by Manchester (26798), out of Sympathy.—Mr. T. Stamper, Highfield, 32 gs.

Princess of Ryedale, roan, calved March 13, 1869, by Manchester (26798), out of Princess 2nd.—Mr. W. Scooby, 27 gs.

Polygeneva, red and little white, calved March 29, 1869, by 3rd Duke of Geneva (21592), out of Polytint.—Mr. Hodgson, 56 gs.

Victoria 2nd, roan, calved April 29, 1869, by Orestes (22443), out of Victoria.—Mr. Cattley, 30 gs.

Lily of Ryedale, red and white, calved June 3, 1870, by St. Swithin, out of Leonora.—Mr. Newton, 18 gs.

Lozenge, red and white, calved March 29, 1871, by Lord Towneley (26749), out of Peppermint.—Mr. Cattley, 51 gs.

SUMMARY.

	£	s.	d.	.....	£	s.	d.
12 Cows averaged	36	4	6	.....	434	14	0
14 Bulls „	36	16	6	.....	515	11	0
26 „	36	10	11	.....	£950	5	0

GENERAL AGRICULTURAL REPORT FOR AUGUST.

The brilliant weather experienced during the past month has had a most material effect upon harvest prospects, and consequently upon the crop generally. Very much progress has been made with cutting and stacking the corn crops, and they have so far been secured in excellent condition. Harvest-work has been greatly accelerated by the brilliant sunshine, and it is further to be noted that reaping machines have this year come into more general use than hitherto. From some districts we received complaints of the scarcity of labour, but this is by no means general, and the harvest has seldom been so rapidly got in, and under such favourable conditions. With regard to the actual results of the crops, it is as yet too early to speak positively; but there is little doubt in our mind that the falling off in bulk in the wheat crop is about 10 per cent., and there is reason to fear that the deficiency will become more apparent as thrashing is proceeded with. Opinions are at present very variable, but there is a decided tendency on the Mark Lane market to modify the opinions hastily formed upon insufficient data a short time back. The quality and condition of the wheat crop are good, the weights of the samples on offer at Mark Lane having varied from 60 to 65 lbs., but there is a falling-off in the quality of the later exhibits from that of the early ones. The prices realized for the new crop have been 54s. to 58s. for red, and 56s. to 60s. for white per quarter; but, as we write, it is very difficult to obtain 60s. for the choicest samples. It is not improbable that the deficiency in bulk will be compensated for by the increased weights and improved quality, or nearly so, while the large foreign supplies available and prospective, must necessarily tend to depress the market. Farmers should send forward freely, so long as it is possible to obtain present currencies, but millers are

by no means anxious to operate for the moment, and it would be difficult to dispose of any large quantity. There is a considerable falling-off in the imports, the aggregate of which, since the commencement of the year, is as follows:—

IMPORTS OF GRAIN INTO THE UNITED KINGDOM SINCE AUGUST 28.

	1870-1.	
	Imports. Cwts.	Exports. Cwts.
Wheat	33,456,196 ...	3,236,720
Barley	7,746,418 ...	111,818
Oats	9,864,509 ...	1,441,767
Peas	985,074 ...	56,780
Beans	2,119,596 ...	16,657
Indian Corn	13,880,776 ...	79,371
Flour	4,289,312 ...	1,352,403
	1869-70.	
	Imports. Cwts.	Exports. Cwts.
Wheat	37,845,441 ...	971,322
Barley	7,687,150 ...	101,260
Oats	11,328,618 ...	811,843
Peas	2,012,454 ...	14,582
Beans	1,738,966 ...	3,161
Indian Corn	17,622,997 ...	16,450
Flour	5,846,759 ...	135,965

The barley crop is the best cereal crop this year, though there is a falling off in the proportion of fine samples. The tendency of prices is temporarily downwards, but it must be borne in mind that we shall not receive the usual large supplies from France and Germany this season. Oats are a good crop, while beans and peas have proved very favourable in the result.

The prospects of feed for stock were seldom better. All roots have prospered well, turnips, mangolds, and swedes having been very favourably affected by the moist character of the season. Unfortunately these observations do not apply to potatoes, which have been badly attacked by disease, more especially in Ireland. This, however, is the only serious failure in the agricultural year. The hay crop, which at one time, threatened to show a serious falling off, has proved about an average, though the magnificent expectations formed at an early period of the year have been completely disappointed.

Hops have fared badly, but at length show signs of improvement, though a great deficiency will be found in the yield. Stocks of old produce are large, and the supplies from abroad promise to be liberal.

The wool market has continued very firm. Manufacturers have been deterred from operating in consequence of the high prices demanded, but there is little doubt, in the present flourishing state of the woollen and worsted trades, that the quotations current can be well maintained.

EAST RIDING CHAMBER OF AGRICULTURE.—

At the monthly meeting at Beverley, Mr. W. Bainton, of Beverley Parks, in the chair, a letter was read from the Morpeth Chamber of Agriculture, setting forth certain grievances which they considered agriculture had to bear. No action was taken in the matter, the letter not containing, in the opinion of the members, sufficient of a definite nature for them to discuss. On the motion of the Chairman, seconded by Mr. G. W. Langdale, it was agreed that the annual meeting for the appointment of officers should be held on that day fortnight. A discussion took place respecting the tax upon farmers' light vehicles, but no resolution upon it was carried. The chairman glanced over the business of the Chamber for the past year, and congratulated the members on the present prosperous state of agriculture. He regretted, however, that the work of the Government with regard to the interests of the farmers, had been all doing and undoing. He advocated also the appointment of a president who would take an active part in the affairs of the Chamber, and promised at an early date to read a paper on Land Tenure.

AGRICULTURAL INTELLIGENCE, FAIRS, &c.

ASHFORD LAMB FAIR AND STOCK MARKET.—

Tuesday last was our lamb fair, but the quantity of store stock brought in was much less than it generally is, which is a sign that the farmers have plenty of keep at home. The store sheep and lambs penned were, in round figures, 5,000 in number, and it is not often that such high prices are made as prevailed to-day. 35s. per head was a frequent price for good store lambs. Mr. Scott, of Boy's Hall, made of his large consignment 38s. per head; and some even fetched 40s. Prices of inferior lambs ranged from 25s. to 30s. per head. To show the difference of the value of store stock between this year and last, it may be mentioned that such lambs sold last autumn at from 7s. 6d. to 12s. 6d. and 15s. per head. Old sheep were also dear, making 40s. to 50s. per head; and store tegs the same. There were about 1,400 fat sheep brought in, and the wethers, and in fact all the best class of them, made very high prices, from 5s. 10d. to 6s. 2d. per stone. Fat lambs, of which there were 300, were also exceedingly dear, making the highest figures of last week. There were some lean bullocks and horses, in each of which a good trade was done; but although there were only 90 fat bullocks, purchasers were few, and the trade was sluggish. It seems the consumption of coarse beef is limited during the hot weather. Most of the salesmen effected clearances, there being some large buyers of store sheep; an old gentleman, named Gibbons, took no less than 750 of one seller.

BRIDGNORTH AUGUST FAIR, AND MESSRS.

NOCK'S GREAT SALE OF RAMS AND SHEEP.—

On Monday there was a very large attendance of sheep breeders, agriculturists, and dealers, including the whole of this district, and part of Staffordshire. Amongst the most noted were Messrs. Keeling and Cheate (Tamworth), Prece (Shrewsbury), Cavendish (Chyknell), Tart and Davies (Patton), J. R. Cartwright and Wyley (Admaston), Dudfield (Kinlett), J. Wilton (Aston Hall), Hall (Wombourne), Wilson (Copley), R. Bradley (Ewdness), Hughes (Hampton's Load), &c., &c. Mr. Nock commenced his sale in the Smithfield exactly at the time appointed, twelve o'clock, and wielded his hammer with more than usual success, as the following high prices amply testify: Mr. Wadlow's, of Houghton, grand rams went from 8 guineas to 20 guineas each; Mr. Instone's, of Callaughton, from 8 guineas to 23 guineas each; Mr. Foster's, from 6 guineas to 19 guineas each; Mr. Wadlow's yearling ewes, from 51s. to 65s. each; Mr. Instone's store ewes, from 80s. to 92s. each; Mr. Massie's yearling ewes, from 55s. to 63s. each; Mr. Wild's store ewes, from 55s. to 58s. each. Previous to the disposal of the above, Mr. Nock obtained for fat wethers 54s., and fat ewes 52s. to 58s. each; lambs, from 27s. to 33s. 6d. each; store ewes, from 46s. to 51s. each; fat cows, from £16 to £22 5s. each; cows and calves, from £17 to £18 10s.; sows in pig, £7 12s. 6d. each; sow and eleven pigs, £8 12s. 6d.; sow and nine pigs, £9 2s. 6d. The sale realised near £1,500. The day was most favourable throughout, the company numerous, and the biddings spirited.

CREDITON FAIR.—The annual "green fair" commenced on Tuesday with the sale of cattle in St. Lawrence Green. The supply of bullocks was scanty, for which exorbitant prices were asked. The supply of sheep was large, but sale was extremely dull, the greater portion not changing hands. Prices had a rather downward tendency toward the close of the fair.

HALLSHAM SHEEP FAIR.—This annual fair was held on Saturday. The supply was much larger than usual, 2,448 sheep and lambs being penned, as against 1,300 last year, and there not being a proportionate number of buyers present trade ruled rather slack during the morning, and prices were somewhat easier than at the recent large fairs. Among the sales effected were the following: Mr. Davey, 50 mixed lambs, 30s.; Mr. Paxton, Willingdon, 50 cull lambs, 23s.; Messrs. Homewood, Rodmill, lambs, 27s. 6d.; Mr. Deadman, Hellingly, teg, 46s.; Mr. Robert Stapley, Ninfeld, 40 wether tegs, 42s.; Mrs. Shoosmith, Nettlesworth, 24 mixed cull lambs, 22s. 6d.; Mr. John Breton, Sayerland, 25 mixed cull lambs, 21s.; Mr. Guy, Willingdon, 66 cull lambs, 21s.; Mr. Piper, Seddlescombe, 50 wether tegs at 41s.; Mr. William Hiekes, Wartling, 60 lambs at 27s. 6d., 60 seconds at 21s., 25 culls at 20s.; Mr. Woodhams, Claverham, 26 lambs

at 22s., 20 at 20s. 6d., and 30 at 18s. 6d.; Mrs. Robert Pitcher, Crawley, 40 mixed lambs, 19s.; Mr. Josiah Pitcher, 24 wether lambs, 20s., 17 cull ewe-lambs, 22s.; Mr. T. Carey, Shawpits, Hellingly, 30 wether-lambs at 27s., 25 at 23s., 25 culls at 19s.; Mr. Valance Elam, 40 old ewes, 33s. 6d.; Mr. Deadman, Chalvington, 20 broken mouthed ewes, 33s. The number of store beasts on the ground was about 150, principally consisting of Irish and Welsh. Mr. Foreman, of Battle, sold 20 Welsh heifers at £10 a-head.

HAWKESBURY UPTON FAIR.—This half-yearly fair was held on Friday. The attendance of farmers, butchers, dealers, and general agriculturists was large and highly respectable, including many from Bristol, Bath, Gloucester, Hereford, Birmingham, Warwick, Salisbury, Cardiff, Newport, &c. The fair has always been famous for its supply of horses of every description, but on this occasion the supply was not near equal to the demand, horses of any age or quality selling at the present time at very high prices. A few cart horses, of very good quality, were readily disposed of at high prices. Sheep of every description were in pretty good supply, and competition was very brisk. Mutton (best wether) realised from 9½d. to 10d. per lb., and in some cases as high as 10½d. to 11d. per lb. was obtained; fat ewes, 8d. to 8½d.; lamb, 9½d. to 10½d. Pigs of all kinds were in rather short supply, and not near equal to the demand. Bacon pigs, 11s. to 11s. 6d. per score; porkers, 11s. 6d. to 12s.

HEREFORD AUGUST FAIR.—This annual sheep and ram fair was held on Wednesday. The attendance of buyers was good, but not above the average. The market was well stocked with useful sheep and rams, not a pen being empty. In the stalls there was a very fair show of store cattle, but good fat beasts were rather scarce. The supply of horses was scant, and with the exception of a few good teamsters they were of very moderate quality. There was a demand for useful carters and a good animal fetched a long price. The pig pens were not full, but some very useful stores were on offer. These changed hands at better prices than they have lately realised. Porkers sold quickly at 6½d., the premier qualities making 7d. Store beasts sold slowly at dearer rates than of late. Beef may be quoted at 8d. to 8½d. The latter price was only obtained for a few very prime animals. In the sheep market there was a demand for fat animals, which realised per lb., 9d. to 9½d. Lamb sold at 11d. There was a large supply of stock ewes, but only a few pens could boast of first-rate quality. There was, however, a good demand for them, and so long prices were obtained. One pen was sold by Mr. Alfred Edwards for 51s. 6d. a piece. Rams were in force, and many of them sold well. Breeders were looking out for wool-making qualities, and consequently the long-wools commanded the best sale. Mr. Alfred Edwards sold a pen of shearing rams, the property of Mr. Pinches, of Hardwick, at prices ranging from six and a half to nine guineas. Six Webton Court rams, bred by the late Mr. Davis, were sold by Messrs. Pye and Sunderland. The competition for these well-known rams was very keen, and as those on offer were fine animals, they were sold quickly. Number one fetched 8gs.; No. two 7½gs.; No. three 12½gs.; No. four 8gs.; No. five, 18gs.; and No. six, 10gs. The greatest sale of the day, however, was that of 21 rams bred by Mr. Price, of Penallt Court, all of which were sold at prices ranging from seven and a half to twenty-three and a half guineas. For some of the rams the competition was very keen. For number seven, a very fine ram, the bidding ran up to twenty-three and a half guineas, and at that price the animal was sold to Mr. Wigmore, Bickerton Court. Another ram was bought for Colonel Feilden at sixteen and a half guineas. The remainder sold as follows:—one for seven and a half guineas, six for eight and half, two for nine, one for nine and a half, one for ten, one for ten and a half, one for eleven, one for eleven and a half, two for twelve, one for twelve and a half, one for thirteen and a half, and one for fourteen and a half guineas, the average being £11 1s. each. Messrs. Pye and Sunderland also sold some good Shropshire rams from the Dorstone flock from £5 to £8 15s. Short-wooled rams were neglected, and many were sent back unsold. Twenty-five yearling ewes, the property of Mr. T. Jowitt, the old Weir, were also disposed of by the last-named auctioneers, and fetched 52s. per head, and a number of yearling wethers from the same flock realised 56s. 6d. per head. The competition for twenty exceedingly handsome and pure-bred Ryelands, produced from the celebrated stock of Mr. J. B. Downig, of

Holm Lacey, was not so keen as we have before witnessed, although several were disposed of at satisfactory prices. This remark will also apply to the Shropshire Downs offered. Mr. Nathaniel Taylor, of Worcester, sold by auction a capital lot of Oxfordshire Down Rams, the property of Mr. Charles Gillet, of Cote House. They realised from £6 Gs. to £9 19s. 6d.

HORNCASTLE HORSE FAIR, Aug. 15.—This fair was opened on Monday with the show. The supply of horses, although not numerically up to many previous fairs at Horncastle was, for stamp and quality, ample to sustain the long acquired celebrity. There was the usual large assemblage of dealers, professional and amateur, and buyers had to concede to demands of breeders. Sales were made at the following general quotations: Harness horses, four and five year old, suitable for breaking to double and single harness for private carriage purposes, 70 to 85 guineas, and seasoned horses 90 to 140 guineas; easy-stepping light-legged horses for small broughams and phaetons, 55 to 80 guineas; well-matched pairs of carriage-horses 220 to 350 guineas; horses suitable for railway carriers, omnibuses, and heavy machine work, 40 to 65 guineas; common roadsters, 30 to 45 guineas; trotters of celebrity, 40 to 75 guineas; riding horses, handsome nags, 50 to 75 guineas; neat, compact-built cobs, 60 to 80 guineas; covert hacks, Galloway, and harness cobs, 50 to 70 gs.; neat-going pairs of matched ponies, 40 to 70 guineas; horses for park riding, easy mouthed, for ladies' saddles, and chargers, 100 to 200 guineas; and among this class were horses of high fashion. Hunters of good blood produced from 150 to 200 guineas; and hunters of reputation in the field fetched 300 guineas, and promising well-bred young Irish horses, 75 to 170 guineas. Stale and used-up hunters made but low figures. Horses suitable for artillery and army work were in great request, and a spirited competition existed between English and foreign army horse contractors, and many strings of this class of horses were consigned to the Continent. Provincial dealers were heavy buyers of hunters, and the London division speculated largely in harness-horses of high class.

IPSWICH LAMB FAIR.—Altogether there was a little more than 13,000 sheep and lambs in the field. Of bullocks nearly 400, and 250 head of horse stock. The sheep and lambs were principally in the hands of the following dealers: Messrs. Makens (Ringshall and Norwich), 3,000; Mr. N. Creasey (Cratfield), 1,100, Messrs. Spurling and Sons (Shotley, Ipswich, and Woodbridge), 2,000, sold by auction; Mr. R. Bond (Ipswich), 1,600, sold by auction; Messrs. Sexton and Grimwade (Ipswich, Colchester, and Hadleigh), 90, by auction; Messrs. Cruso and Hawkins, about 80 tups, by auction; Mr. Oakey (Cambridge), 180 tups; Mr. Barker, 200 sheep and lambs; Mr. W. Nesling (Kenton), 700; Mr. Brook (Charsfield), 700; Mr. C. Page, 900; Mr. S. Page, jun., 500; Mr. L. Goss (Ipswich), 400; Mr. S. Robinson (Ipswich), 200; Mr. Hunt (Culpho), 250; Mr. G. Smith (Higham), 400; Mr. Cowles (Stratford), 200; Mr. Wm. Beer (Huntlesham), 120; Mr. S. Page, sen., 200; Mr. Wm. Page, 200; Mr. Gooding (Debenham), 120; Mr. R. Johnson (Myland), 120; Mr. F. Woods, 300; Mr. T. Betts, 100; Mr. Vinee (Campsey Ash), 140; Mr. E. Betts, 130; Mr. G. Fisk (Bramford), 50; Mr. J. Groom (Woodbridge), 80; and a few holders of smaller lots. Messrs. Makens had about 80 beasts; Mr. Lewis Goss, of Ipswich, about 70 head. The principal holders of horses were Mr. Martin, of Cattavade, and Mr. Pratt, of Melton. There was a large number of cobs and ponies in the hands of dealers, who certainly roared themselves, if their trade did not, for the noise and rushing hither and thither with the horses was such as to keep a good space of that part of the field very well cleared. Trade was complained of in the early part of the day as dull and slow. High prices were asked and eventually given. The cloudy skies and the few light showers that had fallen during the last few days had suddenly improved the prospects of keep and enabled holders to be firm, and good prices were made. Lambs generally ranged from 35s. to 38s., but a few choice lots of forward ones, half-breds, reached as much as 44s. each. Ewes, from 63s. to 70s. each. Beasts, store, £7 to £13 each; fat, 10s. per stone.

IRVINE MARYMAS HORSE FAIR.—At our fair, held on Wednesday last, there was a good supply of horses of rather a superior description, nearly all of which met with a ready sale at what was reckoned very high prices. Good draught horses brought from £25 to £50, and a few of very superior

quality were disposed of at from £50 to £56. An inferior class ranged from £15 to £35. Only a very few were present of the lowest quality. Of riding horses the number was very limited, and for these there did not appear to be much demand.

LANPETER AUGUST FAIR.—This fair was held on Saturday, when a larger number than usual of dealers attended, and there was a great competition for the best beasts. The farmers and graziers were indeed quite perplexed as to what to charge, owing to the demand being unusually brisk. The dealers were not satisfied with waiting for the incoming of the stock at the place where they are generally sold, but posted themselves on the different roads leading to the town, and thereat made several bargains. The rates varied from £6 to £18 for steers at two years old. It is believed that not one single beast was left unsold by 3 p.m. The oldest man living here does not remember witnessing such a fair.

LANARK FAIR.—The third for the season of the great sheep markets held at Lanark commenced on Monday. The stock shown consists of blackfaced ewes and wether lambs, Cheviots, and crosses. In bygone years blackfaced ewe lambs generally took the lead in regard to numbers, but on the present occasion, as well as that of last year, wether lambs were by far the largest class. There was a very evident scarcity of good ewe lambs, while the wether lambs were mostly seconds, the "tops" having been disposed of at the market held a fortnight ago. The turn-out of Cheviots and crosses was a full average, both as regards the number and the quality. The attendance of buyers was good, and a considerable stroke of business was done by the English dealers, who purchased the chief part of the ewe lambs for breeding purposes. A brisk demand was experienced for ewe lambs, and the whole were sold early at very high prices. A very fine lot from Caddenhead, and which was the object of admiration, realised the extremely high figure of £23 per clad score, being 7s. above the top price at the same market last year. Generally, ewe lambs would be up from 4s. to 5s. Wether lambs were a sleeker trade than at the last fair, and prices easier—probably 1s. per head. At the finish of the proceedings, however, a good clearance was effected. Cheviots and crosses enjoyed a good sale. The former would be up from 3s. to 4s. apiece, and the latter 3s. 6d. to 4s. 6d., from last year.

MARLBOROUGH LAMB FAIR.—There was a large number of sheep penned. Prices decreased 3s. or 4s. per head for ewes, and 1s. to 2s. for lambs. A fine lot of sheep reared by Mrs. Price, of Wolfhall, realised 57s. per head. 78s. was bid for the best 100 ewes belonging to that lady, but refused.

MONZIE LAMB FAIR.—This market was held on Friday, near Foulford. The stock shown, which consisted chiefly of blackfaced lambs, was placed on the stance at an early hour. Prices, compared with last year, were 6s. higher. The best lots of top cross-bred lambs sold at from 23s. to 24s. per head. The best lots of blackfaced lambs sold at 14s. each. Second and third-rate animals sold at prices varying from 7s. to 10s. a-head. Previous to the market numerous sales were effected of cross-bred lambs at 22s. per head.

ROMNEY MARSH SHEEP AND LAMB FAIR.—This important fair for the sale of sheep, lambs, and wool, was held as usual at New Romney, on Monday last, and was largely attended by buyers from the upland districts in Kent, Surrey, and Sussex. The total number of sheep and lambs penned was 11,500—viz., 4,000 lambs, 2,500 tugs, and 5,000 ewes, and the greater portion of these all changed hands at the following averages: Lambs, 32s. per head; tugs, 44s. ditto; ewes, 46s. ditto. The wool trade ruled brisk, at £24 per pack for best Kent fleeces, and £14 for lambs' ditto.

ST. LAWRENCE FAIR, BODMIN.—At this Fair, on Monday, fat cattle sold at 80s. per cwt., store cattle 45s. to 50s. per ditto, cows and calves £12 to £16 the two, sheep 8½d. to 9d. per lb., lambs (in the wool) 9½d. per lb., lambs (shorn) 9d. per lb., store sheep 50s. to 55s. each. The supply was limited, and the demand brisk. Some good horses were offered for sale at the horse-fair in the latter part of the day. The weather was fine.

WORCESTER FAIR.—There was about the usual time-of-year supply of stock, and the trade done was at about the same prices as those obtained at the previous fair.

REVIEW OF THE CORN TRADE

DURING THE PAST MONTH.

The poor promise of a cold and rainy July has during the month of August been happily changed by the sudden tropical heat, which lasted for nearly three weeks, and brought the harvest more rapidly to maturity than the most sanguine would have dared to predict as possible. We are glad to say that about one-half of the corn has been gathered in the south, and with fine weather still ruling, another three weeks will bring matters nearly to a close. The first and earliest crop of hay has already been followed by a capital second, and all the corn yet brought to market has been in fair condition, in spite of a few showers, which did more good than harm in mellowing the samples both of wheat and barley. All spring corn is well reported, barley this season standing first; and the quality of the wheat has been much beyond expectation. There is plenty of straw, which was much wanted, but the ears having been short and defective, we certainly are not warranted in looking for an average yield. Many farms already are one-quarter to 12 bushels short per acre, and this with old stocks exhausted and a French demand still upon the market, has served to prevent a decline in prices, notwithstanding a continuous inpour of heavy foreign arrivals. As much, however, is yet in the field, we are still dependent on the weather, and should it still remain fine we are likely to see easier rates for a time, whatever the season may ultimately bring. This hot weather was very much wanted for northern Europe to make up for a backward season, but it is remarkable that scarcely any foreign market has given way. France has continued firm, so has Germany. Hungary, under the belief of a deficiency, has actually risen somewhat, as well as Spain, which lately was reckoning on French wants as a source of prospective business; and America, being informed of the state of things here by submarine cable, has raised the prices of breadstuffs. There is, indeed, one question which may turn out an evil of magnitude, that is, the state of the potato crop in Ireland. It is to be hoped that the first reports have been much exaggerated; but should they only half prove true, it will be a further draught upon a light crop of wheat. But the best set-off we have is the fact that maize is plentiful in America. The following were the most recent prices of wheat, at the several places named: Best white wheat at Paris 69s., red 66s., red Richelle at Marseilles 59s. 6d., Berdianski sorts 54s. At Nantes red wheat was quoted 58s.; fine old white at Bordeaux 63s., best new 59s.; Polish mixed at Amsterdam 59s., at Maestricht 58s.; white new Zealand wheat at Rotterdam 60s., red sorts at Hambro' 51s. to 58s., at Pesth (Hungary) 39s. to 48s.; best high mixed at Danzig 62s., cost, freight, and insurance; in Spain white wheat 45s. to 50s.; white at San Francisco 58s. 6d., cost, freight, and insurance; best No. 2 red spring at New York 49s. 6d., and winter 50s., per 450lbs., cost, freight, and insurance.

The first Friday in August opened on the smallest English supply known for a long time past, there being only 630 qrs.; but the foreign arrivals were free. Very few fresh samples were exhibited on the Essex and Kentish stands, and the trade in anticipation of Monday's holiday had more the appearance of suspense than business, though prices were nominally as at the commencement of the

week. With but few country buyers, the foreign trade was very limited, at unaltered quotations. Floating cargoes were dull. With very brilliant and forcing weather in the country, the markets, being lightly provided, gave way only to a small extent, and some not at all, the utmost decline being about 1s. per qr., as at Bishops' Stortford, Bungay, Hungerford, and Newcastle. Liverpool, though firm on Tuesday for white qualities, was 1d. to 2d. lower per cental for red, with a further decline for such on Friday. Glasgow gave way only 6d. per qr., and Dublin not at all, though the demand was limited to foreign sorts.

On the second Monday there was an improved, but still small quantity of English wheat, with a very heavy arrival of foreign. Among the limited number of samples exhibited on the Essex and Kentish stands were some fine new white qualities, varying in weight from 61 to 63 or 64 lbs. per bushel, the best being for some time held at 60s.; but eventually it was sold at 59s. The quantity of old was too small to make a market, and it was neglected; but nominally the value was as on the week previous. A demand for fine white having again sprung up for France, such sorts were in request at full prices; but the heavy arrivals, consisting mostly of red from Russia and America, were lowered in value 1s. to 2s. per qr., with but a difficult sale at the reduction. Floating cargoes were also difficult to place, unless fine. The weather having continued almost cloudless and intensely hot up to Thursday night, the earlier country markets began to feel its effects in lower prices, and there was a general reduction of value to the extent of 1s. per qr., several places making the fall 1s. to 2s. per qr., as Gainsborough, Lynn, St. Ives, Spilsby, Sheffield, Stockton, &c. Though Liverpool gave way on Tuesday 1d. per cental, this decline was subsequently recovered. The Scotch markets were easier. Edinburgh was down 1s. per qr. and Glasgow 6d. to 1s. per qr.; but the scarcity of native wheat at Dublin kept up its value, foreign also being fully as dear.

On the third Monday there was again a limited supply of native produce, with abundance from abroad. Expectation was to-day disappointed as regards new samples, there being very few, and still fewer of the old crop. This, with the late rain and unsettled aspect of the weather, inclined factors to hold out for 1s. per qr. advance; but millers would not pay it, and business was accordingly done on previous terms. It was, however, not so as regards foreign sorts, which not having previously been reduced had nothing to recover; but Russian and American, in consequence of a good country attendance, went off freely, the former recovering the late 1s. decline, and the latter 2s. per qr. Floating cargoes, more especially white sorts, were in demand at full prices. The altered character of the weather this week, and small supplies in consequence of occupation with harvest work, gave some tone to the country wheat trade. All markets were firm, and some 1s. dearer, as Manchester, Gloucester, and Reading; and at some other places there was a greater advance. Though Liverpool lost 1d. to 2d. on Tuesday, it was more than made up on Friday. Both Leith and Glasgow were up 1s. per qr., and foreign wheat at Dublin brought 6d. to 1s. more money.

On the fourth Monday there was but a small supply of English wheat; but the foreign arrivals were very heavy,

COMPARATIVE AVERAGES.

Years.	WHEAT.		BARLEY.		OATS.	
	Qrs.	s. d.	Qrs.	s. d.	Qrs.	s. d.
1867	22,569½	65 2	671½	39 4	1,675½	28 11
1868	61,642½	57 1	1,794½	41 4	1,927½	29 2
1869	46,279½	53 1	821½	33 7	1,461½	26 3
1870	47,377	54 7	339	33 5	2,949	25 10
1871	33,780½	57 10	116½	35 9	1,204½	27 6

AVERAGES

FOR THE PAST SIX WEEKS:		Wheat.	Barley.	Oats.
July 15, 1871	July 22, 1871	s. d.	s. d.	s. d.
July 15, 1871	July 22, 1871	58 6	34 7	27 10
July 22, 1871	July 29, 1871	58 10	35 11	27 2
July 29, 1871	Aug. 5, 1871	58 0	34 3	28 3
Aug. 5, 1871	Aug. 12, 1871	58 0	36 7	27 4
Aug. 12, 1871	Aug. 19, 1871	58 5	35 11	27 6
Aug. 19, 1871	Aggregate of the above	57 10	35 9	27 6
Aggregate of the above	The same week in 1870	58 3	36 6	27 5
The same week in 1870		54 7	33 5	26 10

BRITISH SEEDS.

Mustard, per bushel, brown	13s. to 15s., white	10s. to 12s.
Canary, per qr.		68s. 66s.
Cloverseed, new red		62s. 61s.
Coriander, per cwt.		21s. 22s.
Tares, winter, new, per bushel		7s. 6d. 8s.
Trefoil, new		28s. 34s.
Ryegrass, per qr.		32s. 31s.
Linseed, per qr., sowing	64s. to 68s., crushing	58s. 63s.
Linseed Cakes, per ton		£11 0s. to £11 5s.
Rapeseed, per qr.		71s. 74s.
Rape Cake, per ton		£6 6s. 0d. to £6 10s. 0d.

FOREIGN SEEDS.

Cloverseed, red	18s. to 53s., white	64s. 68s.
Hempseed, small	41s. to 42s., per qr.	41s. 45s.
Trefoil		24s. 28s.
Ryegrass, per qr.		32s. 31s.
Linseed, per qr., Baltic	55s. to 62s., Bombay	63s. 63s. 6d.
Linseed Cakes, per ton		£10 10s. to £11 5s.
Rape Cake, per ton		£6 6s. to £6 10s.
Rapeseed, Dutch		70s. 72s.
Coriander, per cwt.		21s. to 22s.
Carraway, ,, new		35s. 36s.

HOP MARKET.

BOROUGH, MONDAY, Aug. 28.—There is no alteration to report in our market, which continue quiet, with very firm prices. Material assistance has been given to the plantations by the fine weather of the past few weeks, but while many grounds have improved, others have made no progress, owing to the severe attack of mould, which has spread and effected considerable damage, especially in Middle Kent. Continental reports of Belgium are more favourable. Latest advices from New York state the market to be very excited, owing to an increase of vermin in the plantations, and an advance of 5 cents, per lb. on 1870's has taken place, which, however, has tended slightly to check business.

Mid and East Kent	£3 0	£4 4	£7 7
Weald of Kent	3 0	4 0	5 5
Sussex	3 0	3 10	5 0
Farnham and Country	1 10	5 5	6 0
Olds	1 0	1 5	1 10

CANTERBURY HOP MARKET, (Saturday last).—The demand is confined to small lots for present use; prices continue firm. There is still a diversity of opinion as to the amount of produce per acre, which can only be settled by picking. The late genial weather has been beneficial in bringing the bar into hop; it is expected that picking will be commenced in a fortnight.

WORCESTER HOP MARKET, (Saturday last).—The general reports from the planters this week, upon the whole, are not quite so favourable, as the cold and frosty nights with wind have somewhat retarded the growth, therefore it is now too late for any improvement, except with the few most favoured grounds. Market quiet but firm. Nothing offered by planters to-day.

POTATO MARKETS.

BOROUGH AND SPITALFIELDS.

LONDON, MONDAY, Aug. 28.—The supplies of potatoes have been moderate. There has been a fair demand at our quotations.

Regents	60s. to 80s. per ton.
Shaws	40s. to 60s. "
Kidneys	80s. to 110s. "

PRICES of BUTTER, CHEESE, HAMS, &c.

BUTTER, per cwt.: s. s.	CHEESE, per cwt.: s. s.
Dorset.....125 to 130	Cheshire..... 64 to 74
Friesland .....120 122	Dble. Glouc., new 62 68
Jersey..... 94 102	Cheddar..... 74 84
FRESH, per doz. .. 13 14	American..... 46 66
BACON, per cwt.:	HAMS: York..... 88 96
Wiltshire, green..... 78 82	Cumberland..... 86 94
Irish, green, F.O.B. 76 80	Irish..... 94 102

LONDON CHEESE MARKET, (Thursday last).—We

have nothing new to report with regard to English Cheese this week. The supply of new Cheshire is limited, and the price too high to admit of any important demand. Fine Somerset and Scotch are fairly saleable. There has been a good sale for American Cheese at rather lower rates, namely, 40s. to 54s. Useful quality has also been sold at further reduced prices. The arrivals this week are 38,325 boxes.

GLASGOW CHEESE MARKET, (Wednesday last).—A moderate arrival of Cheese forward this week, but with the accumulated stock lying over for the last two weeks the market was well supplied. Business very slow, and confined to the very choicest parcels. Large arrivals of American Cheese of fine quality, which were offered at 12s. per cwt. under last year's prices at this time, and which operated against our home Cheese; buyers, being convinced that our prices must yield very considerably before long, therefore confine their purchases to the merest retail requirements. Cheddars, fancy quality new 60s., first-class 54s. to 58s., fine 50s. to 53s., secondary 44s. to 48s.; Dunlops, fancy quality 56s., first-class 50s. to 54s., fine 46s. to 50s., secondary 42s. to 46s.; Skim Milk 21s. to 24s. per cwt.

ENGLISH WOOL MARKET.

LONDON, MONDAY, Aug. 28.—Although business in the Wool market has not been on a liberal scale, the tone has continued healthy; choice hogs and wethers have been dealt in to a fair extent, at extreme currencies; other sorts have sold quietly.

CURRENT PRICES OF ENGLISH WOOL.		s. d.	s. d.
FLEECES—Southdown hogs	per lb.	1 5½	1 6
Half-bred ditto		1 5½	1 6
Kent fleeces		1 5½	1 6½
Southdown ewes and wethers		1 5	1 5½
Leicester ditto		1 5	1 6
Sorts—Clothing, picklock		1 5	1 6
Prime		1 3	1 3½
Choice		1 2	1 2½
Super		1 1	1 1½
Combing, wether mat.		1 6½	1 7½
Picklock		1 4	1 4½
Common		1 1½	1 2½
Hog matching		1 7½	1 8½
Picklock matching		1 4½	1 5½
Super ditto		1 1½	1 2½

BRADFORD WOOL MARKET, (Thursday last).—There

has not been so much business passing during the week, and to-day there is a quietness pervading the market, as both buyers and sellers appear to be indifferent with regard to business. There is not any giving way in the price of wool, as staplers' quotations are very firm and spinners' wants not very pressing. Business is very much restricted to users supplying their immediate requirements. All descriptions are in good consumption, but the finer classes are mostly inquired after.

MANURES.

Pure Dissolved Bones, 27.	Concentrated Ammoniacal Manure £10.
Bone Turnip Manure, 26 5s.	Superphosphate of Lime, 25 5s.
Nitrophosphate, 27 5s.	Potato Manure, 27 10s.
Mangold Manure, 28.	Urea, 27 10s.
Hoop 28.	Grass, 28.
Soluble or Fixed Guano, 412.	Government Peruvian Guano, £12 12s.
Nitrate of Soda, 416 15s.	to 417 5s. (Gypsum, 41 10s.)
Sulphate of Ammonia, 418 10s.	to 420 full per ton.

E. PYRER, London Manure Company, 116, Fenchurch Street, E.C.

Guano, Peruvian £12 7 to £12 15 0	Cot-sd. Cake, decer	27 10 0 to 27 16 0
Bone Ash..... 5 15 0	6 0 0	Cloverseed, N.A..... 2 10 0 0 0
Phosphate of Lime 0 1 2	0 1 3	Niger..... 2 7 0 2 8 0
Linseed Cake, per ton—		Ntr. of Soda, p. ct. 0 14 6 0 0 0
Amer. thin, best 10 15 0	0 0 0	German Kalmit..... 3 5 0 3 15 0
Linseed, Bombay, per q. 3 1 6	3 2 0	Tallow, 1st P.K.G. 2 4 6 2 5 0
Rapeseed, Guzerat 3 8 0	3 10 0	super. Norths 2 2 0 2 3 0

SAMUEL DOWNES AND CO., General Brokers, No. 7, The Albany, Liverpool.

Prentice's Cereal Manure for Corn Crops	per ton	28 0 0
Mangold Manure		8 0 0
Prentice's Turnip Manure		6 10 0
Prentice's Superphosphate of Lime		0 0 0

Agricultural Chemical Works, Stowmarket, Suffolk.

THE FARMER'S MAGAZINE.

SEPTEMBER, 1871.

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THE
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—See *Lancet*, 1st December, 1864.

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CAUTION.—Vice-Chancellor Sir W. PAGE WOOD stated that Dr. J. COLLIS BROWNE was, undoubtedly, the Inventor of CHLORODYNE; that the story of the Defendant, FREEMAN, was deliberately untrue, which, he regretted to say, had been sworn to.—See *Times*, 13th July, 1864.

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"Manhood.—This is truly a valuable work, and should be in the hands of young and old."—*Sunday Times*, 23rd March, 1856.

"The book under review is one calculated to warn and instruct the erring, without imparting one idea that can vitiate the mind not already tutored by the vices of which it treats."—*Naval and Military Gazette*, 1st February, 1856.

"We feel no hesitation in saying that there is no member of society by whom the book will not be found useful, whether such person hold the relation of a PARENT, PRECEPTOR, or CLERGYMAN."—*Sun*, Evening Paper.

Manhood.—"Dr. Curtis has conferred a great boon by publishing this little work, in which is described the source of those diseases which produce decline in youth, or more frequently premature old age."—*Daily Telegraph*, March 27, 1856.

Consultations daily, from 10 to 3 and 6 to 8. 15, ALBEMARLE STREET, PICCADILLY, LONDON, W.

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At the HALF-YEARLY GENERAL MEETING of the Proprietors, held on THURSDAY, the 3rd August, 1871, at the City Terminus Hotel, Cannon-street Station.

The following Report for the half-year ending the 30th June, 1871, was read by the Secretary.

WILLIAM CHAMPION JONES, Esq., in the Chair.

The Directors, in presenting to the Proprietors the Balance-Sheet of the Bank for the Half-Year ending the 30th June last, have the satisfaction to report that, after paying interest to customers and all charges, allowing for rebate, and making provision for bad and doubtful debts, the net profits amount to £90,100 16s. 8d. This sum, added to £1,349 0s. 8d. brought forward from the last account, produces a total of £91,449 17s. 4d.

They have declared the usual dividend of 6 per cent., with a bonus of 3 per cent., for the half-year free of income tax, being at the rate of 18 per cent. per annum, which will absorb £90,000, and leave £1,449 17s. 4d. to be carried forward to Profit and Loss New Account.

They have to announce the retirement of their esteemed colleague, John William Burnmaster, Esq., from the Direction, on account of advanced age, and the election of Frederick Youle, Esq., in his stead.

The dividend and bonus, together £1 16s. per share, free of income tax, will be payable at the Head Office, or at any of the Branches, on or after Monday, the 14th instant.

BALANCE-SHEET of the LONDON and COUNTY BANKING COMPANY, 30th June, 1871.

Dr.		
To capital paid up	£1,000,000	0 0
To reserve fund	500,000	0 0
To amount due by the Bank for customers' balances, &c. 14,505,257 15 2		
To liabilities on acceptances, covered by securities.....	2,640,138	5 9
		17,145,426 0 11
To profit and loss balance brought from last account..	1,349	0 8
To gross profit for the half-year, after making provision for bad and doubtful debts, viz.....	251,931	6 2
		256,280 6 10
		£18,901,706 7 9

Cr.

By cash on hand at Head-office, and Branches, and with Bank of England.....	£2,130,797	1 3
By cash placed at call and at notice, covered by securities.....	2,131,464	11 0
		£4,262,261 15 3
Investments, viz.:		
By Government and guaranteed stocks.....	1,400,764	15 9
By other stocks and securities	145,102	7 6
		1,545,867 3 3

By discounted bills, and advances to customers in town and country.....	10,061,582	2 2
By liabilities of customers for drafts accepted by the Bank (as per contra).....	2,640,138	5 9
		12,701,720 7 11
By freehold premises in Lombard Street and Nicholas Lane, freehold and leasehold property at the branches, with fixtures and fittings	245,735	9 10
By interest paid to customers	38,220	6 3
By salaries and all other expenses at head-office and branches, including income-tax on profits and salaries.....	107,901	5 3
		£18,901,706 7 9

Dr. PROFIT AND LOSS ACCOUNT.	
To interest paid to customers, as above.....	£38,220 6 3
To expenses, as above	107,901 5 3
To rebate on bills not due, carried to new account.....	15,708 18 0
To dividend of 6 per cent. for half-year.....	60,000 0 0
To bonus of 3 per cent.	30,000 0 0
To balance carried forward.....	4,449 17 4
	£256,280 6 10

We, the undersigned, have examined the foregoing balance-sheet, and have found the same to be correct.

(Signed) WM. JARDINE,
WILLIAM NORMAN,
RICHARD H. SWAINE, } Auditors.

London and County Bank, July 27, 1871.

The foregoing Report having been read by the Secretary, the following resolutions were proposed, and unanimously adopted:

1. "That the report be received and adopted, and printed for the use of the Shareholders."

2. "That the thanks of this Meeting be given to the Board of Directors for the able manner in which they have conducted the affairs of the Company."

(Signed) W. CHAMPION JONES, Chairman.

The Chairman having quitted the chair, it was resolved, and carried unanimously:

3. "That the cordial thanks of this Meeting be presented to William Champion Jones, Esq., for his able and courteous conduct in the Chair."

(Signed) P. P. BLYTH, Deputy Chairman.

(Extracted from the Minutes.)

(Signed) F. CLAPPISON, Secretary.

LONDON and COUNTY BANKING COMPANY.

NOTICE IS HEREBY GIVEN, that a DIVIDEND on the Capital of the Company, at the rate of 6 per cent. for the half-year ending 30th June, 1871, with a BONUS of 3 per cent., will be PAID to the Proprietors, either at the Head Office, 21, Lombard-street, or at any of the Company's Branch Banks, on or after MONDAY, the 14th instant.

By order of the Board,
W. McKEWAN, General Manager.

21, Lombard-street, August 4th, 1871.

F2254
No. 4 Vol. XL.]

OCTOBER, 1871.

THIRD SERIES.

THE
FARMER'S MAGAZINE,
AND
MONTHLY JOURNAL
OF
THE AGRICULTURAL INTEREST.

Dedicated
TO THE
FARMERS OF THE UNITED KINGDOM.

LONDON :
PUBLISHED BY ROGERSON AND TUXFORD, 265, STRAND.

PRICE TWO SHILLINGS.





A Leicester Ram

Published by the American Sheep Raisers' Association, New York, N.Y.



White Game.



THE FARMER'S MAGAZINE.

OCTOBER, 1871.

PLATE I.

A "ROYAL" LEICESTER RAM.

THE PROPERTY OF MR. GEORGE TURNER, JUNR., OF ALEXTON HALL, UPPINGHAM.

This ram, now a two-shear of Mr. Turner's own breeding, is by the Reserve old sheep at the Manchester meeting of the Royal Agricultural Society, out of a Holme-Pierpoint ewe, purchased at Mr. Sanday's sale in 1861. The Manchester Reserve ram was by the first-prize old sheep at the Bury St. Edmunds' meeting of the Royal Society.

In 1871 as a shearing this ram was not sent to Oxford, but he won a local prize or two, and went on to the Yorkshire show at Wakefield, where, as we reported, "the judges considered him to be a particularly good ram, in a not particularly good class; but they gave Mr. Barton all the prizes!" the Alexton ram being only reserved and highly commended.

In 1871 as a two-shear he took the first prize of his class at the Guildford meeting of the Bath and West of England Society, and the first prize at the Wolverhampton meeting of the Royal Agricultural Society of England, where we said that "for style, symmetry, constitution, and breeding he had grown into one of the best Leicesters out for many a day." He was let last season and again this to Mr. Spencer, of Gileston.

Mr. Turner is a son of the well-known Mr. George Turner, long of Barton, Exeter, so famous for his Devon herd and Leicester flock. Like his father, however, the son is changing from Alexton—a farm he held for many years under the late Lord Berners—to Thorpe-lands, in the adjoining county of Northampton.

PLATE II.

WHITE GAME.

Mr. St. John has clearly a horror of mountain hares as interfering with sport, while from his own experience "I must cordially confess that I made an inward vow against ptarmigan shooting again upon snow-covered mountains." He had two narrow escapes for his life in one day. During storms, the ptarmigan burrow deep under the snow in search of shelter and food; and seldom descend far down the mountains, even in the severest weather. When only the summits are covered they descend to the edge of the snow; but when the whole mountain is white they do

not leave it for the lower hills, but find what shelter they can by burrowing. Ptarmigan shooting during winter is most laborious sport, and is frequently attended with no small risk, owing to the snow concealing the numerous clefts and dangerous places which intersect the heights where these birds abound. The days, too, being short and the changes of weather frequent, the ptarmigan-shooter must work carefully and quickly. Our authority is the naturalist's *Note-Book*; and although the black swan is a *rara avis*, the white game is rarer still.

OLD SERIES.]

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[Vol. LXX.—No. 4.

HEADS.

BY HENRY CORBET.

[From the Bath and West of England Society's *Journal*.]

From the cradle to the grave, in all conditions and ages, throughout all nations, from Adam to the last existing man, from the worm we tread on to the most sublime of philosophers, physiognomy is the origin of all we do and suffer.—LAVATER.

At a dinner-table one evening at the Farmers' Club, a discussion incidentally arose as to the chief points to be taken into consideration in judging an animal; when there was a very unanimous opinion in favour of heads and shoulders. Narrowing the argument, again, to any one particular point to go by, there was a clear majority amongst the half-a-dozen or so of us, who joined in the conversation, in favour of heads. The shoulder, no doubt, answers very much for shape and symmetry of frame, but the head answers for everything. If you go for breed, you look above all to the head; if your aim be style or fashion, you must seek this in the head, as nine times in ten that very accommodating phrase known as *quality* should prove itself by a good head. You get at the very purpose of an animal by a look at his head. The calm placid countenance of a naturally thriving beast; the noble, masculinc, well-defined features of a sire of any character; the several uses of the horse, the instincts of the dog, and the mere gluttony of the pig, how safely you may arrive at a conclusion by studying the head! A scale of points for one or two certain breeds has already been drawn out; but in none of these is sufficient importance, at least as I am led to think, attached to the head of an animal, as the main index to his purity of blood, strength of constitution, and actual fitness for that service for which he is intended. Who would take to himself a bull with a mean, delicate, "cowy" head? And yet I have seen such distinguished in a Royal show-ring. Or, who would crave for his own riding, the sour-visaged, vicious-eyed hack? Or care to breed, or try to breed from the steery-looking heifer, which has lost the very semblance of her sex, from the misdirected zeal employed in feeding her up for show? A man may save himself a deal of money, trouble, and disappointment, by making the head a first principle in establishing a flock or starting a herd.

So strongly have I felt the necessity for more attention being given to this matter, that I have during the last year or so made it my business to collect from some of the best authorities, either as breeders or judges, as it were, a standard series of Heads, with the why and the wherefore any one feature should be regarded as an excellence, or another rejected as a drawback. In doing so, it may be as well to observe the Heralds' Order of precedence, and in bringing under review the several breeds or varieties of stock, to begin with that citizen of the world, the Shorthorn. Mr. Booth, of Warlaby, we are told, "attached much importance to the heads of his animals. Conforming, as regards cows, to the popular opinion that they should be moderately small and tapering, he contended that the bull should not only be broad across the brows, but with a lusty horn, especially stout at the base. Mr. Booth would not use a bull in which these substantial evidences, as he regarded them, of vigorous constitution and procreative power were wanting. And, indeed, sound physiology teaches that the more or less luxurious growth of the horn, is the result of constitutional opera-

tions. The marked influence of ill-health or castration on the growth of the horn, is sufficient proof of this. That the use of sires exhibiting these indications of a masculine character has no influence on the female progeny prejudicial to their feminine mien and character, a glance at the Warlaby cows and heifers will show. They are remarkable for their lady-like aspect, and graceful, well curved waxy horns; those inextinguishable tell-tales of some otherwise unsuspected jump *in* the dark *out* of the dark—inky horns and dingy noses being unknown amongst any of the leading families of Warlaby. The mild prominent eye is expressive of that equable contented temperament so favourable to the attainment of ripe condition; a tendency further indicated by the double chin-like appendages of pendulous fat beneath the root of the tongue, which, however objected to by some admirers of the more horse-like conformations of the head, give, in the opinion of others, an engaging piquaney of expression, and is always regarded approvingly by the knowing grazier as an earnest of aptitude for kindly feeding." So say the records of Killerby and Warlaby, while this description may be supplemented by something more in detail.

The head of a Shorthorn bull should be broad and moderately lengthy, with a full open countenance, a large prominent eye, and plenty of width between the horns, where there should be a good covering of hair. The horns themselves must be strong and slightly backward with a very gentle inclination upwards, positively upright horns being the worst of all kinds. From being broad above, the head should taper gradually towards the nose, but not too decisively, as nothing is worse than a bull with an "egg-sucking" frontispiece, as a houndsman would say; and the muzzle itself should be of a clear cream or flesh-colour. Writing a quarter-of-a-century since, Mr. Wright says of the Shorthorn's head, that "some prefer it to be long and lean, whilst others approve of its being thick and short;" but the long and lean head for a Shorthorn would never do in these days. Mr. Day, speaking to the merits of the famous Durham Ox says, "the head was rather long and the muzzle fine, eyes bright and prominent, with the ears long and thin." According to the print, however, the head of the Durham Ox, although refined and high-bred, is too weak and delicate even for a steer, that is, to pass muster in these times.

But the perfection of the improved Shorthorn's head is to be found in the female. The very expression, so calm, so sweet, and so dignified, is of itself a delightful "study;" and when old Homer, in the way of compliment, applied so continually the epithet, *bo-opis*, or ox-eyed, to his matron Goddess, he must have drawn upon the future, and have pictured to himself the noble, self-assured, full-blown beauty of one of our modern "Duchesses." The tranquil beaming eye, so full, so mild, and yet so prominent, the fairly broad forehead, running down in that graceful line to

the muzzle, where we drop the Goddess, or we shall have Jupiter resuming his masquerade, intent on the conquest of another Europa. The horns of the Shorthorn cow should, then, be slightly curved and spreading, bright and clear in complexion, with a bronze tapering tip; the nostrils wide, with the ears large, and fringed with that fine delicate hair, "only to be found," according to an enthusiast, "on a pure-bred Shorthorn." Still, good though the head may be, this loses nearly all its fascination if it be not properly set on. It should run elegantly into the somewhat full, firm neck, with plenty of play and style in its carriage. Any animal which droops its head in a half-guilty, hang-dog fashion, can never show to thorough advantage, and, of the two, it would be better to have them as the dandy described his partner in the quadrille, "with her head buckled up like a four-in-hand leader." But the naturally, nicely-arched neck is the thing to go for, be it in a woman, a heifer, or a horse. That 'cute observer Sam Slick felt this when he was fastening the hooks and eyes, "I never see such a neck since I was raised. It sprung right out o' the breast and shoulder, full and round, and then tapered up to the head like a swan's."

There are certain Shorthorn tribes or herds that have always been known for good heads. Noticeably enough, although fed terribly high for exhibition, the Athelstaneford heifers never lost their beautiful expression of countenance, and Rose of something's head was thought to be nearly perfect. I had opportunity of seeing a great deal of these animals for a season or two, occasionally crossing with them as they went the rounds of the national meetings, from England back again to Scotland, or over to Ireland. Then, as they have demonstrated at Towneley, the Barmpton Roses throw handsome and blood-like heads, and the Hertforth Cherries, as I am assured, were a family renowned for the grandest heads, which came very beautiful and high-bred, with a certain whiteness of the eye, very "taking" in its way. Old Cherry was the dam of Gainford, and Gainford was the sire of all Mr. Crofton's best stock. But, lovely as are the heads of the females, many bulls of the Bates blood are anything but good in this respect. There is an effeminacy in some of the sort which looks as if perseverance in one particular line had been carried too far, and nothing tells more of any such too close consanguinity than a feeble, weak, "pretty," head. You see it alike in man and beast. And yet you cannot, of course, always "breed heads." With all the attention paid to this point at Warlabby, by far the worst "place" about the celebrated prize bull, Commander-in-Chief, was his head, and this was so bad as to mainly account for his ever having been beaten. It was more that of a steer than a bull, plain and common, with an unpardonable horn. On the other hand, Mr. Bates, whatever may have come of it afterwards, evidently attached due importance to this point, as the oft-told story goes of his once buying a bull at a long price, although he had never seen more of the animal than his head.

The fatal mark against the head of the Shorthorn, "the damned spot," which like that on Lady Macbeth's hand nothing can wash out, is the black or smutty nose, as held to be too sure a sign of bad blood or impurity in a close or more remote degree. But there is no telling how or when you may throw back to a cross, and Collings crossed with the Kyloe, while there were "unsuspected jumps in the dark," that are nevertheless very much matters of history. Perhaps no animal of any repute was ever credited with so many black noses as a well-known Northern "Duke," and there are tribes in descent from him which throw black noses to this day. There is, however, a difference between a thorough smutty nose and one which is only dark in patches, of which Mr.

Pawlett's prize bull, Baron Warlabby, is a very recent example. Many maintain that this was not a smutty nose in the true acceptation of the term, and so one set of judges would pass him, and another Bench set him aside. At the Manchester Meeting of the Royal Agricultural Society they ordered him out, and at the Oxford Meeting they awarded him a prize. According to Mr. Wright—in 1846—"There are many well-bred Shorthorns with dark muzzles. This has been considered by many to be a recent introduction through some inferior cross; but, without denying that, let it not be forgotten that some of the early Shorthorns were not entirely free from it, although not very common, but the sire of Foljambe could not boast of much delicacy there." When, somewhere about the beginning of the present century, Mr. Thomas Booth was showing his Shorthorn herd to a neighbour, the other objected to what he called their *raw* noses—"in his day the stock was nearly all black-nosed, and he never knew a raw-nosed cow that was not delicate." It must be remembered that this was the word of a Yorkshire farmer, as uttered in the district from which the best Shorthorns have sprung. Early maturity or quick feeding is the chief recommendation of a Shorthorn; and so when we look one in the face we must bear in mind that what we want is, as Mr. Carr puts it, "a placidity and composure of mind, a phlegmatic disposition, suggestive of fattening propensity." In fact, a frisky Shorthorn should be something of an anomaly.

Not so the Devon. I should myself have a fancy for a certain wildness or boldness in the head of a pure North Devon; and when Captain Davy says this should in many points resemble the head of the deer, he seems to me to have very happily illustrated his subject. There is, of course, no surer tell-tale to this beautiful breed of animal than the blood-like head and lively look, as one may often distinguish in this way the little "native" gentleman from his commoner, heavier-countenanced cousin, born and bred on the fat lands of Somerset. With such a description apt to my hand, it would be worse than idle to attempt any other than that I have from Captain Davy: "The head should be small, with a broad indented forehead, tapering considerably towards the nostrils; the nose of a creamy white; the jaws clean, and free from flesh; the eye bright, lively, and prominent, encircled by a deep orange-coloured ring; the ears thin; the horns of the cow long, spreading, and gracefully turned up, tapering off towards the ends; in fact, the general aspect of the head should in many points resemble that of the deer. At the same time the expression must be gentle and intelligent. The horns of the bull are thicker set and more slightly curved, or in some instances standing out nearly square, with only a slight inclination upwards. Fault has been found with the length of the horn of the Devon as being disproportionate, and we have been recommended to get them more like those of the Shorthorn; but I hope, and indeed feel sure, that our breeders will never consent to give up one of the grandest characteristics of their breed."

Here, again, we have the *raw* nose, as the old Northern farmer contemptuously called it, and here, too, precisely the same sort of discussion crops up: "A *black*, or even a *spotty* nose is very much disliked, and a calf so marked is never kept by the best breeders. Now the wild cattle in Chillingham Park are of a creamy white colour, with *black* muzzles; may not the appearance at rare intervals of these black muzzles, and also of the *white* of which I have already spoken, be additional proofs, if any be wanting, that the Devons were originally descended from the wild cattle which were natives of these islands? I never heard these marks accounted for. Judging from the rude state of agriculture until, we will say, within the last two

hundred years, it is just possible that our ancestors were not so fastidious about the colour of the nose as we have since become, and did not object to breed from an animal with a black muzzle.*

So says Captain Davy, and his theory is well put; but still it is not so clear *why* we should be so fastidious in preferring a white nose to a black. The Shorthorn breeders say the snout comes originally from a cross, although this would seem to be something of a hypothesis at best. Can the curse of a black nose be further shown by any accompanying want of style or quality—in a word, Does its appearance necessarily imply an inferior animal in other respects? In support of my own theory, I am glad to say that some of the best and most successful Devons I have ever seen have had the handsomest heads, and I need but name Mr. James Davy's Temptress family to recall their fine deer-like character, telling as truly of their lineage as the longest pedigree in *The Herd Book*.

The mottle-faced Hereford is fast going out of fashion. Few people would object to buying a good mottle-faced cow; but no breeder of note would care to rear a bull thus marked, as he might be difficult to sell, for undoubtedly the white faces are now all the fashion. A well-known judge and breeder tells me that, beyond the colour of the face, and the length and straightness of the horn, the good points in a Hereford bull's head cannot differ much from those to be appreciated in other breeds. While, however, the horn of the bull runs straight and level from the poll, those of the cow and ox gradually curve upwards. The eye of the male should be rather lively than otherwise, and that of the cow conveying precisely the same calm, comfortable, good-tempered look which I have already identified with the Shorthorn. The face should be of a beautiful clean white in colour, backed by a rich red, more especially in the bull; the horn also white or light yellow, occasionally tipped with black, and the nose white; although here, again, we have the evil of black noses, which come, it is said, more frequently in Herefords than in any other breed of cattle. The head should certainly not be small in proportion to the other parts, as, in fact, a head either large or small out of proportion is simply a deformity in any animal. A really good head must have a certain length and breadth, to which such a phrase as *small* can never reach. Mr. George Smythies has favoured me with a measurement of the head of Governess, a choice Hereford cow, the property of Mr. Green, of Marlow:

Length of face	21½ inches.
Between eyes.....	12 "
Round nose	25 "
Length of horns	20 "
Width of horns from tip to tip.....	37½ "

It is said that Professor Owen, if you give him only the thigh-bone of some antediluvian creature, will work up the frame of a perfect monster, and with these dimensions he could no doubt fashion out a model Hereford. Governess, however, was altogether on a larger scale than the animals now exhibited, which are neater and finer, as no doubt but few heads would measure against her. One of the kindest heads I ever saw on a Hereford cow was that of Stately 2nd, the property of Mr. Evans, of Swaunstone, though she never did quite so well in public as might have been expected; but

If to her share some trifling errors fall,
Look in her face and you'll forget them all.

The champion Hereford bull, of his day, on the contrary, begins with a somewhat mean, small head; whereas there should be something very noble in the head of a whiteface, when seen at his best.

There is no animal which tells more of high breeding than an Alderney, or rather a Jersey-born, cow. There is a

refined air and carriage, a certain comely "presence," which would forbid all thoughts of the butcher, and never carry one's appetite beyond a syllabub on thin bread-and-butter. A Shorthorn bears "beefsteaks" on his very visage, whereas we shudder at the notion of cutting prime pieces out of old Daffodil, or of putting a round of Nora Creina in salt. It would be worse than killing and eating the pet lamb, let alone the question of Daffodil ever possessing any prime beef, while Nora, more palpably, being all angles can have no rounds. No—the head and beaming eye of the Alderney speak again of her purpose, of rich cream and yellow butter; but the charm here is all on the cow's side. Beyond a peculiar, wild wicked eye there is not much to admire in the head of an Alderney bull, and even the cows lose much of their graceful character when bred away from their native isle. In the Jersey scale of thirty-six points for a perfect cow or heifer, one each is allowed for the following excellencies: "Head small, fine, and tapering; cheek small; throat clean; muzzle fine, and encircled by a light colour; nostrils high and open; horns smooth, crumpled, not too thick at base, and tapering; ears small and thin (one point), of a deep orange colour within (one point); eye full and placid." The eye of the bull must be lively and his horn tipped with black, but beyond these the points are much the same. Mr. Dumbrell, of Ditchling, who has the largest herd of Alderneys in the kingdom, has thus sketched the head for me: "The horns should be fine, tapering, and crumpled, coming level from the head, and not turned up. The ears large, plentifully fringed with fine silky hair, with the inside skin of the ear of a deep rich orange colour, and the hair between the horns fine. The eyes, placed wide apart, should be large, prominent, bright, and intelligent; the forehead wide, and depressed in the centre; the cheek fine, and very tapering to the nostrils, which should be large, and the muzzle black, edged with tan. The head itself should be distinguished by a certain unmistakable evidence of good breeding which is readily recognisable, but not so easily put upon paper." The Jersey Society goes on to distribute the other points over the back, the barrel, legs, and so forth; but if we put down fifteen points for the head, and ten for the udder, leaving the other eleven for general appearance, we should arrive at a tolerably accurate, if not so elaborate, an estimate of an Alderney, which, after all, you must judge mainly fore and aft. I cannot believe in any man entering a ring with a pencil in his hand and carefully entering one point for this, and another for that, until he had proved a very pretty little sum in simple addition. He would surely "bother" himself during that somewhat tedious process.*

Mr. McCombie, again, speaking of course of his much beloved black Polls, says: "A perfect breeding or feeding animal should have a fine expression of countenance; I could point it out, but it is difficult to describe upon paper. It should be mild, serene, and expressive. He should have a small, well put-on head, prominent eye, with a clean muzzle. Thick legs, thick tails, sunken eyes, and deep necks, with thick skin and bristly hair, always point to sluggish feeders." Some years since I was at a meeting of the Highland Society at Aberdeen,

* Since writing this, I have heard an amusing story in point. A scale had been settled for certain breeds of sporting dogs, and at one of the shows the judges, after having awarded the premiums in a class, went on to prove their decisions by the new system. They accordingly noted down so many points for the head of the first-prize dog, so many for his tail, so many for style, and so forth; and they proceeded to appraise the second and third prizes after the same fashion. The several totals were then carefully counted up, when it was found that each of these three dogs had *precisely the same number of points* in his favour!

when rather a good story got about as to the heads of these famous Polls. Some philanthropists from Paris were present, and so struck were they with the Aberdeenshire cattle, that they offered, on the part of some French Humane Society, an extra medal for the best bull, the impression being that an animal without horns could do little injury either to the herd or the herdsman. Whereas the Poll has, in "fancy" parlance, rather "a fighting mug of his own," as often enough, like bulls of other breeds, a bit of temper, and with that hard bullet-head of his he will at times butt away like a nigger. However, the medal was duly awarded, and the French embassy returned, no doubt able to report that it had discovered a breed of cattle which must have flourished in Arcadia in the Golden Age—so gentle, so mild, and so harmless.

Let us look to another kind of Scotch cattle, and what would the West Highlander be without his head? The butcher will say in answer—"the very best beef"—but with his head all his character is gone. There is a wild grandeur, I had almost said majesty, about the head of the Highlander, that should count up very fast in any scale of his points, as perhaps no other animal shows in this respect such insignia of Nature's nobility. You may read of his Highland home in his clear bright eye, his magnificent horn, and his rough, but right royal coat. And the Southron would seem to have a deal still to learn in this way, for at the Smithfield Club Show of 1869 the judges selected as the best Highland ox an animal with an ugly "cowy" half-Ayrshire head, that was no doubt a mongrel; and a new class had straightway to be instituted, in order to avoid such awkward "findings" for the future.

The beauty of the horse, and of the head of the horse, have been sung in all ages. Job says, "the glory of his nostril is terrible," and that "he smelleth the battle afar off;" while Virgil repeats the image:

Micat auribus, et tremat artus;
Collectumque premissis volvit sub naribus ignem.

And this notion of "nostril fire" has been pronounced "the noblest line that ever was written without inspiration." Again, Homer and Shakespeare are never weary of taking the horse as an illustration of courage, vigour, and intelligence. I am inclined to doubt, though, whether the ancients could really have had any correct idea of what a horse's head should be, from the very name which Alexander the Great gave his almost equally renowned charger, Bucephalus—a composition of two Greek words, *bous* and *kephalos*, that is, the head of a bull; just about the worst kind of head a horse could have. We see this repeated, however, at a later period in the animal on which the Knights of the Tourney were mounted, where the same thick, broad bull's head is very commonly the type. But a man in armour was of course a great weight, and his war-steed probably more of a heavy draught-horse than the stamp upon which we now see a dragon officer. In fact, the modern charger, the hack, and the hunter, must all show breed; and let me thus endeavour to sketch the head of the well-bred horse, as it should be. The size of this must be in just proportion to the body, as certainly not noticeably small, but of a happy medium in length and breadth. Indeed, a horse's frame should "prove" by his head. The ears should be long, somewhat thin, and moderately open, and not set too wide apart, nor pricked up, but the rather with a gentle inclination at the points towards each other. Our cropping forefathers when they went so much for short pricked ears, could have had but a poor notion of the actual beauty in this feature of the horse, nevertheless, there are writers who go with them; Youatt, amongst others, who says, "the ear should be small and erect," but I

cannot agree with him, nor do I think that he was any great authority on the horse. In the short stiff ear you lose that beautiful significant "play," almost as true a reflex of a horse's "thoughts" as the eye itself. There is scarcely a movement of the ears but which has its meaning, and on this our barbarian ancestors improved by cutting them off! A lop-ear is assumed to indicate coarseness of breeding and sourness of temper, but this is not invariably the case. I have seen some thorough-bred horses with lop-ears; and Oulston, who carries his very drooping, is, in other respects, a horse of particularly bloodlike appearance. Nor does the lop always answer for sluggish or bad disposition, as it is more "the look of the thing" after all, and I knew a really good judge who rather fancied a hack with *one* lop-ear. Beginning, then, with the lengthy, flexible ear, the horse's forehead should be broad, bold, and gradually expanding in width from the pole to between the eyes, which should be set in the head a third of its entire length from the pole. Nothing has a worse effect than the eye of the horse being set up too high in his head. And the eye of the horse is, of course, one of his great beauties, nor one of the chief tests of his worth. Dark, bright, and lively, it should be a combination of spirit, sagacity, and gentleness, as, in fact, the eye of a gentleman. Especially to be avoided is the small, sunken pig's eye, which tells of everything that is bad.

To proceed, the face from the forehead should be rather round—not exactly bulging like the Gohannas—gradually reaching to a slight dip between the eyes and the nostrils, and then rising and falling again before coming to the nose. This dishing in the face of the high-bred horse is deservedly prized, as the great prominent Roman nose or "Blacklock head" is to be equally avoided. How capitably Leech has transferred all its native ugliness to Jorrocks' Arter-Nerves! The nostrils should be square and open, with a sharp angular look about them that gives a certain peculiar grandness and force to the face. The saying that "a horse should be able to put his nose into a pint pot" is something very like nonsense; as, indeed, I scarcely ever knew a horse, with what a woman would call, a sweet, pretty head, to be good for much. It is the *expression* of the horse's countenance which constitutes his chief charm, and there are many sober-headed horses who, without being handsome, show this all but speaking intelligence in a very remarkable degree. The jowl should have a sweep from the root of the ear, with a good depth and a width of channel, tapering gradually to the muzzle. Plenty of room for the windpipe to play in is a great point, and the best judge of a yearling we have, or certainly a gentleman who generally does the best by his purchases in this way, makes this width of jowl a cardinal point. The lip, another sure sign of blood, should be thin, firm, and of moderate length, as the pendulous thick lip is unsightly in itself, and a tell-tale of bad-breeding. A fat or fleshy head cannot, of course, be ornamental to either man or beast, and, as every one has his own fancy, mine is for a longish, lean head on a horse; how many good nags have I known with that serious, almost judicial cast of countenance!

The horse's head must, above that of all other animals, be well set on. The effect of the best head is ruined if this run "throaty" into the neck, while a certain inclination is everything, either in the way of elegance of appearance or comfort in going. I have seen some good race-horses with ewe-necks, but that of the hunter or the hack must *give* nicely in the right direction, if the horse is to be ridden with anything like satisfaction. I have said that the shoulder should answer for action, but I do not know but that you may often get at a key to this from the head. When you see a dull, drowsy-eyed, melancholy visaged beast, drooping his head in his stall, cannot you tell before you have him out what a slouching,

so lovely goer he will prove ever waiting for a dig of the spur or a crack of the whip; whereas the bright, cheerful-looking horse points his ears, and steps away at once. The head of the heavy-draught horse is not so important a point as that of the better bred one. It lacks much of the sensibility of the other, does not taper nor dish so gracefully, and is, in fact, more in conformity with the character of a mere beast of burden. Still great improvement is observable in the heads of our cart-horses, from the time when our old black breed was in the ascendant, and in none more so than amongst the Suffolks. At the time I first met with these in their own county, I was assured that the small, mean pig-eye was "the proper thing," but since then this has gone very much out of fashion, and the heads of some of the more modern Punches are now handsome enough. In fact, as some good old Conservatives will have it, a vast deal too pretty for their purpose.

I cannot say that I rank myself amongst the staunch admirers of the Arabian; but in General Dumas' book on the Horses of the Sahara, edited by Abd-el-Kader, there is a high-flown description of the head of the Arab, too amusing not to be given: "The eye of a horse should be turned as if trying to look at its nose, like the eye of a man who squints. Like a beautiful quouquette who leers through her veil, his glance towards the corner of the eye pierces through the hair of the forelock, which covers his forehead as with a veil. The ears resemble those of an antelope, startled in the midst of her herd. The forelock is abundant. In the hour of pain mount a slender mare, whose forehead is covered by silky and flowing hair. The nostrils are wide: each of his nostrils resembles the den of a lion; the wind rushes out of it when he is panting."

If we go by heads, indisputably the highest-bred looking sheep are still the two breeds to which most of the other sorts trace something of their excellence. I refer, of course, to the Southdown and the Leicester, either in its way of a very patrician type. Next only, indeed, to the thorough-bred horse or the Jersey cow, there is not an animal on the show-ground which carries more style and "stamp" on his countenance than the Southdown. Moreover, to see him at his best, you must bring him straight up from the Sussex Downs. I do not believe altogether in the positive advantage of mere size or weight, but I go rather with the conclusion to which Cline arrives in his admirable little treatise on form, where he says, "it is wrong to enlarge a native breed of animals, for in proportion to their increase of size they become worse in form, less hardy, and more liable to disease." And I would say, further, that they are apt to lose much of their fine character, so that they suffer alike in symmetry and quality. Thus, when we attempt to grow the Southdown to a greater size than he would reach to on the South Downs, we can only do this at the sacrifice of some other point. The best-bred sheep in appearance at this present time are surely to be found in the Duke of Richmond's flock; and no man could safely go further in improving the Southdown than the justly-celebrated Mr. John Ellman of Glynde. It is to his standard that we must still look if we wish to work on right principles, as it is to him I shall turn for the definition, although he begins with a statement which cannot be passed without comment: "The *smallness* of a sheep's head is an indication of its being well-bred." There is nothing neater than the head of a Southdown; but, as a rule, as I have said, a very small head is objectionable in any animal, more particularly a male, and that capital judge of a sheep, Mr. Henry Lugar, confirms me in this opinion: "The head of a Southdown," as he writes to me, "may be too small, and if the sheep be kept on for breeding purposes, delicacy will in time be the result." Mr.

Ellman's description runs on thus: "The head should be neither too long nor too short, the lips thin, and the space between the nose and the eyes should be rather thin;" but, as Mr. Lugar adds, "a little wider just above the nostrils than nearer the eyes." Ellman, in continuation, says, "the under jaw or chap ought to be fine and thin, the ears tolerably wide, well covered with wool, and not too thin;" while according to Mr. Lugar, they should be "of a fair length, standing well up, but not prick-eared." Ellman could see "no merit in a very prominent eye;" he the rather "admires a tolerably full, bright-looking eye, but the eye-cup or bone should not project," for the reason, as he gives it, that the ewes would have more difficulty in lambing. In so smart a sheep as the Southdown the eye of the ram should be lively if not somewhat bold, in contradistinction to that placid gaze which men so covet in some other breeds of stock. Ellman concludes his description by stating that "sheep should be well covered with wool on the forehead, and especially between the ears, as it is a great protection against the fly." Noticeably enough this authority, who flourished about the beginning of the present century, says nothing of the colour of a Southdown's face—a point which fanciers now often look to before any other, as one which breeders cannot always maintain. I have seen Southdowns exhibited but a few years since, from a very famous flock, nearly as light in their countenances as Leicesters, and I have heard of others getting their lambs as dark as Hampshires. The happy medium or proper tint is a beautiful mouse colour, in admirable keeping with the structure of the head and the texture of the wool. Were I asked to name a "set" of the most thoroughbred Southdown heads I ever saw, I think I should turn to the Duke of Richmond's *second*-prize pen of ewes at the Royal Oxford Show of last summer. About the best-headed sheep they ever sent up from Merton was a Smithfield Club fat shearling; and the ram with the finest head for a Southdown, which Mr. Jonas Webb bred, was Plenipo, and this sheep was out of a Glynde ewe. In fact, we must go back again and again to the Sussex Downs for fine character, and we must go to heads to get this. In the autumn of last year I was spending a day at Angmering, near Arundel, and of course looking over the famous Sussex cattle and still more famous Sussex sheep. On the shepherd turning a flock of ewes towards us I went to face them, when one of the Messrs. Heasman said, "You won't be able to see much of their legs of mutton in that way." "No," was my answer, "perhaps not, but I shall be able to see something I think even more of in a sheep than a leg of mutton." And as they met me, so matchy and breedy, all showing a certain family likeness in their faces, I cannot but believe that I arrived at a glance at a better notion of their true character than by trying their backs, necks, or legs; and it is by his ewes you must prove a man's actual success as a sheep-breeder. A smart prize ram may be turned out occasionally; but it is to his home flock you must look for *established* and reliable worth.

As I walked down the lines at Manchester, and noticed the brown faces, the grey faces, and even the white faces, the long, somewhat Roman-nosed, old-fashioned cast of countenance, or the neat snug "nob" of the Down, and when I found that all these sheep, notwithstanding their diversity of character and expression, were classified as Shropshires, I must confess that I felt fairly at sea. The very judges, moreover, have not for some time past held very strongly to any particular line, and I thus feel it the more necessary to say so much as I do here, on the strength of the best evidence I can call. "It is very curious that I had for some weeks been thinking of writing to you on this subject, as it is very essential that we should have judges who thoroughly understand the cha-

acteristics and the history of the breed." So wrote Mr. Thomas Horley, of the Fosse, in answer to my letter; and it is through his kindness that I am enabled to sketch out the head of a true Shropshire, being the more induced to avail myself of such assistance, as, like Mr. Lugar with South-downs, Mr. Horley no longer exhibits sheep, although he frequently acts as a judge.

The head of a Shropshire ram should be black; but this colour should not extend to the wool on the neck. In size the head should not be too small nor effeminate, with a bold, broad, but not coarse forehead, full eyes, and tolerably prominent ears, self-coloured, but not mottled. Many good rams have their ears tipped with black round the edges, and show a kind of copper or copper-and-gold colour farther down; and if they be well woolled this is not in any way objectionable, saving that such a tint is more generally perceptible in rams which have been forced into high condition. The ear, although not so long as to be remarkable, should not be so short as to be hidden by the wool, which should come well up round the back of the head and ears, with a tendency to cover the top of the head. The nostrils must be fairly expanded, but there should be no inclination to bareness about the ridge of the nose nor between the nostril and eye—any such want of covering being very objectionable, and never to be noticed in a ram of any repute. There is altogether a strength and force about the head of a true Shropshire that should never be disregarded when looking at such sheep. It will, indeed, be observed that this description does not go for the pretty grey mixture, as no doubt the black-face is far more after the manner of the genuine Shropshire breed; but even from the true black-faces there will occasionally crop up a speckled-face cheek, which, as with the Hereford ox, is more a mark of being out of fashion than any positive detriment. The wool of the Shropshire should be close in texture, and not inclined to curl.

Any study of the heads of cross-bred animals or newly-established breeds is not so satisfactory in the way of a test, as the flock-masters themselves seem scarcely to have agreed as to precisely what they should go for. The subjoined synopsis of the head of an Oxfordshire Down ram may consequently not accord with the views of all, but it reads to me as a very good type to aim at. It should be long and tapering, with a forehead not too broad, but sufficiently so to give a good masculine expression, with a full bold eye, and ears well set back—that is, not too near the eyes. The poll must be well covered with wool, adorned with an ample top-knot on the forehead, and the face of a nice dark colour, between a jet black and a fawn. Some of the ewes, like those I have seen at Biddenham, have really blood-like heads; but the judges do not always go for style, but prefer a rather coarser kind of animal, and I must admit that I am not quite satisfied with the lineage as traced by the head of an Oxford Down sheep. Neither is the first impression of a good old-fashioned Hampshire Down ram easily obliterated; for the lop ear, the Roman-nose, and coarse, heavy features, if faithfully sketched, would make up, as Charles Surface says of his aunt Deborah, "a very formidable likeness." Some visible improvement, however, has taken place of late, as it is rather against the spirit of the times to maintain that the plainer an animal is to the eye proportionately greater must be his use and value.

There is something very taking in the clean finely-cut features of a Leicester, over whose head those two great men—Bakewell and Ellman—agreed to differ. The long-wool man considered the prominent eye in a sheep an indication of good breeding, whereas the other "could see no merit in a very prominent eye." A very successful breeder of Leicesters, when these sheep were more in

fashion than they are now, tells me that a well-placed prominent eye, standing deer-like, rather beyond or outside the general contour of the head, must still be regarded as a good point. The face should be rather long, as denoting size, but should be shortened in effect by a broad indented forehead. The bridge of the nose should be somewhat broad and arched—or Roman-nosed—with wide open nostrils of a jet black in colour. The ears, of a fair length, should occupy a prominent position on the head, not too low, not set very far apart: and the "high-quality" well-placed ear of the Leicester is a very safe sign of his purity. The ears and the head should be covered with beautiful silky wool—another proof of good breeding; while there must be a peculiarly delicate tint of blue visible just beneath the wool on the head, as in fact your true Leicester is as proud of his blue blood as a Spanish Hidalgo. If there be, on the contrary, a white ground, this is suspicious or more directly indicative of inferior caste, strong objectionable wool, and a taste of foreign or Lincoln blood. A red ground, again, is to be guarded against as telling of a weakly constitution, a feeble fleece, and a fineness of bone, carried to an undesirable extreme. The Leicester head should be especially bare and quite free from wool of any strength, the expression somewhat sedate, but of marked character in the ram, and his head set on rather bold and lofty, in preference to the low drooping carriage which, at one period in his history, was considered to be "the proper thing."

It is sufficiently suggestive to find that the breeders of Border Leicesters have a positive horror of the blue cast, a fact which of itself goes far to show that this variety of sheep has come from a cross, most probably with the Cheviot. The borderer, indeed, lacks much of the aristocrat in his appearance, so noticeable in the English Leicester of older pedigree. The head is longer and not so refined, the neck thin and weak; and, though the Border may by this time be perhaps ranked as a breed of itself, there is not much to go by in his frontispiece. He hardly looks as if he ever had a grandfather.

I wish we could see more at the West of England Meetings of a far more ancient family, which should furnish one of the leading sections of the show. I, of course, refer to the grand towering Cotswolds, of which Mr. Well, of Hampnett, writing many years since says: "The head should be long and thin, the ears rather wide and not too thin, having no wool but a tuft on the poll;" whilst I am indebted to Mr. Robert Garne, of Aldsworth, for a better and more elaborate reading of a Cotswold countenance. The head should be wide between the eyes, and the eye itself full, dark, and prominent, but mild and kindly, and in no way coarse about the brow. The face should be proportionately wide to the space between the eyes, but not too flat, and should run of much the same width to the nostrils, which must be well expanded and somewhat broader than the face, with the skin on the nose of a dark colour. The cheek is full, and, as the face, well covered with white hair; a just perceptible blue tinge on the cheek and round the eye being rather "fancied." The ear, long but not heavy, of medium thickness and covered with the same short soft hair, should be carried well up, while black spots on the point of the ear are not considered objectionable. The top of the head should not be coarse nor bald, but covered with wool, not hair, and the Cotswold is to be distinguished by a fine tuft of wool on the forehead. Mr. Wells says the head should be long and thin; Mr. Garne, that it should be sufficiently long to save it from being called a short thick head, but that it should not have a long lean appearance. Grey faces still crop up occasionally in all the best Hill flocks, but these are the exception.

Of the other breeds the improved Lincoln now looks

to take much after the Leicester head, although coarser in its character; while the true Dorset, with his nicely curled horn, should have a white eye in harmony with the colour of his countenance, although the best sheep of last season showed an eye as black as a sloe. As for the Scotch blackface, he is as handsome in his degree as the Highland beast, as he tells aside by his head of the wild country from which he springs.

Can there be anything more terrible than the long-snouted, lop-eared, narrow head of such a pig as we may still occasionally see by the roadside, who breaks away as you approach him, with a rush and a *grunt*, into a round swinging trot, and is out of reach before you can attempt to reckon him up. Does not such a head augur too surely of his pinched razor back, his flat sides, and his coarse quality? A kind of pig who will eat any given quantity, without this having "the least effect on him," as the three-bottle men would boast of their potations. On the contrary, what can be a better assurance of "breeding nice pork," as the Fat Boy said of his master, than the round dumpling head of a small black? Full, but yet fine, positively pretty in its plump contented expression, and bound to make flesh even in its sleep. Mr. Fisher, of Carhead, in his scale of 110 points for a perfect pig, allows eight for the head, while he has thus sketched for me the chief features: The forehead should be broad, as indicating a general width of frame and strength of constitution, with a face just long enough to enable the animal to collect its food, for anything beyond this indicates excess of offal. The ears should be slightly pointed forwards to keep out the wet, and sufficiently erect not to interfere with the sight, as they should be well covered with hair, more particularly on the under side, and the orifice nicely filled in to keep out litter, dirt, and so forth. The ear should further show a good fringe of hair on the outer edge. In a full-grown pig of the small breed the length of the ear from the tip to its insertion in the forehead should be from 6 to 7 inches, and in the improved large breed from 8 to 9 inches may be taken as a fair length. The chap should be well filled up to the eyes and ears; and, commencing near the point of the under jaw, should extend to the brisket, leaving no tucked-up appearance under the gullet. The head of the improved Berkshire, of course a very different animal from the old-fashioned Berkshire or Hampshire hog, should be something after the shape of a cone, though not too pointed nor at all turned up at the nose, but short, straight, and deep; in fact, about as long as thick through, at a

line to be taken from between the ears. There should be but little white about the face, if still with a sprinkling of lighter-coloured hair on the centre of the forehead, as well as on one or both eyes; whereas black markings on a white pig are not liked, and I have known very keen hands try to burn them out by show time.

This paper might be extended to almost any length, as where, for instance, could we wish to see more character than in the head of the dog—the long square, if I may so put it, head of the foxhound, so thoughtful and dignified in repose—

The wise, bench-like sagacity of brow; the same
Jaw of the old Ellenborough-size;

or the handsome intelligent countenance of the colley, which Landseer loves to paint; or the refined features of the greyhound, which Miss Mitford sketches so charmingly, when writing of her own Mosstrooper: "His face was singularly beautiful; the finest black eyes, very bright, and yet sweet, and fond, and tender—eyes that seemed to speak; a beautiful complaisant mouth, which used sometimes to show one of the long white teeth at the side; a jet-black nose; a brow which was bent and flexible, like Mr. Fox's, and gave great sweetness and expression, and a look of thought to his dear face—there never was such a dog!" It is noticeable that while one writer compares the jaw of a foxhound to that of a Chancellor, we have here the brow of the greyhound likened to that of a statesman, and the idea in either case is almost equally happy. Or, looking in another direction, how thoroughbred is the long, thin head of the gamecock, set off by his quick, bright, defiant eye; a bird who, by way of exception, seems scarcely "natural" unless he be in close-cut fighting trim! Foxhounds and fighting cocks, however, may be not altogether in place in an Agricultural Journal, and so let me conclude, as I commenced, with a word from Lavater: "The farmer walking through his grounds regulates his future expectations by the colour, the size, the growth, the exterior—that is to say, by the physiognomy of the bloom, the stalk, or the ear of his corn, the stem and shoots of his vine-tree. He remarks in their appearance, as the physiognomist in the countenance of shallow men, any want of native energy." It is tolerably clear from this that Lavater was the first man who cultivated Pedigree Wheat when he extended his theory to the study of the ear, or *head* of corn.

The Farmers' Club, 31st January, 1871.

THE REAPING MACHINE.

BY THE NORTHERN FARMER.

These have now been brought to such perfection, and moreover so simplified, and in consequence so much reduced in price, as to be within reach of most farmers possessing sufficient breadth of corn to render a reaping machine a necessary article of husbandry. The scythe, which a few years ago became the favourite implement for the severance of the corn, displacing the hook with nearly all but the cottier farmer, has had in its turn to succumb to the reaper, and take a secondary position amongst the implements of the harvest field. The scythe in its day has done grand work with the farmer of great extent, and so useful is it where corn is much laid, that many men still cling to it, considering that its capability of adaptation to even the most tangled crop is so great as to enable it to rank on a footing of equality with the very

best machines. This of course is felt to be more especially the case on soils growing soft flaccid straw, where the whole of the corn crop is more or less lodged every season. Welded by a powerful man accustomed to its use, the scythe is no despicable implement even up to the present day, one man clearing two acres of a moderately good crop with comparative ease when standing fair, and heavier or more difficult crops in proportion. With a few hands the owner of from twenty to thirty acres of crop can thus very soon bring his harvest to a conclusion; and doing it both neatly and well, if he take the precaution to fix a few wires on the head of the scythe, so as to grasp the corn and carry it tidily into the swathe. Striking it in against the standing corn is by far the best mode of throwing it down, although latterly

it does not appear to be so generally practised, probably on account of a second person being required to lay it out. This, however, is no extra expense, as the binding is so much facilitated by its being laid down regularly and in exact quantity for a sheaf, as to completely balance the outlay incurred in lifting after the scythe. The increasing difficulty of procuring harvest hands may also have some effect in causing farmers to throw the corn out from the scythe in the same manner as hay, as when the crop is ripe the mowers can proceed with the cutting, while the other hands are engaged elsewhere at work, which for the time being may be actually more pressing than the saving of the harvest. For the farmer of considerable acreage the reaping-machine is indispensable, and where the average breadth of corn grown is anything over thirty acres it should never be done without. For the middling farmer the combined machine suits extremely well, the cutting of the hay and corn harvest keeping it sufficiently employed for the season, to pay for wear and tear and interest of capital. When the breadth to be gone over is so small as not to do this, the possession of a machine ceases to be profitable, and it becomes better to hire one from a neighbour, or use the scythe. Although, as in this case, the combined machine is useful, yet when the extent is considerable it should never be relied on. It is a difficult thing to make a machine which will answer two purposes equally well; and here, although the actual severance of each crop must of necessity be performed in the same manner, with the same knives, and same motive power, yet the collecting of the crops cut, and laying it off in sheaves, make a distinction which in a great measure alters the character of the work to be performed. The one-horse reaper just meets this difficulty. Having but one operation to perform, the working wheels are few, and the whole construction of the machine is simple and easily understood by the ordinary farm men; it is wonderfully light of draught, and going at great speed gets over a deal of work in a day. Although called a one-horse reaper, and supposed to be work for but one horse, it is in practice found to give plenty of work to two; the one placed before the other. This arrangement lightens the work so much, that the horses can keep a quick step for the entire day, a matter of great importance in getting over the ground, as everything else being favourable and in good working order, the higher the speed at which the knives can be driven, just so much better do they clear themselves, and do the work required of them to satisfaction. The driver and raker should be both handy men, able to change with each other, as it is most distressing for any one man to follow a pair of horses for a whole day at the rate of speed at which they are required to walk, so as to work the reaper satisfactorily. The work done by this little machine is so good, and the quantity of ground stripped in a day under favourable conditions so great, that no farmer should be without one who has a fair quantity of ground to get over, and who possesses the very small number of pounds required to purchase it. Although the corn must be cleared out of its way by hand-labour, it should not, as a rule, be kept going only when the hands are ready to bind it, as much valuable time is frequently lost by doing so, especially when the corn is fully ripe. Three smart boys or girls, not quite able to bind, will lift the sheaves out of its reach, giving no delay whatever, unless the crop is a very heavy one, in which case an additional hand can be put on. The extra expense incurred by laying it out in this way counts for nothing in a busy day when much of the corn is ripe, and the farmer is consumed with anxiety to get it severed. The extensive farmer, with a large breadth of corn to be got over, and possessing plenty of working capital, need scarcely have a moment's anxiety about the cutting of

his corn, the extraordinary ingenuity and mechanical skill of modern engineers and implement manufacturers having now produced a machine, self-raking and self-delivering, which for style of performance and speed of working, may, without the slightest exaggeration, be pronounced perfection. I know of no greater boon conferred upon agriculturists than the reaping machine as now turned-out by the leading manufacturers of this country and America, as by its use harvesting operations, as regarding time occupied and expenses incurred, are reduced to the smallest possible limits. A machine that will cut an acre an hour, doing this so closely and neatly as to lead to the impression that the land had been shaved; that lays out the corn without displacing a straw; that divides it into sheaves with unfailling exactitude, placing them so far out on the cleared surface as to leave ample space for the horses to walk without the slightest danger of disturbance or injury, and that moreover does all this with a motive-power of two horses, and requires no manual assistance but the man who drives them, and who sits completely at his ease, leaves very little indeed to be desired in the way of improvement. Anxiety to do a big day's work should never tempt any one to cut corn badly, the very capability of this machine to do it quickly being all the greater inducement to take time, cutting only on the sides of the field which affords the most favourable conditions for doing it in a workmanlike manner. The machine was never yet made which will cut laid corn without coming behind it or taking it at an angle, nor yet do it properly if the corn is even bent or being blown away from it while in the act of working. Such portions should therefore be invariably passed, the machine going on empty until it reaches the point where, from the position of the corn, it can be cut to advantage. A roughly cut stubble, interspersed with cut heads of grain and bunches altogether missed brings discredit on the machine which performed the work, but at the same time much more to the owner who had it in his power to do his work in good style had he but chosen to do so. When the conductor is an intelligent man, taking an interest in what he is entrusted with, he may very safely be told to do as it will best do with him, working where it does well, and passing where it does badly: he will, pleased with the confidence placed in him, seldom fail to give satisfaction. When the field is not badly laid, patches occurring only at intervals, it is good policy to send a man with a scythe to cut out such portions as they become exposed, carrying the cut portion away at once beyond the reach of the machine. Those now made with one large wheel, through which the driving-rod works, and which by an ingenious contrivance gives motive-power to the various working parts of the machine, promise to become extremely useful and efficient. The entire absence of complication and sparing use of cog-wheels, particularly in connection with the self-raking attachment, are matters of congratulation to intending purchasers, as the liability to derangement is thus reduced to the lowest possible limit. The working of the rake on the principle recently adopted excites the warmest admiration when at work, being at once strong, simple, and efficient. The only noticeably weak point is the broad rim of the travelling-wheel, which, being cast-iron, looks scarcely fit to bear the strain of two powerful horses, and the vibration inseparable from the working of such a machine. If not suitable to use malleable iron for this wheel, it could at any rate be strengthened by a couple of bands carefully fitted to avoid compression, and bolted firmly to the original circular frame. This precaution would assuredly save much after-annoyance and trouble, and should not be omitted by intending purchasers. Before purchasing, every farmer should satisfy himself which make is most suitable for his requirements by carefully

watching its performance in the field. Public trials, of which there are now many, afford a pretty fair test of what each can do. But in addition to this, when the one that appears to be the most useful, and which seems to come the nearest to meet his particular requirements, can be seen quietly at work on a field within easy distance—that is the place to form a decided opinion. As

in every district there are to be found farmers both rich and spirited enough to purchase every new implement that has the appearance of work and usefulness about it, ordinary men, who can afford only to follow in the beaten track, have no want of opportunity of judging for themselves before investing their money.

SIGNS OF THE TIMES.

In the face of a pretty general admission as to a bad wheat harvest Mark Lane of Monday last spoke to a decline in prices, as it does again to-day; while beef, mutton, and store stock are getting dearer and dearer. Nothing would now threaten to create a sensation in the corn market, and nobody seems to know the figure to which a sheep or a Shorthorn may soon reach. A man should be prepared to grow grain at something like a certain fixed rate, for all the world can make loaves of bread, but the production of prime joints would seem to be a business more immediately in the hands of an Englishman. The commentary here again is a curious one. On the very day when prices were falling in Mark Lane Mr. Mechi pens a letter to *The Times* on AGRICULTURAL REFORM. And the basis of this Reform is that we should grow more wheat and less stock: "One-half of the United Kingdom is occupied by permanent pasture, much of it exhausted, weedy, and nationally most unprofitable; deprived of the benefits arising from cultivation, yielding a *minimum* of produce and employing a *minimum* of labour and capital." Mr. Mechi proceeds accordingly to "insist upon the necessity of breaking up these poor pastures." In proof of this necessity he calls attention to the letters of *The Times'* correspondents, Messrs. Sanderson and Scott, who "have written gloomily of our wheat prospects," and to the facts that Mr. Prout has 153 acres in wheat but no permanent pasture, and Mr. Mechi himself only fourteen acres, "eight of which I shall break up this year as unprofitable." The moral of this is obvious enough: let everybody take to growing corn and everybody give over breeding cattle. Such advice would look just at present perhaps a little ill-timed, but it is offered on the practice of Messrs. Mechi and Prout, whose ethics would indeed go to show that how to farm profitably is to farm without stock. A man might, as they do at Tiptree, keep plenty of cocks and hens, and a good head of game, but he should go no further in this direction, have no pastures, no herds, and no flocks.

"Where," asked Mr. Sewell Read, at one of the late meetings of the Farmers' Club, "can I find any man so competent—as an agent or adviser—as the gentleman who has written such an extraordinary quantity of lively agricultural articles in *The Times*?" while Mr. Hitchcock, of Lavenham, says, as recently as Saturday, to *The Times* itself, "Your general readers must sometimes read with surprise the letters which appear in your columns upon agricultural topics. I need not say that farmers are frequently astonished at them, and marvel much at the advice they contain." The fact, however, of being able to quote thus much from the columns of our contemporary, tends to show that Messrs. Sanderson, Scott, Mechi, and Co., are no longer to have it quite all their own way. In truth, on Saturday, the other side fairly got an innings; and Mr. Hitchcock is permitted to say how difficult it is "for us poor farmers to decide upon which of our counsellors to lean, and what adds to our difficulty is when we read in these letters in *The Times*, written by such able correspondents, statements

of facts the very opposite of what we see about us." Then, again, Mr. James Howard, of Bedford, says that these reports of Mr. Sanderson and Mr. Scott appear to have obscured Mr. Mechi's "usually clear vision." And of course a very grave question arises here. If such reports have obscured the vision of Mr. Mechi, how have they acted on the other hundreds of thousands of readers of *The Times*? For years past these annual reports have been published almost without cavil or contradiction; just as, take him all the year through, Mr. Mechi is the standing agricultural authority of the same Paper. Whether it be Game, Tenure, or Cropping, there are more letters from Tiptree than anywhere else.

It has often struck us that this was scarcely fair, and we cannot but welcome the wholesome arrangement which gives to others a hearing through the same channel. Under the somewhat ambitious title of AGRICULTURAL REFORM Mr. Mechi declares that the great thing is to break up the poor pastures; whereas Mr. James Howard says, instead of breaking up, improve them: "No land sooner yields to remedial measures and generous treatment than pasture. Some ten years ago my farm manager strongly urged me to break up a piece of poor grass. I objected, and instructed him to drain it, to harrow it well two or three times a year, and to give the animals kept upon it mangold, corn, or cake. This field is now as nice a piece of pasture as any in the neighbourhood. Again, every practical man knows that to breed successfully a certain proportion of permanent pasture is necessary, if not indispensable, and that more stock can be raised upon farms containing some 20 or 30 per cent. of grass land than on farms exclusively arable." Here we have the practical man with his 20 or 30 per cent. of grass land, against Mr. Mechi's eight acres and Mr. Prout's no permanent pasture whatever. But then Mr. Mechi is something more than merely a practical farmer, he is a philosopher and philanthropist, as his great object is to provide food for the million; though if nobody is to breed or to care for stock, meat, as Mr. Howard says, "will soon be at famine prices."

Still there are always two sides to a question, and Mr. Mechi finds a supporter in another of last Saturday's correspondents, who, however, does not give his name. This writer compares the stock-sustaining properties of land in Ireland with those of England, of course to the advantage of the former, maintaining that good pasture land is in England the exception. But, then, has either Mr. Mechi or his anonymous friend ever tried to improve poor pasture? The question must be argued according to the times we live in, and our want just now is not so much a want of wheat as of meat. Moreover, as has been demonstrated continually of late, we import more cattle disease from Ireland than we do from the Continent, and the growing scarcity of beef and mutton must necessarily be traced in a greater or lesser degree to such a cause. There are people who would almost prohibit the importation of beasts from abroad, maintaining that we lose more than we gain in this way, while, of course,

with the foreigner the Irish cattle would be excluded until thoroughly free again of Pleuro-pneumonia and Foot-and-mouth. Associate such vigorous measures as these with Messrs. Mechi and Prout's plan of breeding no cattle whatever, and it is tolerably clear that an Englishman would soon lose his boasted right to roast beef, and be reduced to a vegetable diet. As Mr. Hitchcock puts it, "the present price of wheat will certainly not interfere with the general prosperity of the country," whereas the general complaint is the present price of beef and mutton. Mr. Mechi's Agricultural Reform is, in a word, running all in the wrong direction.

In our Echoes of only last week it will be found that Mr. Caird said at Castle Douglas, "it was a very remarkable fact which the census had lately told them—a fact upon which the prosperity of agriculture in this country materially depended—that within the period from 1801 to 1871 the population had exactly doubled. In 1801 it

was 16,000,000; in 1871 it was 32,000,000; and the remarkable fact was this, that the agriculture of the United Kingdom, combined with the operation of those measures of Free-trade which had become law, had made the pressure for subsistence on the part of these 32,000,000 considerably less than it was on the part of the 16,000,000—that was to say, that the 32,000,000 now existing were much better-fed than when there were only 16,000,000 of a population. They might hope that state of things would still go on. And let them remember this, it was not at the expense of the consumer that agriculture was prospering." This is well put; while Mr. Caird points his argument in this way: "Their great business was the growth of beef, cheese, and butter, rather than the cultivation of corn, which could be brought from abroad."—*Mark Lane Express* of September 25.

THE DERBYSHIRE AGRICULTURAL SOCIETY.

MEETING AT DERBY.

At this the eleventh show there were some fears lest the prevalence of foot-and-mouth disease should keep away many of the animals entered, and no doubt a number of vacant places were left empty on this account, but the show was fully an average one in numbers and quality. The bulls and dairy cows and heifers were good, and the horses were numerous, with the agricultural horses particularly good. The poultry was a good show, and there were not many poor pens. Some very fine roots were exhibited. The wheat shown was not of a high sample; but the barley was excellent, and the oats good, though somewhat deteriorated by the weather. The show of implements was small for a county show.

Of the cattle, Mr. Mitchell's four dairy cows, which took first prize in class 1, were a superior lot, and particularly good milkers. The heifers were a prime class, and one of the best in the yard. The two years old bull class was well filled, and the bull calves a superior class. In the fat stock Mr. F. Wright was first with a beast of great girth, and for an animal under three years old, really extraordinary.

A four years old chestnut, shown by Mr. G. J. Mitchell, was awarded the first prize for hunters. He was bred by Mr. Chaplin, M.P. Mr. G. Wheelton, Derby, took second prize with a bay mare. The hack or harness class was not good. In the three years old class Mr. Mitchell had a colt highly commended, which was second here last year in the two years old class, and also second at Birmingham. Had hacks and hunters been separated, Mr. Mitchell would probably have won a prize in the hackneys. The agricultural horses were of a superior character; but Mr. H. Tomlinson's Clydesdale Lofty, which was first, towered far above the others in merit in every point of view. The agricultural mares and foals were a fair and numerous class. The two-year-olds were also good. Mr. Hawksworth's filly, which was only commended, took second prize at the Royal Show.

The long-woolled sheep reared in Derbyshire and exhibited at this meeting display the characteristics of both the Leicester and Lincoln breeds. The class of breeding ewes was a moderately good one, and the pen which took the first prize was of the Leicester type, while the second prize animals more closely resembled the Lincolns, having larger frames and more lustre wool. The heaves made a respectable show. The ewe lambs were a numerous and good class, and the first prize pen favoured the Leicester type, being small and neatly made. The long-woolled aged ram which carried off the first prize was a fine sheep, and the shearing rams were both good. The classes of long-woolled sheep were better filled than those of the Shropshires. The mixture of the Leicester and Lincoln breeds is well suited to the high and exposed land of Derbyshire. The exhibition of Shropshire sheep was deficient, and in fact, there was scarcely any competition for the prizes. Mr. Baker, Moor Barns, was in full force with a number of show

animals, and he carried off nearly the whole of the premiums. The breeding ewes made a fair show for a county meeting, and the yearling ewes were as good as could reasonably be expected, but the yearling rams were poor, and the judges, had they been severe, would have withheld the prizes. In the class of ewe lambs Mr. Baker failed to obtain the first prize on account of dark wool appearing in two of his lambs, one of which was very dark for a short-woolled sheep.

Of pigs Mr. Walker carried off the first prize for large breed boars, and this, in the opinion of the judges, was the most meritorious class of all among the pigs. The class of aged sows was a capital one. A difficulty arose with regard to the awarding of the second prize in this class. It was given to Mr. W. Johnson, Shuckton, for a sow, the age of which was stated to be eleven months, but as she had a litter four months old the judges anticipated that a mistake had been made. Should that prove, on inquiry, to be the case, the Earl of Harrington will receive the second prize. The sows of the small breed were a good class, and a fair average of excellence was reached by this section. There was a good deal of question as to premiums offered for small-breed pigs going to Berkshires, and in one case the litter was regarded as exhibiting large breed characteristics. The judges appeared to leave to the stewards the responsibility of admitting the animals into the classes. A Berkshire class would be an advantage.

There were about fifty entries for cheese and butter. Of these thirty-two were in competition for the Society's prizes for the best hundredweight of cheese, and the contest was therefore a pretty severe one. Many good dairies were shown, and after much consideration the judges awarded the three prizes in the following order: For cheese—Mr. T. Oakley, Mrs. Stretton, and Mr. C. R. Colville. For butter—Mr. S. Woodward, A. Mundy, and Mr. T. Hancock; and in the class made by the daughter of a member, Mr. T. Hancock was first; and Mr. J. Greston was second. A considerable proportion of the cheese was discoloured, but this was attributed to the season, and not to defective manufacture. There were 17 entries of butter, many of which were of superior quality.

The roots shown included several highly creditable entries, but considering the very favourable season the size and quality were perhaps not better than might reasonably have been anticipated. Neither the red nor the white wheat was particularly fine, but the barley was very superior, and the oats made a fair show, although some of the samples were slightly damaged by being weathered.

For a county meeting the collection of implements at the Derby show is never very large. Mr. Gilbert Murray, Elvaston Castle, contributed the greatest novelty on the ground—a "self-acting churning machine." A heavy weight attached to a rope is hoisted over a pulley to the height of 26 feet, and, descending slowly, sets in motion a machine composed mainly

of a few cog-wheels in a strong frame. To this machine a driving-band is attached, and a rotary motion is thus given to the barrel-churn. It is claimed for the invention that it saves manual labour, that it is simple and inexpensive, and that by its means 60 pounds of butter may be churned in half-an-hour—the time occupied by the weight in descending the distance of 20 feet. Messrs. J. and G. Haywood, Derby, exhibited a large and useful collection of implements; Messrs. W. and J. Ratcliff showed a very useful selection; Messrs. Thompson and Upton, Derby, also made a creditable show; and Mr. T. Corbett, Shrewsbury, had a select selection. The following were among the other exhibitors: J. Woolley, Allestree; J. Smith, Derby; Bradford and Co., Manchester and London; J. Beach and Co., Dudley, and G. Hathaway, Chippenham.

P R I Z E L I S T .

JUDGES.

CATTLE.—W. Sanday, Radcliffe, and J. Dicken, Mansfield.
HORSES, AGRICULTURAL.—G. Woolhouse, Wellington, and J. Andrews, Broughton Clays. **HUNTERS AND HACKS:** — Colton, Newark; J. Bennett, Husbands Bosworth; and — Wright, Wanlip.
SHEEP AND WOOL.—Long-wool: T. Tomlinson, Atlow, and J. Lynn, Stroxtou. **Short-wool and FICS:** — Hall, Wilne, — Coxon, Freeford.
POULTRY.—Dr. Hitchman, and —. Lowe, Comberford.
GRAIN AND ROOTS.—G. Wheelodon, and —. Sibray. **CHEESE.** — Emberlin, Leicester, and —. Watson, Birmingham.
BUTTER.— —. Barber.
IMPLEMENTS.—Messrs. Bullock, Abell, and Purves.
VETERINARY SURGEON.— —. Rossall, Sandiacre.

CATTLE.

DAIRY COWS.

Four cows, belonging to members keeping more than twenty cows.—First prize, G. J. Mitchell, Newton Mount; second, M. T. Hopkinson, Woodthorpe.

For the best animal in this class.—Prize, a silver cup Mrs. Packman.

Two cows, for dairying purposes, belonging to members not keeping more than twenty cows.—First prize, E. Vale, Derby; second, Earl of Harrington; third, Earl of Harrington.

Pure bred Shorthorn cow, having had a living calf between January 1st and July 1st, 1871.—First prize, Mrs. Packman, Tupton; second, E. Vale; third, Mrs. Packman. Highly commended: E. Vale.

Pair of heifers under three years old.—First prize, Earl of Harrington; second, G. J. Mitchell; third, W. T. Cox, Spondon Hall. Commended: E. Vale.

Pair of in-calf heifers, belonging to a tenant farmer dairying not less than twelve cows.—First prize, G. J. Mitchell; second, G. Bryer, Markeaton.

The prizes to be withheld until a certificate be produced to the Secretary that the heifers were calved before the 1st May, 1871.

Pair of stirks under two years old, best adapted for dairy purposes, belonging to a tenant farmer.—First prize, E. Vale; second, S. Robson, jun., Melbourne; third, G. J. Mitchell.

Best female Shorthorn, for breeding purposes in any of the classes.—Prize, silver cup, Mrs. Packman.

Prizes were offered for four rearing cow calves, but there was no entry.

Shorthorn bull, two years old and upward.—First prize, T. Yates, Sapperton (Lord of the Hills); second, T. Yates (Norgrove); third, Earl of Harrington (The Doge). Commended: J. Else, Codnor Breach (Prince Albert).

Yearling (or not exceeding two years old) bull of the pure Shorthorn breed, most suitable for the general use of a tenant farmer, and which shall be, and has been, the property of the same for six months previous to the day of exhibition.—First prize, J. Raynor, Markeaton (Julius); second, E. Canner, Stanley Grange (White Boy); third, S. Robson, jun. (Melbourne). A silver cup was given in addition to the first prize in this class.

Bull calf, not exceeding twelve months old.—First prize, Mrs. Packman (Hampton); second, W. Cox, Brailsford (Amiens); third, Mrs. Packman. A silver cup to the exhibitor of the best pure bred Shorthorn in any of the classes.

Fat ox or steer of any breed.—First prize, F. Wright, Osbaston Manor; second, W. T. Cox; third, J. Evans, Alport.

Fat cow or heifer of any breed.—First prize, Earl of Harrington; second, W. H. Marbrown, Newton; third, W. T. Cox. A silver cup to the exhibitor of the best animal in classes 11 or 12.

To the member, whether owner or representative of owner as steward or bailiff, who shall exhibit the best four specimens of home-bred dairy stock, whether a bull and three cows or four cows; size and quality to be taken into consideration.—First prize, Dr. Hitcham, Mickleover; second, J. Brough, Kirk Langley.

Pure bred Alderney bull, one-year-old and upwards.—First prize, C. H. Bakewell, Quarndon; second, J. Fountain, Cowsley House.

Alderney cow in-milk, two years old and upwards.—First and second prizes, E. Holden.

Alderney calf, or yearling under two years old.—First prize, C. H. Bakewell; second, J. Fountain.

HORSES.

Stallion for agricultural purposes, two years old and upwards, that has travelled within the district of the association this season.—First prize, H. Tomlinson, Blytheford; second, J. Burrows, Stanley. Highly commended: H. Spencer, Loughborough.

Brood mare and foal for agricultural purposes.—First and second prizes, R. Hall, Boro' Fields; third, T. Rose, The Ash. Highly commended: R. Gilman, Longford. Commended: J. Docksey, Hilton.

Two years old gelding or filly for agricultural purposes.—First prize, A. Tomlinson, Stenson; second, J. W. Chappell, Breaston; third, W. Hollingworth, Dale Abbey. Highly commended H. Thompson, Sawley. Commended: J. Hawkesworth, Barton Field.

One-year-old gelding or filly, for agricultural purposes.—First prize S. Wade, Mickleover; second, Mary Tatem, Little Eaton; third, Ann Eley, Longford. Highly commended: H. Thompson, Sawley. Commended: R. Gillman; Catherine Gregory, Aston-on-Trent; and Mary Fletcher, Mile Ash.

Pair of horses for agricultural purposes.—First prize, J. Porter, Weston-on-Trent; second, T. Rose; third, W. Porter, Breadsall. Highly commended: J. Thompson, King's Newton. Commended: J. Rose and W. Hollingworth.

Brood mare and foal best fitted for breeding hunters and hacks.—First prize, Rev. R. Feilden, Mugginton; second, R. Sale, Winhill; third, Rev. J. Copestake, Trusley.

Hack or harness horse above four years old, which has not previously taken the first prize in any of the classes.—First prize, G. Cowlshaw, V.S., Derby; second, G. Murray, Elvaston. Highly commended: W. R. Wardle, Weston.

Gelding or filly, of the value of £50, not thorough-bred, above three and under four years old, the property of a member of this Society from the 1st day of March, 1871.—First prize, J. Pegge, Littleover; second, Earl of Harrington. Highly commended: G. J. Mitchell. Commended: W. Woodward, Stanton-by-Bridge.

Gelding or filly, not thorough-bred, above two and under three years old.—First prize, W. German, Measham; second, E. Bland, M.D., Sandiacre.

Cob, not exceeding 14 hands, for riding or harness purposes.—First prize, J. Whittingham, Coton; second, Earl of Harrington. Highly commended: S. Wade. Commended: G. Rossell, V.S., Sandiacre, and Captain Stepney, Mickleover.

Hunter, four years old and upwards, following the hounds hunting in Derbyshire, and being bona fide the property of the exhibitor from the 1st March, 1871.—First prize, G. J. Mitchell; second, G. Wheelodon; third, G. Shaw, Cropper.

SHEEP.

LONG-WOOLS.

Five breeding ewes, having had lambs in 1871, and suckled them up to the 1st of June.—First prize, F. Dean, Ashlehay; second, R. Johnson, Kirk Ireton; third, J. Heathcote, Hognaston.

Five theaves.—First prize, A. Bryer; second, F. Dean; third, R. Johnson.

Five ewe lambs.—First prize, J. Heathcote; second, Mary Tatam.

Ram of any age above a shearling.—First prize, R. Lee, Kniveton; second, R. Johnson; third, T. Maskery, Norbury.

Shearling ram.—First and second prizes, R. Lee; third, F. Dean.

SHORT-WOOLS.

Five breeding ewes, having had lambs in 1871, and suckled them up to the 1st of June.—First and second prizes, W. Baker, Moor Barns; third, C. Smith, Langley. Commended: C. Smith.

Five theaves.—First and second prizes, W. Baker; third, J. Rose, The Ash.

Five ewe lambs.—First prize, C. Smith, Langley; second, W. Baker.

Ram of any age above a shearling.—First prize, W. Baker; second, W. German.

Shearling ram.—First and second prizes, W. Baker.

Ram lamb.—First prize, W. Baker; second, Earl of Harrington. Commended: J. Rose.

Pen of five wether sheep, of any breed, not exceeding twenty-two months old.—First prize, J. Rose; second Earl of Harrington.

PIGS.

LARGE BREED.

Boar of any age best adapted for general use.—First prize, M. Walker, Stockley Park; second, Earl of Harrington. Highly commended: M. Walker. Commended: A. Bryer, Quarndon.

Sow of any age.—First prize, M. Walker; second, W. Johnson, Shuckton. Highly commended: Earl of Harrington, and M. Walker. The whole class commended.

Three breeding pigs of one litter, not exceeding three months old.—First prize, M. Walker; second, J. Milnes, West Hallam.

SMALL BREED.

Boar of any age best adapted for general use.—First prize, M. Walker; second, Earl of Harrington.

Sow of any age.—First prize, J. Faulkner, Bretby; second, Earl of Harrington. Highly commended: M. Walker. Commended: T. George, Littleover.

Three breeding pigs of one litter, not exceeding seven months old.—First prize, T. M. Crowley, Breadsall; second, M. Walker.

Pig, bonâ fide the property of an agricultural labourer, whose personal earnings do not exceed 15s. per week.—First prize, S. Bosworth; second, J. Morley; third, J. Wass.

EXTRA STOCK.—Dr. Hitchman, highly commended for Berkshire boar and sow.

ROOTS.

Six roots of mangold wurtzel, to be taken from a crop of not less than two acres.—First prize, Mrs. Stretton, Brizlincote; second, J. Faulkner.

Six swedes, to be taken from a crop of not less than two acres.—First prize, Mrs. Stretton; second, J. Faulkner.

Six turnips, to be taken from a crop of not less than two acres.—First prize, J. Milnes; second, J. Faulkner.

Six ox cabbages, to be taken from a crop of not less than two acres.—First prize, C. R. Colville, Lullington; second, J. Faulkner.

CHEESE AND BUTTER.

Cheese of not less than 1 cwt., made by the exhibitor in the year 1871.—First prize, T. Oakley; second, Mrs. Stretton; third, C. R. Colville. Highly commended: S. Woodward, T. Oakley, and R. Bull. Commended: J. Pegge, and T. S. Radford.

BUTTER.

Milk butter (not less than six pounds) made by the exhibitor.—First prize, S. Woodward, Trusley; second, A. M. Mundy, Shipley Hall.

Milk butter (not less than six pounds) made by the daughter of a member.—First prize, T. Hancock; second, J. Greatorex, Stretton.

WOOL.

Three fleeces of long-wool.—First prize, R. Johnson; second, F. Robinson, Newton Grange, Ashbourne.

Three fleeces of short-wool.—First prize, J. Rose; second, T. S. E. Carrington, Eaton.

GRAIN.

Sample of red wheat.—First prize, J. Faulkner; second, J. Greatorex.

Sample of white wheat.—First prize, J. Greatorex; second, J. Faulkner.

Sample of barley.—Prize, J. Faulkner.

Sample of oats.—First prize, J. Thomson, King's Newton; second, J. Faulkner.

AGRICULTURAL IMPLEMENTS, MACHINERY, &c.

Selection of implements for agricultural purposes.—First prize and medal, J. and G. Haywood, Derby; second, W. and J. Ratcliffe, 16, Corn Market, Derby; third, Messrs. Thompson and Upton, Derby.

Churning machine.—Prize, a medal, G. Murray.

MIDDLETON AGRICULTURAL SOCIETY.

In many respects the show is essentially a Manchester one. Situated at so short a distance from the city, and the relations between Manchester and Middleton so close and identical, the meeting naturally derives great support from the city, not only in the matter of exhibitors, but in the multitude of visitors who crowd the Show-yard, large as it is. This year there is again a proportionate increase in the entries. The total number of entries is above 5,000, being an increase of 600 over those of last year. The amount given in prizes is £1,100. As an exhibition of farm-stock, the Show-yard—where the vast extent and range of sheds and shedding is viewed—and the comparatively small space occupied by stock, compared with the great array of articles introduced under the heading of implements, tends to create a little disappointment. Some of the classes in cattle were exceedingly thin in numbers, and many were filled wholly by Mr. Brierley and Mr. Statter. There were between 50 and 60 head shown. For bulls above two years old Mr. T. Statter, jun., was the only exhibitor, and, as a matter of course, received the first-prize. In the next competition Mr. Statter was second to Mr. Brierley, of Rhodes House, for bulls one-year-old and under two. Mr. Brierley's young bull comes from the same stock as Bolivar. At the Royal Agricultural Society's Wolverhampton Show he obtained fourth place in his class, and at the Manchester and Liverpool Show first prize and a silver cup in a local class. Mr. Brierley, being at home at Middleton, held his own in nearly every class in which he

exhibited. The prize-list for the remainder of the stock simply alternated between the names of Brierley and Statter. For bull-calves under one year, Mr. J. L. Becker, of Foxdenton Hall, was second to Mr. Brierley, whose bull is 11 months 10 days old. But for a rougher touch, the calf seems a perfect specimen of his sire, Bolivar. The same kindly, well shapen head and clean cut frame at once identify him with the once popular Shorthorn bull. Mr. Brierley came first for dairy cows, Mr. Statter being second. For two-year-old heifers the position was reversed, Mr. Statter being first and Mr. Brierley second. For one-year-old heifers, Mr. Brierley took both first and second prizes, against Mr. Statter and Mr. Becker, who exhibited. Mr. Brierley was also awarded the first for heifer calves, and Mr. Becker the second prize. Mr. Statter and Mr. Brierley were the only exhibitors of milch cows; and the former gentleman received both first prizes for the best three cows and cow in milk. More entries might have been expected for the premiums given for tenant-farmers. No aged bulls were shown, and only two in the class under two years. Mr. G. A. Goolden, Birtle, received the first prize, and Mr. David Partington, Egypt Farm, Unsworth, near Bury, received the second in the latter class. Mr. R. Travis, Blackley, received the chief premium for dairy cows, and Mr. Thomas Hanson, Wilderness Farm, Heywood, the second. Two-year-old heifers were not deemed sufficiently numerous, or of such merit, as to deserve even mention at the hands of the judges. Mr. Goolden was first and Mr. Travis second in the competition

for one-year-old heifers. Mr. Bradshaw Partington, Lichfield Cottage, Blackley, was the only exhibitor and recipient of a prize for black cows in milk. Mr. Goolden received the silver cup given by Mr. Brierley for the best beast owned by a tenant farmer. In the general competition, Mr. Statter received the first prize of £3 given for aged bulls; and Mr. G. Haworth, Lower Darwen, the second of £4. In the same competition, Mr. Statter received the first prize for yearling bulls; Mr. Henry Neild, Worsley, being second. The same gentleman occupies a similar position to Mr. Statter with regard to bull-calves. Five splendid animals were shown in the competition for dairy cows; and Mr. Brierley, Mr. Statter, Mr. Dugdale, of Burnley, and the Rev. Leonard C. Wood, of Poulton-le-Fylde, had to succumb to Mr. W. Bentley, of Green-side, Bradford, who was awarded the first position of merit; Mr. Statter was second. Mr. Brierley, who exhibited two heifers, received the first prize for two-year-olds, and Mr. Statter the second. Mr. Brierley completed his run of first prizes by taking others for one-year-old heifers, heifer-calves, and three cows in calf or in milk. In yearling heifers, Mr. Statter was second; Mr. Haworth for heifer-calves and cows in calf or in milk. Premiums were given to drovers for milch cows; and the first was obtained by John Coates, Barrack Road, Rochdale; and the second by Nathaniel Hyde, of Rhodes, Middleton. The horses as a class were more numerous, and appeared to be much more than they really were, owing to several of the owners re-entering for other competitions in the catalogue. Thirty-seven premiums were given for light and heavy horses, leaping, and single and double-wheeled conveyances. There were about 172 horses entered in all the classes. The district competition, compared with the general premiums, was limited, and Mr. Statter again carried away the greater portion of the prizes. The hunters and roadsters were exceedingly numerous. The first prize of £50, for hunters, it will be seen, went to Mr. V. Wart, of Edgbaston, near Birmingham, for Loxley. The awards for horses were as follow:

HORSES.

JUDGES (Light Horses).—Major Ballard, Cowbridge, Glamorgan; Captain Skipworth, Ilowsham, Brigg, Lincolnshire; W. S. Atkinson, Barrowby Hall, Woodlesford, Yorkshire. **Heavy Horses:** J. H. Wood, Hamberstone, near Great Grimsby; John Bromley, Lancaster.

DISTRICT COMPETITION.

Brood mare and foal for agricultural purposes.—First prize, David Partington, Egypt Farm, Unsworth, near Bury; second Robert Lindsey, Roach Bank, Pilsworth, near Bury.

Mare or gelding, under 16 hands, for agricultural purposes. First prize, Robert Lindsay; second, John Morris, Heap, near Bury.

Pair of plough horses.—First prize, Lawrence Hoyle, Heap, near Bury; second, Henry Shuttleworth, Middleton.

Brood mare for draught purposes.—Prize, Thomas Statter, jun., Whitefield, near Manchester.

Mare or gelding for draught purposes.—Prize, C. W. Brierley, Rhodes House, Middleton.

Pair of draught horses.—Prize, C. W. Brierley.

Three-year-old gelding or filly for draught purposes.—First prize, C. W. Brierley; second, J. Morris.

Two-year-old gelding or filly for draught or agricultural purposes.—First prize, Daniel Fletcher, Unsworth, near Bury; second, T. Statter, jun.

Yearling gelding or filly.—First prize, Hilton Greaves, Derker, Oldham; second, Thomas Mellodew, Moorside, near Oldham.

GENERAL COMPETITION.

Stallion for agricultural purposes.—First prize, John Edmondson, farmer, Iloughton, Entwistle, near Burnley; second, John Gerrard, Heap, near Bury.

Brood mare for agricultural purposes.—First prize, T. Statter, jun.; second, Henry Neild, Worsley.

Pair of horses for agricultural purposes.—First prize, C. W. Brierley; second, T. Statter, jun.

Mare or gelding under 16 hands for agricultural purposes.—First prize, Samuel Barlow, Stakehill, Middleton; second, T. Statter, jun.

Three-year-old gelding or filly for agricultural purposes.—Prize, T. Statter, jun.

Two-year-old gelding or filly for agricultural purposes.—

First prize, T. Statter, jun.; second, Christopher Holder, Stonefield, Basenden, near Accrington.

Yearling gelding or filly.—First prize, H. Neild, Worsley; second, T. Statter, jun.

Stallion for draught purposes.—First prize, T. Statter, jun.; second, Thomas Partington, Black Bull Inn, Middleton.

Brood mare for draught purposes.—Prize, T. Statter, jun.

Mare or gelding for draught purposes.—C. W. Brierley.

Brood mare roadster.—First prize, T. H. Miller, Singleton, Poulton-le-Fylde; second, T. Statter, jun.

Mare or gelding roadster.—First prize, Joseph Moseley, Levenshulme, Manchester; second, Mr. Clarkson, Leeds.

Mare or gelding that never won a prize.—Prize, Charles Leigh Clare, Park Lane, Higher Broughton, Manchester.

Four-year-old gelding or filly for road or field.—First prize, W. C. Brocklehurst, Batley Hall, Prestbury; second, Henry Inmau, Rose Bank, Stratford.

Three-year-old gelding or filly for road or field.—First prize, J. Battersby, Oldham; second, W. C. Brocklehurst.

Two-year-old gelding or filly for road purposes.—First prize, James F. Crowther, Gnowl Grove, Mirfield; second, J. Duckworth, Radcliffe, near Bury.

One-year-old gelding or filly for road or field.—First prize, T. Statter, jun.; second, George Whittaker, Moss Shaw, Radcliffe.

Weaning colt or filly.—First prize, T. H. Miller, Singleton, Poulton-le-Fylde; second, T. Statter, jun.

Cob, mare, or gelding not exceeding 14½ hands.—First prize, Spencer Leese, West Cliff, Preston; second, Thomas Fildes, East Beach, Lytham.

Pony not exceeding 13½ hands.—First prize, W. S. Gladstone, 3 Rumford-street, Liverpool; second, Alfred Challinor, V.S., Nelson-square, Bolton.

Pony not exceeding 12½ hands.—First prize, Thomas Gray, Bolton; second, George Taylor, New Mills.

Hunter mare or gelding.—First prize, George Van Wart, The Shrubbery, Edgbaston, near Birmingham; second, T. H. Newton, Oldfield, Altrincham; third, Frank Robinson, 22, Priory-road, Kilburn, London.

Jumpers, mare or gelding.—First prize, James Wilson, M.D., Newchurch-in-Rossendale; second, Thomas Newton, Oldfield, Altrincham.

Pigs and sheep were only a meagre show. Two sheep breeders (Mr. Henry Neild, Worsley, and Mr. G. F. Statter, Broomhill, Carlisle) were only represented on the catalogue, and for rams of the long and short-wooled breeds Mr. Neild took both prizes. For pigs, the awards were:

PIGS.

JUDGES.—Simeon Lord, Bluepits, near Manchester; Thomas Atherton, Chapel House, Speke, near Liverpool.

GENERAL COMPETITION.

Boar, large breed.—First prize, Peter Eden, Cross Lane, Salford; second, P. Eden.

Breeding sow, large breed.—First prize, P. Eden; second, Clement R. N. Beswicke-Royds, Pyke House, Littleborough.

Litter of sucklings, not more than seven weeks old, large breed.—First prize, John Openshaw, Waterloo Inn, Manchester-road, Bury; second, George Hardman, Friendship Inn, Whit-lane, Pendleton.

Fat hog or gelt, large breed.—First prize, William Rothwell, Hamer-terrace, Rochdale; second, J. Openshaw.

Boar, middle breed.—First prize, P. Eden; second, Frank Ambler, 56, Haugh Shaw Terrace, Halifax.

Breeding sow, middle breed.—First prize, P. Eden; second, F. Ambler.

Litter of sucklings, not more than seven weeks old, middle breed.—First prize, Edmund Ilowarth, Lower Lane, near Rochdale; second, Richard Hurst, Spring Hill, Rochdale.

Fat hog or gelt, middle breed.—First prize, Wm. Dewhurst, Halifax; second, Wm. Rothwell, Rochdale.

Boar, small breed.—First prize, P. Eden; second, Clement R. N. Beswicke-Royds.

Breeding sow, small breed.—First prize, C. R. N. Beswicke-Royds; second, C. R. N. Beswicke-Royds.

Litter of sucklings, not more than seven weeks old, small breed.—First prize, P. Eden; second, Edmund Whitehead, Hill Bank House, Middleton.

Fat hog or gelt, small breed.—First prize, Thomas Bolton, Albert-street, Rochdale; second, T. Ambler, Halifax.

Extra stock.—First prize, P. Eden; second, P. Eden.

THE ROYAL AGRICULTURAL SOCIETY OF IRELAND.

The monthly meeting of the Council of the Society was held in Upper Sackville Street, Dublin, Sir George Hodson, Bart., in the Chair, and the other members present were Lord Monck, Baron De Robeck, Sir Allan Walsh, Bart., Phineas Riall, Charles Colthurst Vesey, James Robertson, Robert H. Borrowes, William Owen, William Young, Martin C. Vesey, Laurence Waldron, and Charles Cobbe.

The CHAIRMAN informed the Council that he had been especially requested by H. R. H. the Prince of Wales to convey to that body the expression of his thanks for his kind reception by them at the recent exhibition, and of his entire satisfaction with the arrangements made for the comfort and convenience of himself and the Royal party. He had also received a letter from the Lord Lieutenant, in which his Excellency gave them credit for the great zeal and energy displayed by those having charge of the arrangements, and congratulating them on the superiority of the show.

The CHAIRMAN then stated that the following important letter had been received from the Chief Secretary:

Dublin Castle, 14th August, 1871.

Sir,—I am directed by the Lord Lieutenant to acquaint you that his Excellency has received from Professor Ferguson, to whom, at the request of the Council of the Royal Agricultural Society, and with his Excellency's approval, the sanitary arrangements of the late agricultural show at Ball's Bridge were entrusted, a report of certain irregularities in connection with cases of foot-and-mouth disease among the animals there collected. It is stated: 1st. That the disease appeared in an animal on the evening of Thursday, the 3rd instant, but that notice was not given to the Government inspector, and that the animal was sent into Dublin, although there was a quarantine place and infirmary adjoining the showyard; and 2ndly, that two animals which had been placed in the infirmary yard on the morning of Friday, the 4th instant, were allowed to be removed therefrom on the evening of the same day, although the officials in charge had been requested to detain them there. As such proceedings were in direct violation of the directions of the Order in Council relating to this disease, to which your attention had been specially called, I am to request that you will move the Council of the Society to favour me with any explanation which they may desire to make for his Excellency's information.

I am, sir, your obedient servant,

T. U. BURKE.

The Secretary, Royal Agricultural Society,
42, Upper Sackville-street.

Captain THORNHILL intimated that he had written to Mr. Morgan on the subject, but up to the present he had not received any reply. The animal that was removed from the yard was not suffering from foot-and-mouth disease, but from dry murrain, and died that night.

Mr. WALDRON suggested that the further consideration of the letter be adjourned to the next meeting of the Council, copies of the communication, in the meantime, to be sent to Mr. Wade and Mr. Corrigan for their explanation thereon.

The suggestion was adopted.

A letter was received from Mr. Stephens claiming the prize for the best Ayrshire cow, in consequence of Mr. David Patton's animal having been removed from the yard.

Mr. OWEN inquired if the prize had been awarded to Mr. Patton's cow?

Captain THORNHILL replied in the affirmative.

The Council decided that they could not entertain the objection, as the animal had to be removed from the yard in consequence of illness.

Major BORROWES moved the adoption of the following resolution: "That in reference to the veterinary surgeon's opinion, after examination of horses for prizes at future shows of the Society, that such horses must be absolutely sound at the time of examination to entitle their owners to the prize, and no opinion as 'temporary,' but 'sound,' be accepted for the future." This he intended as a recommendation to the premium-sheet committee.

The resolution having been seconded, was put from the chair, and unanimously adopted.

Mr. Robert Shaw, of Barberstown, Straffan,, was balloted for, and unanimously elected a life member.

The usual routine business having been disposed of, the Council adjourned.

MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.

At a general meeting held at Liverpool to "receive the reports of inspectors for draining, marling, sub-soiling, laying down land to grass, and best cultivated farms," the Mayor of Liverpool (Mr. J. G. Livingstone), one of the vice-presidents of the Society, presided.

The following awards made by the inspectors were ratified by the meeting:

DRAINING.—Tenant and occupier of not less than 150 acres who shall drain the greatest quantity during the year ending 12th May, 1871.—Prize, £8, T. Warburton, Bewsey Farm, Warrington.

Of not less than 100 acres and under 150.—Prize, £6, J. Warburton, Dial Post Farm, Burtonwood.

Of not less than 70 acres and under 100.—Prize, £4, R. Kelsall, Wood Lane, Burtonwood.

MARLING.—Tenant and occupier of not less than 100 acres who shall marl not less than 10.—Prize, £3, W. G. Ashton, Roby Farm, Liverpool. Extra prize: Silver medal, W. Stockley, Reeds Farm, Rainford.

Of not less than 50 acres and under 100, who shall marl not less than 5.—Prize, £2, J. Whalley, Moss Nook, Rainford, St. Helens.

MANURE TANKS AND RESERVOIRS.—The tenant and occupier who shall construct the best tank.—Prize, £3, R. Whalley, Mill Green, Bold, Warrington.

ERADICATING HEDGES.—Tenant and occupier of a farm of not less than 160 acres who shall eradicate, at his own expense, the greatest length of hedges, in proportion to the size of his farm.—Prize, £5, T. Ball, Woodend Farm, Maghull, Liverpool.

Of not less than 80 and under 160 acres.—Prize, £4, J. Warburton, Dial Post Farm.

Of not less than 40 acres and under 80.—Prize, £2, J. Clayton, Kirkby, Prescott.

PLANTING AND RAISING HEDGES.—Tenant and occupier who shall have raised, after planting in any one season, the greatest length of Whitethorn Hedge (not less than 880 yards), in proportion to the size of his farm, and after the most approved method.—Prize, £5, R. Whalley, Mill Green.

Not less than 440 yards.—Prize, £3, J. Whalley, Moss Farm, Rainford.

LOW-LYING DISTRICT—ARABLE OR CULTIVATED FARMS.—Tenant and occupier of not less than 150 acres in the best state of cultivation.—Prize, £10, E. Musker, Aintree.

Of not less than 100 acres and under 150.—Prize, £8, W. Turton, Halebank, Warrington.

Of not less than 50 acres and under 100.—Prize, £6, H. Williamson, Orrel, Liverpool.

DAIRY OR GRAZING FARMS.—Tenant and occupier for the best managed dairy or grazing farm of not less than 100 acres and under 200.—Prize, £8, H. Sanderson, Willerscote, Northwich.

LAYING DOWN LAND TO GRASS.—Tenant and occupier of a farm not less than 150 acres, capable of arable cultivation, who shall lay down in the best manner for mowing not less than 15 acres.—Prize, £5, F. G. Byron, Speke, near Liverpool; extra prize, R. G. Owen, Halewood, Warrington, silver medal.

Farm for pasturing.—Prize, £5, W. Birch, Stand Farm, Aintree.

Farm of not less than 100 acres and under 150, for mowing, not less than 10 acres.—Prize, £4, G. Halsall, Halewood.

Farm of not less than 50 acres and under 100, for mowing, not less than seven acres.—Prize, £3, R. Mawdsley, Orrel Village.

Farm of not less than 25 acres and under 50, for mowing, not less than three acres.—Prize, £2, J. Southern, Culcheth.

HIGH-LYING DISTRICT—LAYING DOWN LAND TO GRASS.—Tenant and occupier of a farm not less than 150 acres of land, capable of arable cultivation, who shall lay down, in the best manner, for mowing or pasturing, not less than 10 acres.—Prize, £4, H. Neild, Grange Farm, Worsley.

compact little horse of breed, on a short leg, that looked like a stayer." Melton was third at Birmingham and Paddy Byrne highly commended, and at Malvern Melton was first and Paddy Byrne highly commended. But Melton is a very different horse in the open to what he is in a circus ring; although, noticeably enough, he came in here romping and fighting, and moving much after the manner of a charger, and it was not until he settled down and fairly extended himself that his really fine action became apparent. He went resolutely up to his bridle, while his fencing was as good as his galloping, and once set-a-going, he won all the way. Paddy Byrne, though a clever horse enough, would not compare with the other where there was room for a trial, and the four-year-old Misfortune took second prize; as of her it was recorded last week: "Misfortune, who again had the ill-luck to play third to Major Barlow's pair as she did at Wolverhampton, is a nice mare, of breed and a good goer, but a little shelly in her middle and a trifle slack in the loin; but with all this we like her much." She was, however, fast going amiss at Malvern, and on Tuesday hardly promised to see out the three day's jumping, for which her rider, on the contrary, was very keen. This was altogether a fair creditable class, out of which a thick, useful, short-legged horse of Major Ballard's was necessarily drafted early on account of his infirm hocks. The pick of the neighbouring Hunts was a nice, level, bay horse, a good goer and a fine fencer, while Mr. Colman's chestnut, put second, has a deal more character, but with dwelling rather rocking-horse action, and a great disinclination to show off at the hurdles, although he could fence well enough when he chose. The best hunter, the property of a tenant-farmer, was a roan which had been drafted early in one of the previous classes; and the best hack a common, useful, harness cob which could move a bit, but not a gentleman's nor a prize hack, according to our interpretation of the term. Something a vast deal more like this was Mr. Hooper's highly commended son of Francatelli, a really stylish, well-bred, good-looking hack, but a chipped knee and a big bridle put him out of it. He went, moreover, much more pleasantly under Major Ballard than with Major Barlow, and one was a judge and the other wasn't. The first prize pony was a Billy Button Astlean kind of animal, but the class was altogether indifferent; while most of the decisions in the horse section of the show from the cart stallions onwards were arrived at on a division being called and taken.

At a meeting held as it were under the shadow of the Herefordshire Beacon, the entry of Hereford cattle was curiously and lamentably small. There were in all sixteen animals sent to compete for fourteen premiums, while in the companion classes of Shorthorns there were fifty-two entries, the half-dozen dairy cows being also of the more popular sort. Are the breeders of white-faces indifferent? or why is it that the shows of such cattle, held in the home or adjoining counties, are now so often so small and uninteresting? Still there were some good animals to be found in this short show; such as Monaghty and Bachelor, the first and second prize bulls at Wolverhampton, backed by Mr. Tanner's prize cows, Queen and Lady Milton, and two or three equally well-known heifers from the Leen and Bicton herds. When we have said so much we have said nearly all, for there was but little further competition, and there was no section which excited comparatively so little attention.

The sheep show was confined to Shropshires and Longwools, "the Oxford and other Down classes" not bringing a single entry in the four classes; while the awards over the Shropshires created a deal of discussion, as all prece-

dent as established of late seemed to be set aside. *The Midland Counties Herald*, a good authority in this way, says: "The Shropshires were allowed precedence in the sheep classes; and we would suggest that the judges should in future include a second gentleman who will pay rather more attention to the points which are universally admitted to characterise the true specimens of the breed, when we should not see, as was the case on Tuesday, prizes obtained by sheep with coarse Cotswold coats and pale faces. In ewes, Mr. Firmstone's pen had been got into much better condition since Wolverhampton, and was placed before Mr. Baker's and Mrs. Beach's pens, which there occupied first and second positions. In the class for shearing ewes, to the surprise of nearly every one, Mr. Pulley's were placed first, and Mr. Baker's and Mr. Firmstone's highly commended pens at the Royal Agricultural Society, between which the contest was supposed to lie, second and third. Mrs. Beach won with a shearling ram, to which the extra prize as the best male animals in the sheep classes was also awarded. Mr. Pulley was second and third with sheep as opposite in character to the first as can well be imagined." Of the other Longwools Mr. Harris, of Wootton, had some of the best, and Mr. Harris, of Stoney-lane, some of the worst, the third-prize theaves being as bad a pen as ever took a premium. With the Duckeringins, the Wheelers, Mr. Smith of Henley-in-Arden, the Cirencester College, and Mr. Heber Humfrey as exhibitors, there was a capital show of pigs, alike of Whites and Berkshires, Mr. Smith's Champion boar being probably the best Berkshire of his day, although not exhibited at Wolverhampton, where his owner was one of the judges.

The implement exhibitors were: Bradford and Co., Fleet-street, London; Belcher, Gee, and Co., Gloucester; Mines, Cheltenham; Baylis, Worcester; McNaught and Smith, Worcester; Jennings and Son, Hereford; Lyon, Windmill-street, Finsbury, London; Davis, Malvern Link; Towndrow, Malvern Link; Russell, Great Malvern; Passey and Co., Worcester; Skarratt, Worcester; Cross, Malvern; Scott and Oram, Worcester; Lee, Gloucester; Rendle, Victoria-street, London; Hill and Smith, Brierley Hill; Sawney, Beverley; Burrow, Great Malvern; Hamsler, Malvern; Halford, Upton-on-Severn; Webb and Sons, Wordsley, Stourbridge; Beach and Co., Dudley; Whitgrove and Son, Worcester; Shorland, Amen Corner, London; Brazzins, Banbury; Huds-peth, South Tyne Works, Haltwhistle, Northumberland; Dodge, Upper Thames Street, London. Hobday, Worcester; Sparks, Great Malvern; Larkworthy and Co., Iron Works, Worcester; Lewis and Co., Iron Works, Shrewsbury; Crump, Tewkesbury; Horton, Worcester; Hall, Worcester; Jones and Rowe, Worcester; Cook, Malvern Link; Lely and Son, Redditch; Tipper, Birmingham; Horton, Colwall, Malvern; Tomlins, Great Malvern; Newman, Forthampton, Tewkesbury; James and Son, Tivoli Works, Cheltenham; Burgess, Malvern Wells; Southwell and Co., Albion Iron Works, Rugeley; Hathaway, Chippenham; Hall, Worcester; Barrows and Son, Leigh Sinton, Great Malvern; Humphries, Pershore; Wallis and Stevens, North Hants Iron Works, Basingstoke; Corbett, Perseverance Iron Works, Shrewsbury; Woods, Cocksedge, and Warner, Suffolk Iron Works, Stowmarket; Caswell, Martley, Worcestershire; Jones, Tewkesbury.

PRIZE LIST.

JUDGES.

CATTLE.—W. Taylor, Thinghill Court, Hereford; S. Rich, The Cedars, Fearnall Heath, Worcester; T. Morris, Maise-more Court, Gloucester.

SHEEP AND PIGS.—M. Savage, Sarsden, Chipping Norton; J. Dale, Spetchley, Worcester.

HORSES.—Major Barlow, Hasketon, Woodbridge, Suffolk; H. Corbett, Farmers' Club, London; H. Ridgeley, Steven-ton, Ludlow.

WOOL.—J. Couchor, St. John's, Worcester.

IMPLEMENTS.—G. Shackell, Erleigh Court, Reading.

CATTLE.

SHORTHORNS.

Earl Beauchamp's prize.—Bull in Shorthorn classes, £25.—The Marquis of Exeter (Telemachus).

Bull, above two years old.—First prize, The Marquis of Exeter, Burghley Park, Stamford (Telemachus); second, J. Outhwaite, Bainesse, Catterick (Royal Windsor). Highly commended: Earl Beauchamp, Madresfield Court, Malvern (Festival); G. Garne, Churchill Heath, Chipping Norton (Royal Butterfly 20th); J. Cooper, Powick Farm, Worcester.

Bull, above one and under two years old.—First prize, H. Allsopp, Hindlip Hall, Worcester (Marnhull Duke); second, R. Stratton, Burdop (Master Glanville); third, G. Garne (3rd Earl of Warwickshire). Highly commended: the Rev. Walter Sneyd, Keele Hall, Newcastle-under-Lyne (Lord of the Manor).

Cow, in milk or in calf.—First prize, J. Outhwaite (Vivandiere); second, J. How, Broughton, Huntington (Windsor's Butterfly). Highly commended: W. Bradburn, Wednesfield, Wolverhampton (Miss Chesterfield); W. Bradburn (Red Rose).

Two-year-old heifer, in milk or in calf.—First prize, J. How, (Vesper Queen); second, W. Bradburn (Coralline); third, W. Bradburn (Moss Rose). Commended: H. Allsopp (Daisy).

Yearling heifer.—First prize, Rev. W. Sneyd, Keele Hall, Newcastle-under-Lyne (Maid of the Mist); second, J. How (Verona); third, R. Stratton (Innocence). Highly commended: Rev. Walter Sneyd (Firenze); R. Stratton (Mabel). Commended: Earl Beauchamp (Severn Maid); G. Garne (Girl of the Period); G. Garne (Butterfly's Duchess).

The Toddington Challenge Cup, of the value of fifty guineas.—The Marquis of Exeter (Telemachus).

HEREFORDS.

Sir E. A. H. Lechmere's prize of £20 for best Hereford.—P. Turner, The Leen, Pembridge (Rarity).

Bull above two years old.—First prize, W. Evans, Llandowlas, Usk (Monaughty 3rd); second, P. Turner (Bachelor). Commended: J. Twinberrow, Whitehouse, Suckley, Worcester (Monarch).

Bull above one and under two years old.—Prize, J. Twinberrow (Woodman). No competition.

Cow, in milk or calf.—First prize, R. Tanner, Frodesley, Dorrington, Salop (Queen); second, R. Tanner (Lady Mitton). Commended: T. Fenn, Stonebrook House, Ludlow.

Two-year-old heifer, in milk or in calf.—First prize, P. Turner (Rarity); second, J. Harding, Bicton, Shrewsbury; third, T. Rogers, Coxall, Brampton.

Yearling heifer.—First prize, P. Turner; second, R. Tanner (Princess Louise); third, E. J. Morris, Stanley Pont-larger, Winchcomb (Stanley's Delight).

DAIRY COWS.

Three dairy cows, in milk, any breed.—Prizes first and second, Earl Beauchamp.

SHEEP.

SHROPSHIRE.

Five breeding ewes.—First prize, W. C. Firmstone, Rockingham Hall, Hagley, Stourbridge; second, W. Baker, Moor Barns, Atherstone; third, Sarah Beach, The Hattons, Brewood.

Five theaves.—First prize, J. Pulley, Lower Heaton, Hereford; second, W. Baker; third, W. C. Firmstone.

Shearling ram.—First prize, Sarah Beach; second, J. Pulley; third, J. Pulley.

Ram of any age.—First prize, T. Fenn; second, R. Tanner; third, W. Baker.

LONG-WOOLLED.

Five breeding ewes.—First prize, T. W. D. Harris, Wootton, Northampton; second, T. W. D. Harris; third, T. Harris, Stoney-lane, Bromsgrove.

Five theaves.—First prize, T. W. D. Harris; second, T. W. D. Harris; third, T. Harris.

Shearling ram.—First prize, T. W. D. Harris; second, T. W. D. Harris.

Ram of any age.—First prize, T. Harris; second, J. Wheeler and Sons, Long Compton, Shipston-on-Stour.

Oxford Down classes.—No entries.

PIGS.

Boar, of large breed.—First prize, R. E. Duckering, Northorpe, Kirton Lindsay; second, R. E. Duckering.

Breeding sow, large breed.—First prize, R. E. Duckering; second, R. E. Duckering. Highly commended: J. Wheeler and Sons, Long Compton.

Two hiltts, of large breed.—First prize, J. Wheeler and Sons; second, R. E. Duckering.

Boar, of small breed.—First prize, R. E. Duckering; second, J. Wheeler and Sons.

Breeding sow, of small breed.—First prize, J. Wheeler and Sons; second, R. E. Duckering. Highly commended: R. E. Duckering and J. Wheeler and Sons.

Two best hiltts, of small breed.—Prize, R. E. Duckering.

Boar, of the Berkshire breed.—First prize, J. Smith, Healey-in-Arden; second, Russell Swanrick, Cirencester.

Breeding sow of the Berkshire breed.—First prize, Russell Swanrick; second, H. Humfrey, Kingstone Farm, Shrivensham.

Hiltts of the Berkshire breed.—First prize, Russell Swanrick; second, R. Swanrick.

Earl Somers' £5 for the best boar in the pig class.—Prize, J. Smith, (Berkshire).

HORSES.

Stallion, for agricultural purposes.—First prize, H. Tomlinson, Blithford, Rugeley (Young Lofty); second, W. Wynn, Clanchill Leys, Grange, Alcester (A 1). Highly commended: J. Manning, Oringbury (Young Champion).

Pair of cart geldings or mares, above four years old, which have been regularly worked.—First prize, J. Groves, Friar-street, Worcester; second, S. Davis, Woollasshill, Pershore.

Cart mare and foal.—First prize, S. Davis (Darby); second, T. Ballinger, Barrows Court, Boddington, Cheltenham (Bonny).

Cart filly or gelding, two and under three years old.—First prize, S. Davis (Darling); second, J. Perry, Salters Hall, Claverley, Bridgnorth.

Thoroughbred stallion, constitutionally sound, that has served mares regularly in the county of Worcester during the season of 1871, or that is certified to serve mares in the county of Worcester in the season of 1872.—First prize, Earl of Coventry, Croome Court, Severn Stoke, Worcester (Empire); second, M. Biddulph, Ledbury (The Mallard). Highly commended: J. G. Watkins, Woodfield, Droitwich (Fairfield Selection).

Hunter, irrespective of weight.—First prize, T. Percival, Wansford (Melton); second, C. Cook, Taddington, Winchcomb (Misfortune). Highly commended: T. Percival (Paddy Byrne).

Hunter, ridden in the past season with the Worcestershire, Herefordshire, Ledbury, Cotswold, Albrighton, Ludlow, North and South Staffordshire, or North Warwickshire Hounds.—First prize, Major Martin, Ham Court, Upton-on-Severn; second, W. Colman, Rowallan, Great Malvern (Dragon). Highly commended: H. Allsopp (Chance); E. A. N. Roysds, Eilerslie, Great Malvern (Saucy Girl).

Hunter, the property of a tenant farmer resident in Worcestershire.—First prize, W. S. Coucher, St. John's, Worcester (Lord George); second, G. C. Matthews, Eastbury, Hallow, Worcester (Rosina). This award is disputed on the ground that Mr. Coucher is not a tenant farmer.

Hunting mare or gelding, under five years o'd.—First prize, C. Cook, Toddington, Winchcomb (Admiral); second, J. G. Watkins, Woodfield, Droitwich.

Hack, not exceeding fifteen hands.—Prize, W. Lea, Other-ton Farm, Cotheridge, Worcester. Highly commended: R. N. Hooper, Lansannon (The Hart). Commended: T. W. Blyth, Aldington (Vanity).

Pony, above twelve and under fourteen hands.—Prize, W. Godsall, Tewkesbury. Commended: C. R. Kynoch.

Brood mare for producing hunters.—Prize, G. B. Jones, Eight Oaks, Castlemorton, Tewkesbury. Commended: W. Taylor, Ambersley.

WOOL.

Tod of wool of the clip of 1871, shorn from long-woolled sheep.—Prize, T. Harris, Stoneylane.

Tod of wool of the clip of 1871, shorn from short-woolled sheep.—Prize, H. Allsopp. Commended: R. Hickman, Cotheridge, Worcester.

compact little horse of breed, on a short leg, that looked like a stayer." Melton was third at Birmingham and Paddy Byrne highly commended, and at Malvern Melton was first and Paddy Byrne highly commended. But Melton is a very different horse in the open to what he is in a circus ring; although, noticeably enough, he came in here romping and fighting, and moving much after the manner of a charger, and it was not until he settled down and fairly extended himself that his really fine action became apparent. He went resolutely up to his bridle, while his fencing was as good as his galloping, and once set-a-going, he won all the way. Paddy Byrne, though a clever horse enough, would not compare with the other where there was room for a trial, and the four-year-old Misfortune took second prize; as of her it was recorded last week: "Misfortune, who again had the ill-luck to play third to Major Barlow's pair as she did at Wolverhampton, is a nice mare, of breed and a good goer, but a little shelly in her middle and a trifle slack in the loin; but with all this we like her much." She was, however, fast going amiss at Malvern, and on Tuesday hardly promised to see out the three day's jumping, for which her rider, on the contrary, was very keen. This was altogether a fair creditable class, out of which a thick, useful, short-legged horse of Major Ballard's was necessarily drafted early on account of his infirm hocks. The pick of the neighbouring Hunts was a nice, level, bay horse, a good goer and a fine fencer, while Mr. Colman's chesnut, put second, has a deal more character, but with dwelling rather roeking-horse action, and a great disinclination to show off at the hurdles, although he could fence well enough when he chose. The best hunter, the property of a tenant-farmer, was a roan which had been drafted early in one of the previous classes; and the best hack a common, useful, harness cob which could move a bit, but not a gentleman's nor a prize hack, according to our interpretation of the term. Something a vast deal more like this was Mr. Hooper's highly commended son of Francatelli, a really stylish, well-bred, good-looking hack, but a chipped knee and a big bridle put him out of it. He went, moreover, much more pleasantly under Major Ballard than with Major Barlow, and one was a judge and the other wasn't. The first prize pony was a Billy Button Astlean kind of animal, but the class was altogether indifferent; while most of the decisions in the horse section of the show from the cart stallions onwards were arrived at on a division being called and taken.

At a meeting held as it were under the shadow of the Herefordshire Beacon, the entry of Hereford cattle was curiously and lamentably small. There were in all sixteen animals sent to compete for fourteen premiums, while in the companion classes of Shorthorns there were fifty-two entries, the half-dozen dairy cows being also of the more popular sort. Are the breeders of white-faces indifferent? or why is it that the shows of such cattle, held in the home or adjoining counties, are now so often so small and uninteresting? Still there were some good animals to be found in this short show; such as Monaghty and Bachelor, the first and second prize bulls at Wolverhampton, backed by Mr. Tanner's prize cows, Queen and Lady Milton, and two or three equally well-known heifers from the Leen and Bicton herds. When we have said so much we have said nearly all, for there was but little further competition, and there was no section which excited comparatively so little attention.

The sheep show was confined to Shropshires and Longwools, "the Oxford and other Down classes" not bringing a single entry in the four classes; while the awards over the Shropshires created a deal of discussion, as all prece-

dent as established of late seemed to be set aside. *The Midland Counties Herald*, a good authority in this way, says: "The Shropshires were allowed precedence in the sheep classes; and we would suggest that the judges should in future include a second gentleman who will pay rather more attention to the points which are universally admitted to characterise the true specimens of the breed, when we should not see, as was the case on Tuesday, prizes obtained by sheep with coarse Cotswold coats and pale faces. In ewes, Mr. Firmstone's pen had been got into much better condition since Wolverhampton, and was placed before Mr. Baker's and Mrs. Beach's pens, which there occupied first and second positions. In the class for shearing ewes, to the surprise of nearly every one, Mr. Pulley's were placed first, and Mr. Baker's and Mr. Firmstone's highly commended pens at the Royal Agricultural Society, between which the contest was supposed to lie, second and third. Mrs. Beach won with a shearing ram, to which the extra prize as the best male animals in the sheep classes was also awarded. Mr. Pulley was second and third with sheep as opposite in character to the first as can well be imagined." Of the other Longwools Mr. Harris, of Wootton, had some of the best, and Mr. Harris, of Stoney-lane, some of the worst, the third-prize theaves being as bad a pen as ever took a premium. With the Duckeringins, the Wheelers, Mr. Smith of Henley-in-Arden, the Cirencester College, and Mr. Heber Humfrey as exhibitors, there was a capital show of pigs, alike of Whites and Berkshires, Mr. Smith's Champion boar being probably the best Berkshire of his day, although not exhibited at Wolverhampton, where his owner was one of the judges.

The implement exhibitors were: Bradford and Co., Fleet-street, London; Belcher, Gee, and Co., Gloucester; Mines, Cheltenham; Baylis, Worcester; McNaught and Smith, Worcester; Jennings and Son, Hereford; Lyon, Windmill-street, Finsbury, London; Davis, Malvern Link; Towndrow, Malvern Link; Russell, Great Malvern; Passey and Co., Worcester; Skarratt, Worcester; Cross, Malvern; Scott and Oram, Worcester; Lee, Gloucester; Rendle, Victoria-street, London; Hill and Smith, Brierley Hill; Sawney, Beverley; Burrow, Great Malvern; Hamsher, Malvern; Halford, Upton-on-Severn; Webb and Sons, Wordsley, Stourbridge; Beach and Co., Dudley; Whitgrove and Son, Worcester; Shorland, Amen Corner, London; Braggins, Banbury; Huds-peth, South Tyne Works, Haltwhistle, Northumberland; Dodge, Upper Thames Street, London; Hobday, Worcester; Sparks, Great Malvern; Larkworthy and Co., Iron Works, Worcester; Lewis and Co., Iron Works, Shrewsbury; Crump, Tewkesbury; Horton, Worcester; Hall, Worcester; Jones and Rowe, Worcester; Cook, Malvern Link; Lely and Son, Redditch; Tipper, Birmingham; Horton, Colwall, Malvern; Tomlin, Great Malvern; Newman, Forthampton, Tewkesbury; James and Son, Tivoli Works, Cheltenham; Burgess, Malvern Wells; Southwell and Co., Albion Iron Works, Rugeley; Hathaway, Chippenham; Hall, Worcester; Burrows and Son, Leigh Sinton, Great Malvern; Humphries, Pershore; Wallis and Stevens, North Hants Iron Works, Basingstoke; Corbett, Perseverance Iron Works, Shrewsbury; Woods, Cocksedge, and Warner, Suffolk Iron Works, Stowmarket; Caswell, Martley, Worcestershire; Jones, Tewkesbury.

PRIZE LIST.

JUDGES.

CATTLE.—W. Taylor, Thinghill Court, Hereford; S. Rich, The Cedars, Fearnall Heath, Worcester; T. Morris, Maise-more Court, Gloucester.

SHEEP AND PIGS.—M. Savage, Sarsden, Chipping Norton; J. Dale, Spetchley, Worcester.

HORSES.—Major Barlow, Hasketon, Woodbridge, Suffolk; H. Corbet, Farmers' Club, London; H. Ridgeley, Steven-ton, Ludlow.

WOOL.—J. Coucher, St. John's, Worcester.

IMPLEMENTS.—G. Shackell, Erleigh Court, Reading.

CATTLE.

SHORTHORNS.

Earl Beauchamp's prize.—Bull in Shorthorn classes, £25.—The Marquis of Exeter (Telemachus).

Bull, above two years old.—First prize, The Marquis of Exeter, Burghley Park, Stamford (Telemachus); second, H. Outhwaite, Bainesse, Catterick (Royal Windsor). Highly commended: Earl Beauchamp, Madresfield Court, Malvern (Festival); G. Garne, Churchill Heath, Chipping Norton (Royal Butterfly 20th); J. Cooper, Powick Farm, Worcester.

Bull, above one and under two years old.—First prize, H. Allsopp, Hindlip Hall, Worcester (Marnhull Duke); second, R. Stratton, Burderop (Master Glanville); third, G. Garne (3rd Earl of Warwickshire). Highly commended: the Rev. Walter Sneyd, Keele Hall, Newcastle-under-Lyne (Lord of the Manor).

Cow, in milk or in calf.—First prize, J. Outhwaite (Vivandiere); second, J. How, Broughton, Huntingdon (Windsor's Butterfly). Highly commended: W. Bradburn, Wednesfield, Wolverhampton (Miss Chesterfield); W. Bradburn (Red Rose).

Two-year-old heifer, in milk or in calf.—First prize, J. How, (Vesper Queen); second, W. Bradburn (Coralline); third, W. Bradburn (Moss Rose). Commended: H. Allsopp (Daisy).

Yearling heifer.—First prize, Rev. W. Sneyd, Keele Hall, Newcastle-under-Lyne (Maid of the Mist); second, J. How (Verona); third, R. Stratton (Innocence). Highly commended: Rev. Walter Sneyd (Firenze); R. Stratton (Mabel). Commended: Earl Beauchamp (Savern Maid); G. Garne (Girl of the Period); G. Garne (Butterfly's Duchess).

The Toddington Challenge Cup, of the value of fifty guineas.—The Marquis of Exeter (Telemachus).

HEREFORDS.

Sir E. A. H. Lechmere's prize of £20 for best Hereford.—P. Turner, The Leen, Pembridge (Rarity).

Bull above two years old.—First prize, W. Evans, Llandowlas, Usk (Monaghty 3rd); second, P. Turner (Bachelor). Commended: J. Twinberrow, Whitehouse, Suckley, Worcester (Monarch).

Bull above one and under two years old.—Prize, J. Twinberrow (Woodman). No competition.

Cow, in milk or calf.—First prize, R. Tanner, Frodesley, Dorrington, Salop (Queen); second, R. Tanner (Lady Mitton). Commended: T. Fenn, Stonebrook House, Ludlow.

Two-year-old heifer, in milk or in calf.—First prize, P. Turner (Rarity); second, J. Harding, Bieton, Shrewsbury; third, T. Rogers, Coxall, Brampton.

Yearling heifer.—First prize, P. Turner; second, R. Tanner (Princess Louise); third, E. J. Morris, Stanley Pont-large, Winchcomb (Stanley's Delight).

DAIRY COWS.

Three dairy cows, in milk, any breed.—Prizes first and second, Earl Beauchamp.

SHEEP.

SHROPSHIRE.

Five breeding ewes.—First prize, W. C. Firmstone, Rockingham Hall, Hagley, Stourbridge; second, W. Baker, Moor Barns, Atherton; third, Sarah Beach, The Hattons, Brewood.

Five theaves.—First prize, J. Pulley, Lower Heaton, Hereford; second, W. Baker; third, W. C. Firmstone.

Shearling ram.—First prize, Sarah Beach; second, J. Pulley; third, J. Pulley.

Ram of any age.—First prize, T. Fenn; second, R. Tanner; third, W. Baker.

LONG-WOOLLED.

Five breeding ewes.—First prize, T. W. D. Harris, Wootton, Northampton; second, T. W. D. Harris; third, T. Harris, Stoney-lane, Bromsgrove.

Five theaves.—First prize, T. W. D. Harris; second, T. W. D. Harris; third, T. Harris.

Shearling ram.—First prize, T. W. D. Harris; second, T. W. D. Harris.

Ram of any age.—First prize, T. Harris; second, J. Wheeler and Sons, Long Compton, Shipston-on-Stour. Oxford Down classes.—No entries.

PIGS.

Boar, of large breed.—First prize, R. E. Duckering, Northorpe, Kirton Lindsay; second, R. E. Duckering.

Breeding sow, large breed.—First prize, R. E. Duckering; second, R. E. Duckering. Highly commended: J. Wheeler and Sons, Long Compton.

Two hilt, of large breed.—First prize, J. Wheeler and Sons; second, R. E. Duckering.

Boar, of small breed.—First prize, R. E. Duckering; second, J. Wheeler and Sons.

Breeding sow, of small breed.—First prize, J. Wheeler and Sons; second, R. E. Duckering. Highly commended: R. E. Duckering and J. Wheeler and Sons.

Two best hilt, of small breed.—Prize, R. E. Duckering.

Boar, of the Berkshire breed.—First prize, J. Smith, Henley-in-Arden; second, Russell Swanirek, Cirencester.

Breeding sow of the Berkshire breed.—First prize, Russell Swanirek; second, H. Hamfrey, Kingstone Farm, Shrivenham.

Hilt, of the Berkshire breed.—First prize, Russell Swanirek; second, R. Swanirek.

Earl Somers' £5 for the best boar in the pig class.—Prize, J. Smith, (Berkshire).

HORSES.

Stallion, for agricultural purposes.—First prize, H. Tomlinson, Blithford, Rugeley (Young Lofty); second, W. Wynn, Clanhill Leys, Grafton, Aicester (A 1). Highly commended: J. Manning, Oringbury (Young Champion).

Pair of cart geldings or mares, above four years old, which have been regularly worked.—First prize, J. Groves, Friar-street, Worcester; second, S. Davis, Woolashill, Pershore.

Cart mare and foal.—First prize, S. Davis (Darby); second, T. Ballinger, Barrows Court, Boddington, Cheltenham (Bonny).

Cart filly or gelding, two and under three years old.—First prize, S. Davis (Darling); second, J. Perry, Salters Hall, Claverley, Bridgnorth.

Thoroughbred stallion, constitutionally sound, that has served mares regularly in the county of Worcester during the season of 1871, or that is certified to serve mares in the county of Worcester in the season of 1872.—First prize, Earl of Coventry, Croom Court, Severn Stoke, Worcester (Umpire); second, M. Biddulph, Ledbury (The Mallard). Highly commended: J. G. Watkins, Woodfield, Droitwich (Fairfield Selection).

Hunter, irrespective of weight.—First prize, T. Percival, Wansford (Melton); second, C. Cook, Taddington, Winchcomb (Misfortune). Highly commended: T. Percival (Paddy Byrne).

Hunter, ridden in the past season with the Worcestershire, Herefordshire, Ledbury, Cotswold, Albrighton, Ludlow, North and South Staffordshire, or North Warwickshire Hounds.—First prize, Major Martin, Ham Court, Upton-on-Severn; second, W. Colman, Rowallan, Great Malvern (Dragon). Highly commended: H. Allsopp (Chance); E. A. N. Royds, Ellerslie, Great Malvern (Saucy Girl).

Hunter, the property of a tenant farmer resident in Worcestershire.—First prize, W. S. Coucher, St. John's, Worcester (Lord George); second, G. C. Matthews, Eastbury, Hallow, Worcester (Rosina). This award is disputed on the ground that Mr. Coucher is not a tenant farmer.

Hunting mare or gelding, under five years old.—First prize, C. Cook, Toddington, Winchcomb (Admiral); second, J. G. Watkins, Woodfield, Droitwich.

Haek, not exceeding fifteen hands.—Prize, W. Lea, Other-ton Farm, Cotheridge, Worcester. Highly commended: R. N. Hooper, Lansannor (The Hart). Commended: T. W. Blyth, Aldington (Vanity).

Pony, above twelve and under fourteen hands.—Prize, W. Godsall, Tewkesbury. Commended: C. R. Kynoch.

Brood mare for producing hunters.—Prize, G. B. Jones, Eight Oaks, Castlemorton, Tewkesbury. Commended: W. Taylor, Ambersley.

WOOL.

Tod of wool of the clip of 1871, shorn from long-woolled sheep.—Prize, T. Harris, Stoneylane.

Tod of wool of the clip of 1871, shorn from short-woolled sheep.—Prize, H. Allsopp. Commended: R. Hickman, Cotheridge, Worcester.

IMPLEMENTS.

Prize £5, for the best collection of the most useful agricultural implements, J. L. Larkworthy and Co.; £5, for the best collection, exhibited by manufacturer, Corbett, Shrewsbury; £3, for the best collection of improved implements used in the cultivation and management of hops, J. L. Larkworthy and Co. Silver medals to J. Brazgins, Banbury, for gates and patent locks; Corbett, Shrewsbury, for combined winnow and elevator; Humphries, Pershore, for thrashing machines; Hornsby, Grantham, for double ploughs and reaping machines; James and Son, Cheltenham, for bone crushers, pump, and water cart; Southwell and Co., Rugeley, for grist mill; Webb and Co., Worcester, for chemical manures; medals would also have been awarded to Carter and Co. London; Hathaway, Chippenham; and Wallis and Stevens, Basingstoke; but the entries were not made in time for competition.

At the dinner, Sir E. A. H. LECHMERE, Bart., the chairman, proposed "Success to the Worcestershire Agricultural Society." He believed that society took its date from the year 1830, when certain gentlemen and agriculturists of the county met to consider its formation, with a view, no doubt, to the attainment of much the same objects as those for which they had met that day. An especial object was to take into consideration the depressed state of agriculture. Great changes had occurred since that time. He looked around him in vain for the faces of depressed agriculturists. While the times had changed, the circumstances of the Society had altered also. Formerly, the meetings—no doubt very interesting and successful, and reflecting great credit on those who promoted them—were held in the confined space of the Cattle Market at Worcester, and those who visited them met at the dinner table as depressed agriculturists, and made long speeches. They met that day under far brighter circumstances—assembling at the foot of those grand old hills, and having the attractions of music and flowers, and last, though by no means least, the presence of ladies. He thought the members of the committee acted very wisely in making the change they did, and they deserved very great credit for incurring so much labour and responsibility. He should like to see another phase of the Society's work, and still larger meetings. He would wish to see the Worcestershire Society inviting the counties of Gloucester, Herefordshire, and perhaps Shropshire, to join it in holding one large show for the four counties in each year. He conceived such an exhibition would be of far greater benefit to the agriculturists of the district than the present meetings, however pleasant and successful they might be. He had had some correspondence with a gentleman who took great interest in agriculture in Gloucestershire, namely, Mr. Holland, who saw no great difficulty in the way of effecting the desired object if that county were approached in a friendly spirit. He believed Mr. Holland was not at all disinclined to entertain the question. He had had no communication with Herefordshire gentlemen, but he considered it very possible that they would be willing to entertain the proposal. He suggested, at any rate, that the committee of this Society should take the question into consideration. On some future occasion when they met they might see before them Herefordshire cattle, Cotswold sheep, Shropshire sheep, and an assemblage of the agriculturists of the four counties.

Mr. W. E. DOWDESWELL, M.P., said he cordially agreed with every word spoken by Sir Edmund in regard to amalgamation with neighbouring societies, but he wished to vindicate the committee's conduct in respect of this matter. It was in the recollection of many gentlemen that a resolution was passed about two years ago authorising the committee to meet and endeavour to effect an amalgamation with the Herefordshire and Gloucestershire Societies. They attended at Hereford, and had a lengthened correspondence with Gloucestershire. Herefordshire received them in the courteous manner in which the residents in that county received strangers when they were once across those beautiful hills, but told them it preferred having its own show. Gloucestershire, without giving any very decisive answer, said, in effect, that the time for amalgamation had not yet come. He hailed with the greatest satisfaction (and he was sure Mr.

Buck, and the members of the committee who recollected the circumstances, received with equal satisfaction) the fact that the chairman of the Gloucestershire Association had communicated in black and white to Sir Edmund Lechmere that he was anxious for amalgamation. On hearing from the committee of the Gloucestershire Society, the Worcestershire Committee would call a general meeting of the members to consider whether or not it would be for the benefit of local agriculture that the two societies should amalgamate and hold the shows alternately in the two counties.

Sir JOHN PAKINGTON cordially joined with his hon. friend in the chair and with Mr. Dowdeswell, in the feeling that they would do well to themselves and to their neighbours if they could promote the general agriculture of the district by an amalgamation of the societies in several counties, and the holding of one great show. He hoped to see that accomplished.

LORD BEAUCHAMP said they must feel on the present occasion greatly obliged to Mr. Curtler for his timely warning, because this was a case in which to be forewarned was to be forearmed. He was sure Mr. Curtler's warning would be taken to heart, and that they would be prepared to adopt all necessary precautions—to separate those of their cattle which might be attacked by foot-and-mouth disease from the rest of the flocks and herds, and prevent the infection from being carried into their neighbours' fold-yards. With regard to the question of amalgamation, while he believed a union of the societies would tend very much to the advantage of agriculture throughout the district, he must remind them that advances had been made by this society, and it was well known that they were ready to amalgamate on fair and equal terms with other societies. But he did not think the whole burden of the necessary negotiations and arrangements should be thrown on this county. The Gloucestershire Society should take active steps to give effect to Mr. Holland's views before he would recommend the committee of their society to spend further time in trying to bring about an amalgamation.

MR. WHITAKER said he must allude to a painful subject, namely, the small support received by the Chamber of Agriculture from noblemen and gentlemen in the county. He asserted that every landlord should enrol his name as a member of the Chamber. There were some unreasonable men in all societies, but as long as the Chamber displayed the moderation it had hitherto shown—not advocating tancy measures, but only requiring justice—it was the duty of the landlords to support the tenantry. It was for the tenantry also to do their duty. Every farmer renting 100 acres a year should consider himself bound to join the Chamber, which should number at least 2,000 members. He was sure that if the gentry and farmers throughout the county lent a helping hand to the Chamber, great good might be done without advocating extreme measures.

MR. TRINDER said allusion had been made to the question of amalgamation with the Gloucestershire and Herefordshire Societies. It must be borne in mind that two years ago this Society took the initiative in the matter, but neither of the other counties received the proposal with approval. It should also be remembered that the Worcestershire Society had not only held its own, but had increased year by year in strength and popularity. If further steps were taken in the matter, they must emanate from the Gloucestershire and Herefordshire Societies. He could not but express his regret that, meeting as they did on the borders of Herefordshire, the cherry sides and white faces had not more largely competed for the prizes offered. Should this arise from jealousy of the favour shown to the more fashionable Shorthorns by the giving of a challenge prize, he, for one, as an admirer of the Herefords would be happy to subscribe his guinea towards providing another challenge cup, to be competed for on a future occasion by breeders of that class of animals.

MR. BUCK said although he had assisted in the endeavour to bring about the amalgamation spoken of, he believed, looking at the results of the last few shows, that if other societies did not wish to join them, they could reasonably hope to hold their own, and to increase the influence of the Society.

AIRDALE AGRICULTURAL SOCIETY.

The fifth annual show of this young but flourishing Society was held at Bingley. The town, from the early morning till late in the night, presented a scene of great bustle and animation. The main street was neatly lined with fir trees, which were fixed in the ground at the edge of the curb stones, and at different points there were erected triumphal arches, which were decked with heather and artificial flowers. The streets were closely packed on one side with all manner of stalls, and in Myrtle Place and on the south side of Ireland Bridge, there were a large number of shows. Thousands of persons crowded the streets, and several very heavily-laden trains arrived during the morning, when the town became very crowded, despite the large numbers who were attracted to the show ground, which was at a distance from the town. Considering the moderate size of the town in connection with which the show is held, it is highly creditable to the district that the prize-list reaches the handsome total of £350—about £50 in advance of last year. From the starting of the society in 1866, each successive show has been a marked improvement on the preceding one, and this year, therefore, has been the best of the series. The entries were fully fifty in excess of last year, and the show in every respect was one of great excellence. The entries in the horse department were large, and the display was first-class, many of the animals shown possessing sterling merit. In the hunter class the cup was carried away by Mr. E. Charlesworth's Monarque. In the roadster stallion class, Merrylegs, shown by Mr. John Smith, Shipton, Market Weighton, took the cup; and a like distinction was carried off in the draught stallion class, by Mr. James Forshaw, Burley-in-Wharfedale, with Nonsuch. The show of cattle was decidedly superior. The competition was very close, and in consequence of the great merit of many of the animals shown, the judges' work was rendered very difficult. In the Shorthorn class Mr. Statter, of Whitefield, and Mr. Hutchinson, Catterick, who was a large exhibitor, took the first prizes. Pigs were numerous and a remarkably fine show, the majority of the animals being of a very superior kind. Sheep were a numerous show, and on the whole the quality was good for the country in which they were exhibited. In dogs there was a capital show both in numbers and breed. The show of poultry was also good. The black and other red game birds were a fine class, and the cup was taken by Mr. E. Ackroyd, Eeceshill, with a very beautiful couple of game-fowl. The hurdle leaping drew together an audience numbering several thousands.

JUDGES.

CATTLE AND SHEEP.—G. Smart, Woodhouse Grange, Aberford, South Milford; J. Coates, Clapham.

HORSES.—G. Holmes, Bar House, Beverley; J. Wilders, Croxton Park.

PIGS.—W. Hornsly, Stittenham, York.

CATTLE.

(Open to all.)

Shorthorn bull, any age.—First prize, silver cup, W. Tillotson, Marsden Hall, Burnley; second, T. Statter, jun., Stand Hall, Whitefield.

Shorthorn cow or heifer, any age.—First prize, silver cup, T. H. Hutchinson, Manor House, Catterick; second, T. Statter.

(Open to tenant-farmers who are chiefly dependent on their farms for a living.)

Shorthorn bull, above twelvemonths old.—First prize, J. Robertshaw, Grange, Allerton; second, T. Garforth, Menston, near Otley.

Shorthorn bull calf, under twelvemonths old.—First prize, T. Hird, Small House, Skipton; second, T. H. Hutchinson.

Shorthorn cow or heifer, above two years old.—First prize, T. H. Hutchinson; second, J. Robertshaw.

Shorthorn heifer, under two years old.—First prize, J. Atkinson, Deer Park, Bingley; second, T. Hird.

Shorthorn heifer calf, under twelvemonths old.—First prize, T. H. Hutchinson; second, T. Hird; extra, S. Atkinson, Thornton-road, Bradford.

(Confined to the parish of Bingley, or a circuit of four miles from the Market-place, and to have been in the possession of the exhibitors one month previous to the 30th August, 1871.)

Cow, for dairy purposes.—First prize, silver cup, Miss Bentley, Allerton; second, W. H. Jackson, Keighley.

HORSES.

Hunter.—First prize, silver cup, E. Charlesworth, Bradford; second, C. Semon, Bradford; third, B. Nicholson, Garforth.

Leaper.—First prize, silver cup, E. Charlesworth; second, J. M. Andrew, Albion Hotel, Dewsbury.

Roadster stallion.—First prize, silver cup, J. Smith, Shipton, Market Weighton; second, J. Gill, Howden Park, Silsden.

Draught stallion.—First prize, silver cup, J. Forshaw, Burley-in-Wharfedale; second, T. Statter.

Horse or mare in single harness.—First prize, silver cup, T. Marshall, Bradford; second, J. Smith, Piccadilly, Bradford.

Nag or roadster.—First prize, silver cup, E. Salt, Fernyhurst, Shipley; second, H. Mason, Bankfield, Bingley.

Cob, under 15 hands.—First prize, silver cup, J. H. Smith; second, E. Charlesworth.

Roadster brood mare.—First prize, H. Mason; second, Mrs. J. W. Rhodes, Huddersfield.

Roadster gelding or filly, three years old.—First prize, J. W. Mills, Cheviu Grange, Guseley; second, F. Mitchell, Bradford.

Roadster, gelding, or filly, two years old.—First prize, J. F. Crowther, Mirfield; second, J. Keighley.

Roadster, gelding, or filly, one year old.—First prize, J. Scriven, Throstle Nest, Otley; second, T. Parker, Old Carr Head, Crosshills.

Draught brood mare.—First prize, T. Statter, Stand Hall, Manchester; second, L. Freer, Houldsworth, Ovenden.

Draught gelding or filly, three years old.—First prize, J. Moore, Cottingley; second, R. Layfield, Denton.

Draught gelding or filly, two years old.—First prize, E. and W. Pawson, Burley-in-Wharfedale; second, W. Anderton, Bingley.

Draught gelding or filly, one year old.—First prize, J. and H. Cringles; second, E. Haley, Dean Lane Head, Allerton.

Mare or gelding, for agricultural or general purposes.—First prize, silver cup, Bottomley and Sons, Buttershaw Mills, Bradford; second, T. Statter.

Pony, above 12½ hands and not exceeding 14 hands.—First prize, W. White, West Villa, Doncaster; second (name omitted).

Pony, under 12½ hands.—First prize, J. Anderton, Bingley; second, T. Statter, jun.

Pony leaper, above 12½ hands and not exceeding 14 hands. First prize, J. M. Andrew, Dewsbury; second, J. Hudson, Bowling Hotel, Bradford.

Pony leaper, under 12½ hands.—First prize, T. Wall, Keighley; second, T. J. Sunderland, Coley Hall, Halifax.

SHEEP.

LEICESTER OR LONG-WOOLLED.

Ram, any age.—Prize, C. and W. Dovener, Sunley Rains, Ripon.

Ram lamb.—First prize, C. and W. Dovener; second, R. Sun, Felliscliff, Ripley.

Pen of three ewes, any age.—First and second prizes, C. and W. Dovener.

Pen of three ewe lambs.—First prize, C. and W. Dovener; second, R. Surr.

LONKS.

Ram, any age.—First prize, B. Dobson, Ilkley; second, W. Riley, Oakworth.

Ram lamb.—First prize, B. Dobson; second, J. Smith, Hainworth, Keighley.

Pen of three ewes, any age.—First prize, J. Dinsdale, Exley Head, Keighley; second, C. Sedgwick, Ryddlesden Hall, Keighley.

Pen of three ewe lambs.—First prize, B. Dobson; second, Smith and Hanson, Uttley.

Ewe lamb.—First prize, B. Dobson; second, Smith and Hanson.

CROSS-BREDS.

Pen of three ewe lambs, first cross from Lonks.—First and second prizes, J. Gill, Silsden.

PIGS.

Boar, large breed.—First and second prizes, W. Lister, Armley.

Boar, middle breed.—First prize, cup, J. E. Fox, Great Horton; second, F. Ambler, Halifax.

Boar, small breed.—First prize, C. R. N. Beswicke-Royds, Littleborough; second, W. Lister.

Sow, large breed.—First prize, W. Lister; second, F. Ambler.

Sow, middle breed.—First prize, J. C. Taylor, Otlands; second, J. Rudd, Horton.

Sow, small breed.—First prize, C. Roberts, Wakefield; second, C. R. N. Beswicke-Royds.

Boar, large breed, under nine months.—First prize, T. Hutton, Bingley; second, J. Umpleby, Guiseley.

Boar, middle breed, under nine months.—First and second prizes, C. McDonnell, Keighley.

Boar, small breed, under nine months.—First prize, S. Reeday, Keighley; second, J. Hillas, Bradford Moor.

Gilt, large breed, under nine months.—First prize, J. Umpleby; second, J. Reeday.

Gilt, middle breed, under nine months.—First prize, C. R. N. Beswicke-Royds; second, C. McDonnell.

Gilt, small breed, under nine months.—J. Hillas; second, W. Lockwood, Guiseley.

Store pig, under nine months.—First and second prizes, J. Brumfitt, Sheepscar.

Fat pig, under twelve months.—First prize, W. Dewhirst, Halifax; second, J. Spencer, Farnhill, Kildwick.

LABOURING MEN'S PREMIUMS.

Sow, any breed.—First prize, Z. Steel, Keighley; second, T. Burns, Keighley.

Gilt, any breed, under nine months.—First prize, T. Burns; second, J. Smith, Bingley.

Store pig, under nine months.—First and second prizes, Dracup and Roe, Saltaire.

Fat pig, under twelve months.—First prize, Dracup and Roe; second, W. Boyce, Baildon.

GLOUCESTERSHIRE AGRICULTURAL SOCIETY.

MEETING AT CHELTENHAM.

The cattle and sheep, which occupy the premier position in the catalogue, are the weak point of the show; the number of entries originally was not very large, and at the last moment it was considerably reduced by the withdrawal of several from competition from a very excusable dread of the foot-and-mouth disease, which has so unfortunately broken out in the county. In the Shorthorn classes there was a better show than of Herefords. The bull, Lord of the Forest, shown in class 1, by Mr. R. E. Oliver, of Towcester, was second at Guildford. In class 2, Mr. R. Stratton was the only exhibitor, with two young bulls. In class 4, Mr. Stratton took the first award for his roan bull James 1, and a roan cow with roan calf by his Majesty. Mr. W. Bradburn took first honours for breeding cows, and was second to Mr. Stratton's first for heifers under three years. In the Hereford classes the most successful exhibitor was Mr. Morris, of Stanley Pontlorge, without whose entries, the Herefords, indeed, would have been almost "conspicuous by their absence," while, as it was, there was just about a prize for each animal of this breed exhibited. The long-wooled sheep comprised only sixteen entries, and were chiefly Cotswolds, of which breed the late Mr. Gillett's executors, and Mr. H. Cole, of Cirencester, were the most successful exhibitors. Short-wools were slightly more numerous than the long, and the chief prizes were taken by Colonel Kingscote, Sir W. Throckmorton, and Mr. Wallis. The pigs were numerous, and the show of Berkshires particularly fine. The hunters, with the exception of those which took first and second prizes, were below par, looking more like flashy light-weight horses than fourteen-stone hunters. Of the five-year-olds the well-known Misfortune took the red riband, second honours going to a very promising young horse, The Rajah, belonging to Mr. Charles Harland. The Admiral, a grey gelding, three years old, having been amiss, did not show to advantage. Major Quentin's horse never was dangerous except to his master, who, "provoking a caper which he seemed to chide," got put on the small of his back in the arena, while his horse showed his leaping powers by clearing the ropes, and disappearing among the crowd.

Amongst the hacks not exceeding 15 hands, and numbering thirteen, Mr. R. N. Hooper's The Hart, admirably shown by Captain Ballard, took first prize, and a blood-looking chesnut, belonging to Major Quentin, second place; while Lizzie, the property of Mr. Cook, a cobby mare, escaped notice altogether,

though she took first prize at Malvern last week for jumping, where she was never placed in her class, and at Kidderminster last year first prizes as a hack and as a jumper.

Of thoroughbred stallions there were six entries. Redoubt by Artillery took the first prize, and Umpire second place. Umpire's stock have proved well, and it was only last week that Not-out, one of his sons, won the Ebor Handicap, at York; the day after his sire won the first prize at Malvern. A 1, the grey horse, already the winner of eleven prizes, took the first prize for cart horses; and the second prize was given to Mr. Manning's Young Champion. First prize for cart mares and foals was taken by Lord Sudeley, for a great roomy mare, Beauty, with a foal at her foot, and the Duke of Beaufort ran second with a slashing grey mare, Glen, showing great power and substance, with a fine colt by her side.

Of implements there was a thoroughly-varied show, belonging to Messrs. Alexander and Pumphrey (Cirencester), James and Son (Cheltenham), R. and A. Lister (Dursley), J. and H. Povey (Cirencester), and Messrs. Savory and Son (Gloucester). Several of the steam-engines and so forth were at work on each day, and attracted all the more practical of the sight-seers.

PRIZE LIST.

CATTLE.—T. Mace, R. J. Newton.

SHEEP AND SHEEP DOGS.—E. Little, R. H. Masfen, T. Porter.

CART HORSES.—W. Allen, E. J. Morris.

RIDING HORSES.—J. Capel Croomie, Sir Reginald Graham, Colonel Kingscote.

CHEESE.—E. Bretherton, D. Long.

IMPLEMENTS.—Captain De Winton, T. Lawtence.

CATTLE.

SHORTHORNS.

Bull above two years old.—First prize, R. E. Oliver, Shoolbrook-Jodge, Towcester; second, F. Leybourne, Popham, Hunchett-house, Bristol.

Above one and under two years old.—First prize, R. Stratton, Burderop, Swindon; second, R. Stratton.

Bull calf under twelve months old.—First prize, R. Stratton; second, C. Hobbs, Maisey-Hampton, Cricklade.

Bull, cow, and offspring.—Prize, R. Stratton.

Breeding cows.—First prize, W. Bradburn, Wednesfield, Wolverhampton; second, Miss F. Strickland, Apperley-court, near Tewkesbury. Highly commended: Lord Fitzhardinge; J. Limbrick, Iron-Acton, Bristol; Miss Fr. Strickland.

Heifer under three years old.—First prize, R. Stratton; second, W. Bradburn, Wednesfield.

Heifer under two years old.—First prize, R. Stratton; second, R. Stratton.

Heifer calf under 12 months old.—First prize, R. Stratton; second, T. Morris, Maisemore-court.

HEREFORDS.

Bull above two years old.—Prize, J. Walker, Westfield House, Holmer.

Bull calf under twelve months old.—First and second prizes, W. Taylor, Showle Court, Ledbury, Herefordshire.

Bull, cow, and offspring.—Prize, E. J. Morris, Stanley Pont-large, Winchcomb.

Breeding cow.—Prize, E. J. Morris.

Heifer under two years old.—E. J. Morris.

Heifer calf, under twelve months old.—Prize, T. Cadle, Longcroft, Westbury on Severn.

SHEEP.

LONGWOOLS.

Five theaves.—Prize, S. W. D. Harris, Wootton, Northampton.

Ram of any age.—Prize, Executors of the late T. Gillett, Kilkenny, Faringdon. Commended: T. Beale-Browne, Salperton, Andoversford, Cheltenham.

Shearling ram.—First and second prizes, Executors of the late T. Gillett.

Five ewe lambs.—Prize, H. Cole, Ashbrook, Cirencester.

Five ram lambs.—H. Cole.

SHORTWOOLS.

Five theaves.—First and second prize, Col. Kingscote, C.B., M.P., Kingscote Park, Wootton-under-Edge.

Ram of any age.—First prize, Col. Kingscote; second, H. S. Waller, Farmington, Northleach.

Shearling ram.—First prize, Col. Kingscote; second, W. Playne, Longfords House, Minchinhampton.

Five ewe lambs.—Prize, F. Gillett, Burford.

Five ram lambs.—Prize, Sir W. Throckmorton, Bart., Buckland, Faringdon.

Oxfordshire and Shropshire ram, of any age.—Prize, G. Wallis, Old Shifford, Banpton, Faringdon. Commended: G. Wallis.

Shearling ram.—Prize, G. Wallis.

SHEEP DOGS.

Sheep dog of the English breed.—First prize, W. Lawrence, Brockworth Park, Gloucester; second, A. Stewart, Saintbridge, Gloucester.

PIGS.

Boar under a year old.—First prize, R. Swanwick, Royal Agricultural College Farm, Cirencester; second, Lord Fitzhardinge.

Boar pig more than a year old.—First prize, H. Humfrey, Kingstone Farm, Shrivensham; second, J. Wheeler and Sons, Long Compton, Shipston-on-Stour.

Three sow pigs of the same litter under nine months old.—First prize, R. Swanwick; second, J. H. Elwes, Colesbourne.

Sow pig for breeding purposes.—First prize, A. Stewart, Gloucester; second, J. W. Wheeler and Sons.

Sow and pigs.—First prize, Lord Fitzhardinge; second, R. Swanwick.

HORSES.

Stallion for agricultural purposes, above two years old.—First prize, £20, W. Wynn, Grafton; second, £10, J. Manning, Oringbury.

Mare and foal (her own offspring) for agricultural purposes.—First prize, £10, Lord Sudeley, Toddington; second, £5, Duke of Beaufort, Badminton. Commended: S. Davis, near Pershore.

Gelding or filly for agricultural purposes, under three years old.—First prize, £5, S. Davis, Woolashill; second, £2 10s., J. Sivill, Longford.

Stallion calculated to get hunters or hacks.—Prize, H. Brown, Swindon.

Hunting mare or gelding of any age.—First prize, £20, F. B. Jones, Cheltenham; second, £10, W. R. Ielman, Cheltenham.

Hunting mare or gelding under five years old.—First prize, £15, C. Cook, Taddington; second, £7 10s., Chas. Harland, Cheltenham.

Mare calculated to breed hunters, with her foal at foot, got by a thorough-bred horse.—Prize, £10, W. Slatter, Dalinworth.

Haek not exceeding 15 hands.—First prize, £10, R. N. Hooper, Cowbridge; second, £5, Major Quentin, Cheltenham.

Pony above 12 and under 14 hands high.—First prize, £8, Major Quentin; second, £4, Major Quentin.

Pony not exceeding 12 hands high.—First prize, £5, E. Phillimore, Cheltenham; second, £3, G. Houghton, Tewkesbury.

JUMPING PRIZES.

(Gift of the Cheltenham Local Committee.)

For the best jumper in class 39, for hunters of any age, prize, G. J. Lawson, Chepstow.

For the best jumper in Class 40, for hunters under five years old, prize, H. Clinton, Tewkesbury.

For the best jumper in class 42, for hacks not exceeding 15 hands, prize, C. Cook, Taddington.

For the best jumper in class 44, pony not exceeding 12 hands, G. Houghton, Tewkesbury.

IMPLEMENTS.

Collection of implements for agricultural purposes.—First prize £10, J. and H. Tovey, Cirencester; second, £5, James and Son, Cheltenham.

Implement or implements of merit, prizes to be given at the discretion of the judges.—£2 Alexander and Pumphrey, Cirencester, for litter cutter; £2 P. and H. P. Gibbons, Wantage, Berks, a straw elevator; £2, Brown and May, North Wilts Foundry, Devizes, for a steam-engine, water heated by condensed steam; £2 to R. A. Lister, Dursley, Gloucestershire, for a safety lever chaff cutter; £1 to J. Merret, Birdlip, Gloucestershire, for a double plough; £1 to C. F. Webb, Stratton, Cirencester, for an agricultural cart.

CHEESE.

Cwt. of thick cheese.—First prize, G. Gibbons, Tunley Farm, near Bath; second, S. M. Harding, Nupdown, Thornbury.

Cwt. double cheese, first prize, J. Smith, Nupdown, Thornbury; second, G. Harris, Court House Farm, Cam, Dursley.

Cwt. thin cheese—Prize, G. Harris.

THE WEST GLOUCESTERSHIRE FARMERS' CLUB.

The Club embraces a large area, its operations extending over Mangotsfield, Winterbourne, Frampton, Cotterell, Westerleigh, Puckchurch, Wick and Abson, Dryham and Hinton, Wapley and Codrington, Doynton, Siston, Bitton, St. George's, Stapleton, Stoke Gifford, Filton, Horfield, Westbury-upon-Trym, Henbury, Iron Acton, Yate, Dodington, Chipping Sodbury, Almondsbury, Bristol, Thornbury, Littleton, Elberton, Olveston, and Alveston. In all these places local committees have been formed to promote the objects of the Association, and their efforts appear to have been successful in all respects,

for the meeting was, on the whole, the best the Club has ever held. It was held on Kingswood-hill.

PRIZE LIST.

HORSES.

Gelding or filly, above three years old, for hunting purposes.—First prize, J. Mountstephen, Almondsbury; second, H. Grace, Kingswood.

Mare or gelding, above four years old, equa to 14 stone

with hounds.—First prize, H. Grace; second, L. Cornock, Kingston.

Jumping prizes.—First prize, H. Grace, for Snuff-box; second, H. Grace, for Grasshopper.

Mare and foal for hunting purposes.—First prize, G. H. Jones, Dodington; second, J. Matthews, Frampton Court.

Cart mare and foal.—First prize, J. Williams, Olveston; second, T. Parker, Stoke Gifford.

Gelding or filly for agricultural purposes, under three years old.—First prize, W. H. Williams, Dodington; second, H. J. Highnam, Dyrham.

Gelding or filly, under three years old, for hunting or carriage purposes.—First prize, S. Young, Hortham; second, H. Hewitt.

Yearling colt or filly, suited for hunting or carriage purposes.—First prize, W. Lawrence, Westerleigh; second, G. F. Worlock, Codrington Court.

Pony, not exceeding 13 hands.—First prize, Rev. A. G. Morris, Fishponds; second, W. Jefferies, Warmley.

CATTLE.

Fat ox.—First and second prize, T. Walters, Grimsby Court.

Fat cow, above four years.—First prize, W. Tayler, Chipping Solbury; second, R. Iles, Wapley.

Fat steer, under four years.—First and second prize, B. Pool, Olveston.

Pair of steers, under three years.—First prize, H. Williams, Henbury; second, Sir G. S. Jenkinson, Bart., M.P., Eastwood Park.

Bull, cow, and offspring.—First prize, W. H. Williams, Dodington; second, J. Yalland, Fishponds.

Bull, above two years.—First prize, C. Keen, Littleton-on-Severn; second, H. J. Highnam, Dyrham.

Bull, above one and under two years.—Mrs. M. Young, Alveston; second, W. Savage, Hinton.

Bull calf.—First prize, W. H. Williams, Dodington; second, G. Anstey, Hinton.

Best bull of any class or breed.—C. Keen, Littleton-on-Severn.

Dairy cow, in milk or calf, above three years.—First prize, J. Limbrick, Iron Acton; second, W. B. Limbrick, Yate.

Pair of heifers, above two and under three years, in calf.—First prize, W. H. Williams, Dodington; second, Mrs. M. Young, Alveston.

Pair of heifers, above one and under two years.—First prize, H. Williams, Henbury; second, W. H. Williams, Dodington.

Pair of heifers, above one and under two years.—First prize, J. Godfrey, Barr's Court; second, H. Williams, Henbury.

Pair of heifer calves.—First prize, J. Godfrey; second, J. Thomas, Gaunt's Eartheott.

SHEEP.

Long-woolled or cross-bred shearhog ram.—Prize, G. H. Jones, Dodington.

Ram of any breed.—First prize, J. Matthews, Frampton Cotterell; second, G. H. Jones.

Five fat wethers.—First and second prizes, T. Knight, Westerleigh.

Five fat ewes.—First prize, Mrs. F. Blanche, Latteridge; second, C. Pendock, Mangotsfield.

Five 6-tooth wethers.—Prize J. Parker, Stoke Gifford.

Five 6-tooth ewes.—First prize, C. Pendock; second, H. Hewitt, Coalpit Heath.

Five 4-tooth ewes.—First prize, Mrs. Blanche; second, C. Pendock.

Five 4-tooth ewes.—First prize, C. Pendock; second, H. Hewitt.

Five breeding 2 tooth ewes.—Prize, W. Alway, Dyrham.

Five breeding 2-tooth ewes.—First prize, Mrs. Blanche; second, C. Pendock.

Pen of breeding ewes.—Prize, C. Pendock.

Five ewe lambs.—First prize, J. Matthews; second, Mrs. Blanche.

Five wether lambs.—First prize, Mrs. Blanche; second, J. Matthews.

PIGS.

Fat pig.—First prize, S. Davis, Bristol; second, J. Godfrey, Barrs Court.

Boar above six months and under two years old.—First prize, J. Dove, Hambrook; second, R. Hember, Westbury.

Breeding sow above twelve months in farrow, or having farrowed within three months.—First prize, Mrs. Matthews, Wick; second, R. Hember.

Four pigs under nine months old.—First prize, S. Davis; second, Mrs. Blanche.

Fat pig, the property of an agricultural labourer.—First prize, W. Yeoman, Soundwell; second, S. Gaunter, St. George's.

CHEESE.

Cwt. of thick cheese made on exhibitor's farm.—First prize, R. Phelps, Doynton; second, E. Williams, Oldland Common. Ditto thin.—First prize, R. Iles, Wapley; second, J. Batley, Hinton. Ditto, made in T. Brown's improved opening vats.—Prize, R. Phelps. Prizes were also awarded to servants and ploughmen.

At the dinner, Sir GEORGE JENKINSON, M.P., said he knew politics were eschewed at these meetings, but that he did not think that rule ought to prevail so strictly now as it did twenty years ago. The farming interest was not now what it was twenty years ago. The farmers had a very different race in life now to what they had twenty or thirty years ago. Every man must look out for himself now, and every interest must look out for itself; and he said, without the least hesitation, that farmers, if they wanted to take their part and to succeed in the struggle of life, and to have their interests looked after, must look after politics just as much as other men. There must be no exception on the score of politics or anything else for the farmers any more than for the merchants and traders of this country; and, although they might eschew all party conflict and all acrimonious expressions at meetings of that sort, he did not think it was possible for any agricultural body to hold their peace in the struggle of this life; and he did not think it was possible to exclude from these meetings all subjects, merely because they were political, seeing that they bore as much upon the agricultural class as any other. He regretted extremely that one of their county members was not there that afternoon; he meant the one who had lately spoken after so plain and manly a fashion. He (Sir George) had read with the greatest satisfaction and pleasure the remarks which, as an English country gentleman, as a farmer, as an English county member, and as member for West Gloucestershire, Colonel Kingscote lately made at the Badminton Farmers' Club, and also at the Kingscote Farmers' Club, although it might, perhaps, be matter of question whether all the Colonel's friends would read them with as much satisfaction. Still, he always spoke well of the bridge that carried him over, and when he saw a man who represented part of his (Sir George's) county speak as he did, he had some hopes that there was some good in him yet. He wished the other county member had been present, and had spoken as Colonel Kingscote did at those two meetings. He thought that they, as farmers, had a right to look back at the last session of Parliament and review what the Legislature had done in favour of the agricultural classes. He confessed that he could see nothing that it had done. It seemed to him as if every fresh impost was to be put on the agricultural classes in the shape of rates, and that no relief was ever to be given to them in the way of spreading those rates over all classes of property. There was a General Rating of Property Bill brought in by the Government this year, and it was brought in by a gentleman who was supposed to be a very good President of the Poor-law Board; but the moment he had brought forth that child he was taken away and put to nurse another. He was placed at the head of the Admiralty, and he (the speaker) did not think he had done so much good at the Admiralty as he would probably have done had he been left to nurse the child he himself was the father to. That unfortunate child, he regretted to say, was not entirely immaculate, because there was in one page a mistake of over twenty millions. He hoped, however, that next year they would have the rating question properly dealt with by Government, and have some home legislation carried through.

WIRRAL AGRICULTURAL SOCIETY.

MEETING AT BIRKENHEAD.

Although the Meeting was this year confined to one day, the number of entries was almost as great as last year, when the show remained open for three days, there being only about 40 fewer. In explanation of the circumstance that only one day was this year allotted, it should be stated that there was an objection on the part of the agriculturists to allow their stock to remain so long as three days, and also that the committee bore in mind the fact of the Manchester and Liverpool Society's show coming next week. The horses entered last year numbered 131, whilst this year they were 132; cattle 64, against 75 this year; sheep 91, against 64; pigs 98, against 211; poultry 221, against 198; dogs 211, against 229. No doubt the foot-and-mouth disease, now prevalent throughout the county, interfered with the show of cattle, inasmuch as many owners refrained from becoming exhibitors on that account. With regard to the horses, the agricultural class was not so well represented as last year, but there was an improvement in the lighter description. The sheep were not equal to last year's, but the cattle were better, and the same remark applies to the poultry, and also to the dogs. The dogs, indeed, formed an exceedingly attractive feature, comprising as they did many beautiful specimens of the favourite breeds. The most attractive feature of the show was the trial of hunters in the afternoon, the grand stand and the ground immediately surrounding the enclosure being crowded. During the leaping a very serious mishap unfortunately occurred. Among the competitors was a cob belonging to Mr. John Wainwright, of Upton, which was ridden by a boy. The animal went over the fence and the ditch, but it made a "bolt" towards the gateway at the west end of the ground, and knocked down several persons. One gentleman was severely hurt on the face. He received a cut under the lower jaw, was greatly shaken, and bled profusely. Mr. Henry Churton, the coroner for South Cheshire, who is connected with the medical profession, being on the ground, rendered every assistance, as did also Mr. Lamb, surgeon, of Birkenhead. Another gentleman was found lying in a fainting state, appearing to have received an injury to the collar bone; whilst a third had received a cut on the side of the head. All the sufferers were immediately attended to, and those most severely injured were taken to the Birkenhead Borough Hospital.

The arrangements in connexion with the ground were ably carried out under the direction of Mr. Robert Dobson, of Rock Ferry.

PRIZE LIST.

JUDGES.

HORSES.—Hunters and Roadsters; Colonel Cholmondeley, Abbot's Grange, Nantwich; W. Lort, The Cotteridge, King's Norton; Captain H. Cotton, Pentre Island, Flint. Agricultural: W. Dale, Liverpool; R. Kenwick, Shrewsbury; Owen, Norris-green, Liverpool.

CATTLE.—Morton, Skelmergh Hall, Kendal; Pickering, Poulton, Wrexham.

SHEEP.—Roberts, Sealands, Chester; Horton, Ilarnage Grange, Salop.

GRAIN AND ROOTS, CHEESE, BUTTER, AND IMPLEMENTS.—Wise, Upton Manor Farm, Birkenhead; Webster, Stonehouse, Litherland; Wheelhouse, Guildon Sutton, Chester. CONSULTING ENGINEER.—Maxwell Scot.

HORSES.

Thoroughbred entire horse.—First prize, R. C. Naylor, Hooton Hall, Chester; second, W. Johnson, Shotwick Lodge, Chester.

Entire horse for draught or agricultural purposes.—First prize, A. Cook, Mutch Hoole, Preston; second, J. Statter, New Brighton.

Mare for agricultural purposes, with foal at foot, or that has had a foal this year.—First prize, W. Dale, Thornton Lodge, Neston; second, J. Sumner, Upton.

Gelding or filly for agricultural purposes, foaled after Jan. 1, 1869.—First prize, J. Simpson, Court House, Bromborough Pool; second, J. Jones, Saughall, Cheshire.

Colt, gelding, or filly, for agricultural purposes, foaled after January 1, 1870.—First prize, J. Maddock, Capenhurst; second, W. Dale.

Foal for agricultural purposes.—First prize, J. Sumner; second, J. Maddock.

Hunter.—First prize, J. Statter; second, G. G. Belcher, Holmstead, Mossley-hill, Liverpool.

Jumper over hurdles and water.—First prize, R. J. Vanderkiste, Birkenhead; second, T. H. Jackson, Manor House, Cloughton; third, S. L. Radford, Raby, and T. B. Brierley, Tattenhall, Cheshire.

Lady's horse, of any age or sex, for horses regularly ridden by ladies and owned by themselves or some member of their family, and not under 15 hands high.—First prize, J. Torr, Carlet Park, Eastham; second, S. Kirby, Manchester; third, A. Hutton, Malvern Lodge, Oxtou.

Gelding or mare, 15 hands or upwards.—First prize, G. G. Belcher; second, Colonel Kennard, Dawpool.

Mare, 14 hands and upwards, with foal at foot.—First prize, Hon. Sir E. Cust, Leasowe Castle, Birkenhead; second, W. D. Briscoe, Neston.

Gelding or mare, 14 hands and under 15 hands.—First prize, A. Woods, The Grange, Sefton; second, T. Fildes, East Beach, Lytham.

Cob, gelding, or mare, 12 hands and under 14 hands.—First prize, S. L. Radford; second, J. Torr.

Pony, gelding, or mare, under 12 hands.—First prize, J. C. Rogerson, Manchester; second, M. A. Ralli, Fairfield; third, T. H. Jackson.

Jumping cob, 12 hands and under 14 hands.—First prize, J. Wainwright, Upton, Chester; second, J. Stevenson, Chester.

Jumping pony, under twelve hands.—First prize, T. Jones, jun., Neston, Chester; second, J. Wainwright.

Extra stock.—First prize, W. Robinson, Little Altcar; second, R. Jones, Moreton.

Special prizes for Donkeys.—First prize, C. E. Ince, Pren-ton; second, J. Prince, Oxtou Village.

CATTLE.

(Restricted to farmers residing within the Society's district, and principally dependent on their farms.)

Bull of any breed, calved after January 1, 1869.—First prize, Samuel Oxtou, Storeton; second, T. Westray, Spital.

Bull of any breed, calved after January 1, 1870.—First prize, T. Westray; second, R. Jones.

Dairy cow.—First prize, W. D. Briscoe; second, T. Westray.

Heifer, calved after January 1, 1869.—First and second prize, W. Rose, Barnston.

Heifer, calved after January 1, 1870.—First prize, W. Dale; second, T. Parry, Neston, Chester.

Calf, calved after January 1, 1871.—First prize, Mr. Wheelhouse, Guilden Sutton; second, T. Westray.

(Open for general competition.)

Shorthorn bull, calved after January 1, 1869.—First prize, J. Outhwaite, Bainsesse, Catterick; second, T. Statter, jun., Stand Hall, Whitefield, Manchester.

Shorthorn bull, calved after January 1, 1870.—First prize, E. Musgrove, Aughton, Ormskirk; second, Musker and Birch, Aintree.

Shorthorn cow.—First prize, J. Outhwaite; second, T. Statter, jun.

Shorthorn heifer, calved after January 1, 1869.—First prize, T. Statter, jun.; second, E. Musgrove.

Shorthorn heifer, calved after January 1, 1870.—First prize, T. Statter, jun.; second, J. Hart, Bulkeley, Malpa.

Channel Island cow in milk or calf.—First prize, S. Williamson, Copley, Neston; second, T. Statter, jun.
Cow of any other breed in milk or calf.—First prize, T. Statter, jun.; second, J. R. De Wolf, Oxtou.

SHEEP.

LEICESTERS, OR ANY OTHER LONG-WOOLED.

Ram under four years.—First prize, G. F. Statter, Broomhill, Carlisle; second, T. H. Hutchinson, Manor House, Catterick.

Shearling ram.—First, second, and third prizes, T. H. Hutchinson.

Pen of three ewes.—First and second prizes, T. H. Hutchinson.

Pen of three shearling ewes.—First and second prizes, T. H. Hutchinson; third, G. F. Statter.

Top lamb.—First prize, J. and W. Pinder, Waddington, Clitheroe; second and third, T. H. Hutchinson.

Three ewe lambs.—First prize, T. H. Hutchinson; second, J. Torr.

Pen of three Cheviot ewes.—First prize, H. Littledale, Liscard, Birkenhead; second, Mrs. Ziegler, Landican, Birkenhead; third, J. Torr.

Best ram under four years.—First prize, S. Griffiths, Argoed Farm, Overton, Ruabon; second, W. Baker, Moorbarns, Atherstone.

Shearling ram.—First and second prize, W. Baker; third, S. Griffiths.

Pen of three ewes of any age.—First and second prize, W. Baker.

Pen of three shearling ewes.—First and second prize, W. Baker; third, R. Kynaston, Thornton Hall, Neston.

Top lamb.—First and second prize, W. Baker.

Three ewe lambs.—First and second prize, W. Baker.

PIGS.

LARGE BREED.

Sow and litter of not less than six pigs, the pigs not to be more than ten weeks old.—First prize, J. Birch, Sefton; second, T. Rathbone, Backwood Hall, Neston.

MIDDLE BREED.

Boar of any age.—First prize, W. Gamon, Hoole Cottage, Chester; second, C. Morriss, Holmleigh, Grassendale.

Sow and litter of not less than six pigs, to be not more than ten weeks old.—Prize, J. J. Briscoe.

SMALL BREED.

Boar of any age.—Prize, C. Morriss.

Sow of any breed.—Prize, A. C. Lockwood, Chester.

Boar.—Prize, A. C. Lockwood.

EXTRA STOCK.—First prize, — Evans, Grange-lane; second, J. Farrall, Sutton Lodge, Chester.

GRAIN AND ROOTS.

Two bushels white wheat.—First prize, Executors of the late J. Hegan, Dawpool; second, W. Palford, Mere Farm, Oxtou.

Two bushels red wheat.—First prize, Executors of the late J. Hegan; second, S. Ledward, Hill Bark, Frankby.

Two bushels barley.—Prize, C. L. Campbell, Thurstaston Hall.

Two bushels of white oats.—First prize, H. Davis, Thornton Grange, Neston; second, Executors of the late J. Hegan.

Two bushels of yellow oats.—First and second prizes, H. Littledale.

Two bushels black oats.—First and second prizes, H. Davis. Two bushels beans.—Prize, C. Bushell, Hinderton Hall, Neston.

Twenty round potatoes.—First prize, T. Hay, Wallasea; second, W. Marshall, Poulton-cum-Seacombe.

Twenty kidney potatoes.—First and second prizes, W. Marshall.

Six roots swedish turnips.—First prize, H. Turner, Thornton Hough, Neston; second, J. Walker, The Grange, Storeton; third, C. Bushell.

Six roots mangold, long red.—First prize, S. Ledward; second, W. B. Burnham, Spital; third, the Hon. Sir Edward Cust.

Six roots mangold, globe.—First prize, H. Turner; second, W. B. Burnham; third, W. Inman, Upon Manor, Birkenhead.

CHEESE AND BUTTER.

Three cheeses over 50lb. weight each, made in the Society's district.—First prize, W. Dean, Ledsham; second, G. Knowles, Burton.

Three cheeses over 30lbs. weight each, and under 50lbs., made in the Society's district.—First prize, W. Dean; second, G. Knowles.

Four pounds of butter, made up in half-pounds, made in the district.—First prize, W. Inman; second, C. Langley, Raby, Neston; third, Mary Brown, Irby, Birkenhead.

IMPLEMENTS.

Carriages.—Silver medals to R. Main, Birkenhead, for stand-up waggonette; and E. Davis and Sons, Birkenhead, for park phaeton.

Sewing machines.—Silver medals to Singer Manufacturing Company, Liverpool, for new family sewing machine; the Howe Machine Company, Liverpool, for collection; I. Bragg and T. H. Stephens, Birkenhead, for collection; and Tester Sewing Machine Company, Liverpool, for collection.

Agricultural implements.—Silver medals to T. Corbett, Shrewsbury; and Lewis and Co., Shrewsbury.

At the dinner, Mr. LAIRD, M.P., the Chairman, said he had heard some complaints that the prizes were too open; that this brought cattle from all parts of the country—cattle sent specially for the purpose of getting prizes—and that this did not give a fair chance to the farmers of the hundred of Wirral. (A Voice: "That is humbug on their part.") Whether it was humbug or not, he (the Chairman) should be sorry to see the Wirral show come to be a second-class meeting; but that objection could be easily rectified by having one set of prizes open to the country, and another set of prizes confined to the hundred of Wirral. He would urge upon the farmers of the hundred the necessity of persevering in the path of improvement, so that they might not be left behind by the farmers of Lancashire and other places, but rather that they should beat those who came from "foreign parts" to compete. The Society was established thirty years ago, and during that time a great improvement had taken place in agriculture. With the increased facilities for crossing the Mersey, at the end of three years the Wirral farmers ought to be in a position to show the Liverpool market what they could do.

Mr. R. BARTON proceeded to show that, as compared with the three-day exhibition last year, there was an increase this year, with a one-day exhibition in almost every class, with the exception of sheep. This result in every respect showed that a one-day show was the best for the Society. The exhibition that day showed a decided progress in the Society, and it also proved that they were gaining confidence and ground in the country generally, which was a fact they might congratulate themselves on. He would urge the desirability of having the prizes open. If they fall back to a competition for the hundred of Wirral only, or for the district only, then the Society would become a very inferior one, and it would not pay. He urged that the farmers should be always trying to be doing something better, and if they were beaten one year they should determine not to be beaten another year. The farmers of the hundred should not confine themselves to exhibiting at the meetings of that society, but they should compete in Warwickshire, Shropshire, Yorkshire, Lancashire, and other neighbouring counties, and thus learn the value of stock in those places. If they did that, they would come back and win prizes at their own society. He believed the show of that day to be as good as usual. He had seldom seen a better class of hunters or of roadsters. He thought there was a falling off in agricultural horses.

Mr. T. B. FORWOOD maintained that the farmers of Wirral were far superior to those of Prussia, Saxony, Belgium, and France. He had been lately on the continent, where he saw the farmers using wooden ploughs and wooden harrows. He never saw an iron plough in Prussia or in Saxony, nor did he see a piece of machinery in either of those countries, and it was not till he got to Holland that he found a piece of machinery, and that was for chopping turnips.

THE HALIFAX AND CALDER VALE AGRICULTURAL ASSOCIATION.

MEETING AT HALIFAX.

There was an unusually large entry of stock, and the show was in every respect successful.

P R I Z E L I S T .

JUDGES.

CATTLE, SHEEP, ROOTS, AND BUTTER.—H. Ambler, Halifax, and S. Watkinson, Gargrave.

HORSES, HUNTERS AND ROADSTERS.—H. Sanders, Northampton; J. H. Skipworth, Brigg; and E. Langley, Knowlmore.

COACHING AND DRAUGHT HORSES: J. Crawshaw, Dewsbury, and W. Godson, Normanby-by-Stow.

WOOL.—R. Midgley, Horley Green, and D. Crossley, Halifax.

PIGS.—J. Fisher, Cross Hills, and S. Barrett, Harewood.

IMPLEMENTS.—J. Smith, Lightcliffe, and J. F. Crowther, Mirfield.

CATTLE.

(Open to the United Kingdom.)

Two years old and aged Shorthorn bull.—Prize, J. Knowles, Wetherby.

One-year-old Shorthorn bull.—Prize, T. Statter, jun., Whitefield.

Shorthorn bull calf, under twelve months old.—J. Knowles, Alderney or Guernsey bull, any age.—Prize, T. Riley, Mytholmroyd.

Three years old and aged Shorthorn cow.—Prize, Rev. L. C. Wood, Poulton-le-Pyld.

Two years old Shorthorn cow.—Prize, T. Statter, jun.

One-year-old Shorthorn cow.—Prize, T. Statter, jun.

Shorthorn Wye calf, under twelve months old.—Prize, T. Statter, jun.

Alderney or Jersey cow, any age.—Prize, W. Smith, Halifax.

Guernsey cow, any age.—Prize, H. Crossley, Halifax.

Ayrshire cow, any age.—Prize, T. Statter, jun.

Dairy cow, any age or breed, except pure-bred Shorthorn.—Prize, H. Crossley.

Best of any breed or cross breeds, not already classed.—Prize, T. Statter, jun.

(Open to farmers in the parish of Halifax and the townships immediately adjoining.)

Shorthorn bull, above one year old.—Prize, A. S. Shaw, Southwram.

Shorthorn bull calf, under twelve months old.—Prize, J. Crossley, Stones Grange, Todmorden.

Three years old and aged Shorthorn cow.—Prize, J. Bancroft, Ovenden Wood, Halifax.

Two years old Shorthorn cow.—Prize, J. Crossley.

One year old Shorthorn cow.—Prize, J. Crossley.

Shorthorn Wye calf, under twelve months old.—Prize, J. Robinson, Pellon.

Dairy cow, any age or breed, except pure-bred Shorthorn.—Prize, G. Higgin, Hebden Bridge.

The borough member's silver cup, for male animal of the Shorthorn breed, of any age above twelve months.—J. Knowles.

The vice-president's silver cup, for female animal of the Shorthorn breed, of any age above twelve months.—T. Statter, jun.

The vice-president's silver cup, for bull in the farmers' class above one year old.—A. S. Shaw.

The vice-president's silver cup, for dairy cow, heifer, or calf of any age or breed, or cross breed most likely for milking or dairy purposes, the property of a farmer.—G. Higgin.

HORSES.

(Open to the United Kingdom.)

Hunter, any age.—First prize, silver cup, value 50 guineas, or £5, S. J. Wellit, Louth; second, £10, F. H. D. Bailey, Ollerton.

Leaper, above 14½ hands high, any age.—First prize, £5, in

addition to the vice-president's silver cup, B. Nicholson, Sturton Grange, Garforth; second, £5, T. Newton, Altrincham.

Leaper, 14½ hands high and under, any age.—First prize, the vice-president's silver cup, or £5, T. W. Townsend, Brow Bridge, Greetland; second, £3, E. S. Bent, Fallowfield.

Roadster stallion, any age.—First prize, the vice-president's silver cup, or £5, J. Smith, Shipton; second, £2 10s., J. Gill, Silsden.

Yearling roadster, colt or filly.—Prize, Mrs. Jackson, Hartshead.

Two years old roadster, gelding or filly.—Prize, J. F. Crowther, Mirfield.

Three years old roadster, gelding or filly.—Prize, T. Mitchell, Bradford.

Roadster, mare or gelding, four years old and aged.—Prize, £3, in addition to the vice-president's silver cup, J. Moseley, Levenshulme.

Roadster mare and foal.—Prize, Mrs. J. W. Rhodes, Springfield, Huddersfield.

Draught stallion, any age.—Prize, the vice-president's silver cup, or £5, J. Forshaw, Burley-in-Wharfedale.

Yearling draught colt or filly.—Prize, T. Statter, jun.

Three years old draught gelding or filly.—Prize, C. W. Brierley, Middleton.

Draught mare or gelding, any height, four years old aged.—Prize, the vice-president's silver cup, or £5, C. W. Brierley.

Draught mare or gelding, not exceeding 16½ hands high, any age, the property of a tradesman or farmer resident within the parish of Halifax.—Prize, J. Kershaw, Four Mills, Halifax.

Draught mare and foal.—Prize, T. Statter, jun.

Carriage horse, any age.—Prize, J. Foster, Cliffe Hill, Halifax.

Pair of carriage horses, any age.—Prize, the president's silver cup, J. Foster.

Lady's pad.—Prize, the vice-president's silver cup, A. Dugdale, Rose Hill, Burnley.

Cob not exceeding 14½ hands high, any age.—Prize, the vice-president's silver cup, or £5, E. Charlesworth, Bradford.

Mare or gelding for harness purposes, any age, to be shown in harness and trap.—Prize, the Society's silver cup, or £5, B. Waud, Lightcliffe.

Pony not exceeding 13½ hands high, any age, to be shown in harness and trap.—Prize, the Society's silver cup, or £5, J. G. Hey, Cleckheaton.

Pony, not exceeding 13½ hands high, any age.—Prize, John Maude, Leeds.

Pony, not exceeding 12 hands high, any age.—Prize, J. C. Rogerson, Manchester.

SHEEP.

Ram of any age or breed.—Prize, L. J. Crossley, Willow Hall, Halifax.

Pen of three Leicester ewes, any age.—Prize, L. J. Crossley.

Pen of three lonk or mountain ewes, any age.—Prize, T. B. Sidgwick, Keighley.

Pen of three ewes of any other breed, any age.—Prize, J. Knowles.

WOOL.

Two fleeces Northumberland hogg wool.—Prize, Sutcliffe and Co., Halifax.

Two fleeces Irish hogg wool.—Prize, Anderson Brothers, Halifax.

Two fleeces Irish wether wool.—Prize, R. Youd and Co., Halifax.

Two fleeces Midland Counties hogg wool.—Prize, E. Haigh, Halifax.

Two fleeces Midland Counties wether wool.—Prize, J. Holdsworth, Halifax.

Two fleeces South Country hogg wool.—Prize, W. Apple-
yard and Son, Halifax.
Two fleeces South Country wether wool.—Prize, W. Apple-
yard and Son.

PIGS.

Boar, large breed, any age.—Prize, P. Eden, Salford.
Boar, middle breed, any age.—Prize, J. E. Fox, Bradford.
Boar, small breed, any age.—Prize, P. Eden.
Black boar, any age or breed.—Prize, P. Eden.
Boar under six months old, any breed.—Prize, C. G. Barber,
Lightcliffe.
Sow any age and litter of pigs.—Prize, P. Eden.
Sow large breed, any age.—Prize, C. R. N. Beswick-Royds,
Littleborough.
Sow middle breed, any age.—Prize, P. Eden.
Sow small breed, any age.—Prize, C. Roberts, Wakefield.
Black sow, any age or breed.—Prize, R. E. Duckering and
Sons, Kirton Lindsey.
White gilt under six months old, any breed.—Prize, P.
Eden.
Black gilt under six months old, any breed.—Prize, H.
Crossley, Broomfield, Halifax.
Store pig large or middle breed, any age.—Prize, P. Eden.
Store pig small breed.—Prize, C. R. N. Beswicke-Royds.

Black store pig, any age or breed.—Prize, M. Walton,
Halifax.
(Open to working men resident within the parish of Halifax.)
Pig above six months old, of any sex or breed.—Prize, W.
Dewhurst, Hipperholme.
Gilt any breed, under six months old.—Prize, G. Spencely,
Halifax.
Sow of any age, colour, or breed, except black.—Prize, C.
Roberts.
Black pig of any sex or breed.—Prize, P. Eden.

ROOTS AND BUTTER.

(Open to the parish of Halifax.)

Six roots of turnips of any sort.—Prize, J. Binns, Light-
cliffe.
Six roots mangel wurzel, any sort.—Prize, L. J. Crossley.
Six kohlrabi.—Prize, T. Riley, Mytholmroyd.
Two pounds of butter.—Prize, Rev. T. Sutcliffe, Hepton-
stall.

IMPLEMENTS.

Prizes for the best plough, pair of harrows, haymaker, hay-
cutter, and turnipcutter were awarded to J. Robinson, Leeds;
and for the best washing machine, to Taylor and Wilson,
Accrington.

PENISTONE AGRICULTURAL SOCIETY.

The show itself, both of agricultural stock, proper and of dogs
and poultry, was considered to be very good, and the entries
numbered about eighty more than last year. The stock was
allowed to be removed immediately after being judged, the rain
being so heavy.

P R I Z E L I S T.

JUDGES.

CATTLE and SHEEP.—F. W. Addy, Upper Cudworth, Barns-
ley; W. Mellows, High Melton, Doncaster; J. Rooth,
Stretton, Alfreton, Derbyshire.
HORSES.—J. Robinson, Manchester; T. Rogers, Wath-upon-
Dearne.
PIGS.—J. Sheard, Huddersfield; C. Speight, Sheffield.
POULTRY.—J. Dixon, Bradford; M. H. Broadhead, Holm-
firth.
DOGS.—H. Miller, Uppertorpe; J. Barker, Lyme Park,
Stockport; T. Beaver, Boardhill, Penistone.

CATTLE.

Shorthorn bull of any age.—First prize and cup, T. Statter,
Stand Hall, Whitefield, Manchester; second, T. Wragg, Lox-
ley Grange.
Shorthorn bull calf, under twelve months old.—First prize,
T. Clayton, Bodes, Doncaster; second, J. Wright, Scholes,
Holmfirth.
Shorthorn cow or heifer.—First prize, T. Statter; second,
T. Adwick, Staythorpe, Newark.
Cow for dairy purposes.—First prize, S. C. Alderson, Barns-
ley; second, J. Wright.
Two-year-old Shorthorn heifer.—First prize and cup, T.
Statter; second, T. Adwick.
One-year-old Shorthorn heifer.—First prize and cup, Eliza
Sayles, Ecclesfield; second, T. Statter.
Shorthorn heifer calf, under twelve months old.—First prize:
T. Statter; second, W. Smith, Barnes Hall.

SHEEP.

Ram of any age.—First and second prizes and cup, T. H.
Hutchinson, Catterick.

Shearling ram.—First and second prizes, T. H. Hutchinson.
Tup lamb, bred in 1871.—First and second prizes, T. H.
Hutchinson.

Tup lamb, bred in 1861.—First prize, Mrs. Birks, Edge
Hill, Penistone; second, W. Parkin, Pond Farm, Snowden
Hill.

Pen of three ewes, having suckled lambs in 1871.—First
prize, W. Parkin; second, W. Atkinson, Oxspring, Penistone.

Pen of three yearling gimmers.—Prize, T. H. Hutchinson.

Pen of three shearling gimmers.—Prize and cup, W.
Parkin.

Pen of three ewe lambs, bred in 1871.—First and second
prizes, J. Stones, Barmby Hall, Cawthorne.

Pen of three ewe lambs, bred in 1871.—First prize, Mrs.
E. Birks; second, W. Atkinson.

Ram of any age.—Prize, W. F. Marshall, Branston,
Lincoln.

Shearling ram.—First and second prizes and cup, W. F.
Marshall.

HORSES.

Gelding or mare for agricultural purposes.—First prize, T.
Statter, jun.; second, W. Bramley, Amcotts.

Brood mare for agricultural purposes.—First prize and cup,
T. Statter, jun.; second, J. Parker, Burton, Barnsley.

Foal of 1868, gelding or filly, for agricultural purposes.—
First prize, T. Statter, jun.; second, J. and J. Charlesworth,
Field Head Farm, Dodworth.

Foal of 1869.—First prize, J. Baddiley, South Kirkby; se-
cond, W. Bramley. Highly commended: G. Wood, Hay-
fields, Doncaster.

Foal of 1870, for agricultural purposes.—First prize, T.
Statter, jun.; second, J. Haigh, Pule Hill, Thurgoland.

Foal of 1871, for agricultural purposes.—First prize, J.
Parker, Burton, Barnsley; second, H. Dransfield Addey, Upper
Cudworth.

Roadster.—First prize, T. E. Morrell, Hellaby Hall, Rother-
ham; second, J. Fisher, Dodworth.

WHITBY AGRICULTURAL SOCIETY.

The following is a tabular statement of the entries of stock for the last ten years :

Yrs.	Horses.	Cattle.	Sheep.	Pigs.	Total.	
1862.—142	...	43	...	67	...	302
1863.—171	...	65	...	78	...	367
1864.—259	...	49	...	78	...	391
1865.—200	...	75	...	77	...	420
1866.—228	...	0	...	53	...	310
1867.—212	...	0	...	75	...	395
1868.—219	...	33	...	65	...	341
1869.—181	...	48	...	57	...	314
1870.—175	...	53	...	45	...	312
1871.—332	...	57	...	70	...	390

The show of horses was of a very superior description, and it was the leading feature of the exhibition. The hunting classes were extremely well represented, amongst the entries being several animals well known in the field. The entire horses were all of good breed and quality, and we may particularly mention the agricultural stallion, Hercules, belonging to Mr. Milbourn, of Fillingham, which obtained the first prize in its class. The coaching brood mares were above an average in merit, Mr. Wilson, of Kingthorp, Pickering, obtaining the first prize, and Mr. Stainthorpe, of Newton, the second. The coaching foals made up a numerous and superior class, and the yearlings were also of equal merit. The two years and three years old coaching classes were made up of very good animals. Eight capital animals were entered for Cleveland brood mares, the prize being a silver cup given by the president, the Hon. Colonel Duncombe, M.P. The piece of plate was secured by Mr. Watson Robinson, of Maltby House, with a splendid mare, nine years old, by Wonderful Lad. The class for hunting mares or geldings, the animals having to jump thorn fences, brought nine animals before the judges. Joe Bennett, the property of Mr. Brunton, of Marton, took the first prize of £7, this being the forty-fourth that he has won. Mr. Nesfield, of Scarbro', with Mischief, secured the second prize of £3. The special prize for the leaping of hunters, given by the tradesmen of Whitby, was well contested by ten animals. The first prize of £10 was taken by Mr. W. Ward, of Banniel Flat, with Polly, seven years old. The competition for the second prize was a dead heat, and Mr. Duell, of Borrowby, Salthurn-by-the-Sea, and Mr. Jackson, of Normanby, had to divide the stakes, taking £1 each.

The second section in point of importance was that for cattle. The classes for bulls were represented by some of the best blood in the district, and heifer classes were also commendable. The principal class in the cattle department was that for yearling Shorthorn bulls of the district. Mr. Rudsdale, of Danby End, obtained the prize of £5 with a fine young bull fourteen months old, and it also obtained the first prize in the yearling bull class. The dairy cows constituted a capital collection of fourteen animals, the prize-takers being Messrs. R. and T. Smith, of Whitby, Mr. H. Ward, of Whitby, and Captain Turton, of Larpool Hall.

The sheep and pigs were of fair average merit throughout, the pigs particularly ranking amongst the primest specimens. An excellent class was that for sows or gilts of any large breed, comprising eleven animals. Mr. Duckering, Northorpe, obtained the first prize, and Mr. J. Wilkinson, Whitby, secured second honours with a splendid Berkshire sow, two years old, one of the finest specimens of its breed in the country.

JUDGES.

HUNTERS, ROADSTERS, AND PONIES.—A. L. Maynard, Newton Hall, Durham; W. J. Simpson, Easton House, Bridlington.

COACHING AND AGRICULTURAL HORSES.—H. Foxton, Wellburn Grange, Kirbymoorside; J. Robinson, Newcastle-on-Tyne.

CATTLE, SHEEP, AND PIGS.—J. Cattley, Stearsby; T. Stamper, Highfield House, Oswaldkirk.

MOOR SHEEP.—J. Wilson, Littlebeck, Whitby; G. Allison, Haawsker, Whitby.

IMPLEMENTS.—W. Watson, Bempton, Bridlington; J. Pierson, Goathland.

PRIZE LIST.

HORSES.

Thoroughbred stallion.—Prize, £2, P. Hoggarth, Lyth.

Coaching stallion.—Prize, £2, R. Rhea, Pickering.

Agricultural stallion.—Prize, £2, N. Milbourn, Fillingham.

Coaching brood mare, with her foal or stunted.—First prize, £3, R. Wilson, Kingthorp, Pickering; second, £1, F. Stainthorpe, Newton, Salthurn-by-the-Sea.

Coaching foal, colt or filly.—First prize, £2, J. Harrison, Glazedale; second, £1, R. Wilson.

Yearling coaching colt or gelding.—First prize, £2, C. Pratt; second, £1, W. Ward, Aislaby.

Yearling coaching filly.—First prize, £2, F. Stainthorpe; second, £1, J. Plews, Uggelbarney.

Two years old coaching gelding.—First prize, £2, G. F. Wormald; second, £1, J. Jackson, Goldsbro', Whitby.

Two years old coaching gelding.—First prize, £2, J. and J. Welford; second, £1, F. Norman, Ruswarp, Whitby.

Three years old coaching gelding.—First prize, £2, R. Rhea; second, T. and G. Codling, Whitby.

Three years old coaching filly.—First prize, £2, C. M. Palmer, Grickle Park; second, £1, G. Gill, Brotton, Salthurn-by-the-Sea.

Special prize for Cleveland bay brood mare, with her foal or stunted, a silver cup (given by the president, the Hon. O. Duncombe, M.P.), — R. Watson, Maltby House.

Agricultural brood mare, with her foal or stunted.—First prize, £3, R. Watson; second, £1, J. Donaldson, Ayton.

Agricultural foal, colt or filly.—First prize, £2, and second, £1, Mrs. M. Kitchen and Son.

Agricultural yearling colt or filly.—First prize, £2, J. Braithwaite; second, £1, W. Sleightholm, Deau Hall, Whitby.

Two years old agricultural gelding or filly.—First prize, £2, and second, £1, N. Davison, Risebro' Hagg, Kirbymoorside.

District prize for pair of agricultural horses.—First, £2, — Barnett; second, £1, J. Porritt.

Hunting brood mare, with her foal or stunted.—First prize, £3, S. B. R. Robson, Granton; second, £1, R. Jackson, Normanby.

Hunting foal, colt or filly.—First prize, £2, J. Weighill, Whitby; second, £1, W. Woodwark, West Barnby, Whitby.

Yearling hunting colt or filly.—First prize, £2, P. Shimmins, Whitby; second, £1, T. Boyes, Fryup, Yarm.

Two years old hunting gelding.—First prize, £2, C. M. Palmer; second, £1, I. Garbutt.

Two years old hunting filly.—First prize, £2, C. M. Palmer; second, £1, G. F. Wormald.

Three years old hunting gelding.—£2, J. Jackson; second, £1, J. Wilkinson.

Three years old hunting filly.—First prize, £2, Captain E. H. Turton, Larpool, Whitby; second, £1, W. Ward, Banniel-Flat.

Special prize for hunting mare or gelding.—First prize, £7, R. Brunton, Marton; second, £3, E. Nesfield, Scarborough.

Special prize for leaping (given by the tradesmen of Whitby).—First prize, £10, W. Ward, Banniel Flat; second, £2, W. Duell, Borrowby, and R. Jackson, Normanby, divided. A whip for the best rider was awarded to G. Pearson, and G. Dodds obtained a pair of spurs as the second best.

District prize for hunting mare or gelding.—First prize, £4, D. Smallwood, Stainsacre; second, £2, J. Hindson.

Roadster mare or gelding, over 14 hands.—£3, J. Robson, Old Malton; second, £1, R. Rhea.

Ponies over 12½ and not exceeding 14 hands.—First prize, £2, W. Simpkin; second, £1, Mr. Cowell, Brotton, Salthurn-by-the-Sea.

Ponies not exceeding 13½ hands high.—£1, M. Kitching, Ayton; second, 10s., M. Kitching.
 Donkeys in the district.—First prize, 10s., J. Wilson, Egton, Yarm; second, 5s., T. Richardson; third, 2s. 6d., J. Green, Sleights, Whitby.

EXTRA STOCK.

Horses.—First prize, W. Ward, Aislaby; second, Stonehouse and Son, Mickleby.

CATTLE.

Bull calf, over six and under twelve months old.—First prize, £2, W. C. Worsley, Hovingham; second, £1, D. Hartley, Westerdale.

Yearling bull.—First prize, £2, W. Rudsdale, Danby; second, £1, J. Porritt, Buck Rush.

Two years old bull.—Prize, £2, T. Brown, Butterwick, Malton.

Heifer calf, over six and not exceeding twelve months old.—First prize, D. Webster, Broughton; second, £1, H. Ward, Hawsker.

Yearling heifer.—First prize, £2, R. Hodgson, Westerdale; second, £1, J. Sanderson, Westerdale.

Two years old heifer, in-calf or milk.—First prize, and second, £1, G. D. Yeoman, Woodlands.

Cow, in-milk or calf.—First prize, £2, D. Webster; second, £1, J. Wilson, Farnedale.

DISTRICT PRIZES FOR CATTLE.

Yearling Shorthorn bull.—Prize, £5, Mr. Rudsdale, Danby End.

Dairy cow, with special reference to milking.—First prize, £2, R. and T. Smith; second, £1, H. Ward; third, 10s., Capt. E. H. Turton.

Two yearling heifers, which have been the property of the exhibitor six months prior to the show.—First prize, £1, R. Hodgson; second, 10s., D. Allinson.

Cottagers' cow.—First prize, £1, R. Nicholson; second, 10s., T. Wilson, Hawsker.

LEICESTER SHEEP.

Two-shear or aged ram.—First prize, £2, R. P. Petch, Skelton; second, £1, R. Jackson, Thornton Grange.

Shearling ram.—First prize, £2, H. Barker, Barngh; second, £1, G. D. Yeoman.

Top lamb.—First prize, £1, and second, £1, Wm. Ward, Banniel Flat; third, 10s., W. S. Gray.

Five ewes, having reared lambs in 1871.—First prize, £2, D. Allinson; second, £1, J. Elliot.

Five shearling gimmers.—First prize, £2, E. Tindall, Knapton; second, £1, W. S. Gray.

Five gimmer lambs.—First prize, £2, Wm. Ward; second, £1, W. S. Gray.

DISTRICT PRIZE.

Three tup lambs.—First prize, £1, Wm. Ward; second, 10s., W. S. Gray.

MOOR SHEEP.

Two-shear or aged ram.—First prize, £1, second, 10s., Wm. Rudsdale.

Shearling ram.—First prize, £1, J. E. Medd; second, 10s., Wm. Rudsdale.

Tup lamb.—First prize, £1, C. and J. Smith; second, 10s., Wm. Rudsdale.

Five ewes, having reared lambs in 1871.—Prize, £1, Wm. Rudsdale.

Five shearling gimmers.—Prize, £1, C. and J. Smith.

Five wethers, two-shear or upwards.—First prize, £1, second, 10s., J. Peirson, Gouthland.

PIGS.

Boar of any large breed, over six months old.—First prize, £2, C. Duckering, Northorpe; second, £1, John Beal.

Sow or gilt of any large breed over six months old.—First prize, £2, R. E. Duckering; second, £1, J. Wilkinson.

Boar of any small breed, over six months old.—First prize, £2, R. E. Duckering; second, £1, R. P. Clarkson, Pickering.

Cottagers' pig (open to the district only).—First prize, £1, William Pearson, Abbey Cottage; second, 10s. ditto.

IMPLEMENTS.

Mr. J. Weighill, Pickering, £4, for stand, and 10s. for corn screen. Messrs. Jackson Brothers, Lyth, £2, for stand, and 5s. for Samuelson's improved reaper, and 5s. for pulper. Mr. W. Sawney, Beverley, 15s., for stand. Mr. G. Pounder, Kirbymoorside, 10s. for stand. Mr. G. Matterson, Ryedale Foundry, Kirbymoorside, £1, for stand. Messrs. Sonley and Son, Kirbymoorside, 10s. for four barrel churns. Mr. Paul Smithson, Bridlington, 10s., for waggon for agricultural purposes.

At the dinner, the chairman, Mr. W. H. Gladstone, M.P., said: A model chairman ought to have examined every animal in the show, and to have been able to descant on their merits or demerits. He had no faculty for doing this. He had visited the show, and had been interested in so doing, but there was one test which he could apply in common with everybody who had visited the town, and which might be called the table test. When the mutton and potatoes and other agricultural produce were taken in comparison with what was produced in other places, it put the town in a very good position with regard to the quality of its productions. He must congratulate the meeting on the success of the show, which was more particularly shown in the figures which the secretary had handed to him. Last year the number of horses exhibited was 175, this year there had been 232. The number of cattle exhibited last year was 53, this year it had been 56. 45 sheep had been shown last year against 70 this year, and in the pigs there had been a diminution of 8, whilst the poultry had increased, there having been 304 entries against 334 this year. He was happy to tell them that the receipts had also increased, as last year £150 had been taken, and this year it had risen to £170. This, the 38th meeting of the Society, had been held under very favourable circumstances, and we found ourselves in the prospect of a rich and abundant harvest, with all its attendant blessings. Within the last ten years the prices of agricultural produce had very much risen to the advantage of the farmer. He had been reading the Guide to Whitby lately, and he found from that within 150 years the price of mutton had been multiplied by five. Whitby, whilst no doubt greatly interested in agriculture, ought not to lose sight of manufactures. It might be true that the spread of manufactures had the effect of causing a rise in wages, but it carried with it preponderating advantages. It caused a better market to be provided, stimulated the demand, and caused an increase of railway accommodation. He was glad to see that there was every prospect of two additional railways in this neighbourhood, and they would give to the farmer the opportunity of bringing to the cultivation of the soil much improved machinery, which would effect a great saving of labour. They would be able to bring at a cheap rate all the more valuable manures which could be applied to the cultivation of the crops. There was one feature of that show, as of all other shows, to which he would refer, as it had been the subject of complaints from quarters which were entitled to respect. He was inclined to think that too much attention was paid to ornamental excellence in stock. If ornamental excellencies carried away all the prizes it would tend to dishearten those farmers who had not capital to lay out in procuring such excellence. He would suggest that in some future show a class be provided in which beasts might be shown which were not expected to be possessed of ornamental excellence.

CRAVEN AGRICULTURAL SOCIETY.

The seventeenth annual show of the Craven Agricultural Society was held at Skipton. The various mills in the place were stopped, and the streets presented quite a holiday appearance. Decorative arches were suspended over the principal approaches to the show ground, and there was a liberal display of flags from the windows along the way. The principal part of the town was crowded with show booths and tents of all descriptions, and presented much the appearance of a fair. Skipton is the centre of a great grazing district; and the exhibition, in both number and quality, compared very favourably with that of the previous year. The total number of entries was 1,024, as compared with 959 in 1870. The total amount given as prize money was £416, which was £19 in excess of last year. The show of cattle was said by the judges to be the best which the Society has ever had. For the best bull, in the competition open to the kingdom, Lady Pigot, Newmarket, took the first prize. The first prize for yearling bulls was awarded to Mr. Richard Parker, Burnley; and for bull calves Mr. Thomas Statter, Manchester, was first. The whole of the class of cows in calf or milk was commended, and the first prize being taken by the Rev. Leonard Charles Wood, Poulton-le-Fylde. Lady Pigot was a large exhibitor, and took a number of prizes. Mr. Thos. Statter, Whitefield, Manchester, besides other prizes, took the silver cup, value 20 guineas, for the best collection of Shorthorns. The tenant-farmers in the district showed well in the classes open to them. Mr. J. Knowles (Wetherby), Mr. Robert Whittam (Burnley), Mr. John Farrer (Burnley), Mr. Thomas Hird (Skipton), and Mr. Benjamin Baxter (Skipton) were the first prize-takers. For the best tenant-farmer collection of Shorthorns a silver cup was given to Mr. John Farrer, Burnley.

The horses were a good show, especially the roadsters and hunters. Mr. J. H. Wright, North Rigton, near Otley, got the first prize for a thoroughbred stallion. For the best roadster stallion Mr. James Gill, Silsden, was first; and for the best draught stallion Mr. James Forshaw, Burley. The cup for the best hunter was won by Mr. J. M. S. Musgrave, Beverley, with a five-year-old bay.

The sheep showed a considerable increase upon the numbers of last year. The effect of this annual exhibition has been to improve greatly the breeds of sheep in the district, and this was apparent in the excellent quality of the young stock shown. For an aged longwooled ram Mr. W. Thompson, Bedale, was first; and for a shortwooled ram of any age the first prize was taken by Mrs. Jowett, Keighley. These were open to the kingdom. In the classes of longwool sheep, open to local competition, Messrs. J. and W. Pinder (Waddington), Mr. Robert Surr (Ripley), Messrs. J. and R. Earnshaw (Citheroe), and Mr. Anthony Bentley (Settle) were prominent prizetakers. Mr. John Young (Hazlewood), Mr. Samuel Newall (Eastby), and Mr. Stephen Hudson (Hazlewood) carried off all the first prizes for mountain sheep of the Scotch breed. For Lonk sheep Mr. Benj. Dobson (Ikley), Mr. J. B. Sedgwick (Keighley), and Mr. John Dinsdale (Keighley) were the principal exhibitors and prizetakers. The half-bred sheep included some fine crosses. The following were first-prizetakers: Mr. Henry Nutter (Skipton), Mr. Wm. Varley (Airedale), Mr. Chris. Swithebanc (Malham), Mr. William Carlisle (Bordley Hall), Mr. Wm. Young (Hazlewood), Mr. J. Markendale (Gargrave), Messrs. William and Thomas Holgate (Grindleton), and Mr. James Gill (Silsden). Two longwooled ewes, four and five-shear, exhibited by Mr. W. Thompson, Bedale, as extra stock bred by the exhibitor, were very superior animals.

The pigs were a large show, and exhibited an increase as compared with last year. For the best boar of the large breed Mr. Wilson, Armley, Leeds, took first and second prizes; while Mr. J. E. Fox, Great Horton, Bradford, was the first-prizetaker for a boar of the middle breed. For a boar of the small breed Mr. John Sagar, Lister Hills, Bradford, was

first. For the best sow of the large breed Mr. Clement, Littleborough, was first; best sow, middle breed, Mr. J. C. Taylor, Leeds; and best sow of small breed, Mr. C. Roberts, Wakefield. The first prize for a boar of the large breed, under nine months, was won by Mr. John Umpleby, Guiseley; best boar, middle breed, under nine months, Mr. Charles McDonall, Keighley; best boar of the small breed, under nine months, Mr. Joseph Reeday, Keighley. In the various classes of gilts, Mr. John Umpleby, and Mr. Joseph Bramfitt, Leeds, were foremost.

There was a large show of poultry. Dorkings, Cochins, and Spanish were especially fine. Amongst the Hamburgs there were some good specimens, but they were failing in feathers. The game was a moderate show; game bantams very good. Geese were good in quality, but few. Aylesbury and Rouen ducks were excellently represented, and there were some pretty foreign birds. The show of young poultry and pigeons was also very good. Among the pigeons were a large number of carriers. The attendance on the ground was very large during the day.

The judges were as follows: Shorthorns.—Thos. Dodds, Wakefield; Chas. Bland, Gaddesby Hall, Leicester. Horses.—Thomas Robinson, Wingate Hill, Tadcaster; W. Robson, High Ouseburn, York. Sheep.—Thomas Willis, jun., Manor House, Carperby; Anthony Horner, Nidderdale; Robert Holgate, Buckden. Pigs.—Stephen Barrett, Harewood; Joseph Culshaw, Towneley, Burnley. Poultry and Pigeons.—Enoch Hutton, Pudsey, near Leeds; James Heywood, Middleton, Manchester. Roots, Butter, Cheese, Oatcake.—Joseph Culshaw, Towneley, Burnley. Shepherd's Dogs.—The same as or sheep.

BATH AND WEST OF ENGLAND SOCIETY, AND SOUTHERN COUNTIES ASSOCIATION.

A meeting of the Council of this Society was held on Tuesday, Aug. 29, at the White Lion Hotel, Bristol. Present: The Earl of Cork, in the chair; Sir J. T. B. Duckworth, Mr. Bremridge, Mr. Jonathan Gray, and the Rev. T. Phillpotts, vice-presidents; the Hon. and Rev. J. T. Boscawen, Mr. C. Bush, Mr. R. H. Bush, Captain Davy, Mr. Dymond, Mr. C. Edwardes, Mr. Hole, Mr. Holly, Col. Luttrell, Mr. Moore Stevens, Mr. Spiers, Major Trood, Mr. Troyte, Mr. Herbert Williams, and J. Goodwin, Secretary and Editor.

At the commencement of the proceedings the Earl of Cork stated that he should not be doing his duty, in the position he occupied, were he to omit alluding to the loss sustained by the Society since the Guilford meeting in the death of the late lamented Sir Thomas Acland, a man universally esteemed and respected by persons of every rank and station in life, and sincerely beloved and esteemed by his neighbours and friends. Happily they had in the present Baronet a warm and zealous friend of the Society, who they felt satisfied would follow in the steps of his worthy father.

The business of the day was chiefly of a routine character; Col. Luttrell being appointed one of the Stewards of Arrangements, and Mr. Greuffell one of the Stewards of Field Implements.

A copy of the Society's Journal, which has just been issued to members whose subscriptions are not in arrear, was laid upon the table, and reference was made to an article by Professor Brown on Pleuro-Pneumonia, especially that portion of it containing a history or summary of the legislation that has taken place with reference to the disease.

The Council at their meeting in October next will take into consideration at what town the meeting of 1873 shall be held.

ROCHDALE AGRICULTURAL SOCIETY.

There was a large attendance, the day being observed as a holiday. The entries were numerous, the prizes liberal, the competition in many of the cases keen, and the stock exhibited above an average. The entries nearly approached 1,900, comprising 75 head of cattle, 135 of horses, 60 of sheep, 72 of pigs, 201 of poultry, 270 of pigeons, 50 of rabbits, and 100 entries in the class for vegetables, 7 for butter, 652 for implements, and 204 for dogs. The amount given in prizes was about £600. The cattle exhibited included several successfully exhibited at the Royal Agricultural Society's recent meeting. A new feature in the programme this year was a silver cup given by Mr. C. W. Brierley "for the best turn-out with two-wheeled conveyance, horse, and harness, driven on the show-ground." In the class for bulls four or five animals were shown, any one of which might have been worthy of first honours at any local exhibition. The milch cows were also good as a class. In draught-horses, as usual, Mr. Thos. Statter, jun., of Whitefield, near Manchester, and Mr. C. W. Brierley, of Middleton, were the chief rivals. Mr. Brierley carried off four first-class prizes in this class and for agricultural purposes, whilst Mr. Statter took five first prizes. The roadsters were well represented; but the ponies were a poor show.

P R I Z E L I S T .

JUDGES.

CATTLE.—B. Baxter, Elstack Hall, Skipton; T. Dodds, Mount Pleasant, Wakefield.

HORSES (heavy).—J. Bromley, Lancaster; T. Metcalf, Uttoxeter, Staffordshire.

HORSES (light).—J. Clarke, Beeston, near Leeds; J. Greaves, Flixton, near Manchester.

SHEEP.—T. Birtwistle, Within Grove, Accrington; W. Midgley, Salesbury Old Hall, Ribchester, Preston.

PIGS.—W. Gamon, Hoole Cottage, Chester; T. Atherton, Chapel House, Speke, near Liverpool.

CATTLE.

GENERAL COMPETITION.

Bull of any breed.—First prize, J. Farrar, Thorneyholm, Burnley; second, T. Statter, jun., Whitefield, Manchester.

Bull calf, above one and under two years old.—C. W. Brierley, Rhodes House, Middleton; second, T. Statter, jun.

Bull calf, not exceeding twelve months old.—First prize, T. Statter, jun.; second, C. W. Brierley.

Cow in calf or in milk.—First prize, Rev. L. C. Wood, Kirkham; second, C. W. Brierley.

Heifer, not exceeding three years old.—First prize, J. Leigh Becker, Chadderton Road, Manchester; second, T. Statter, jun.

Heifer, not exceeding two years old.—First prize, C. W. Brierley; second, T. Statter, jun.

Heifer calf, not exceeding twelve months old.—First prize, C. W. Brierley; second, T. Statter, jun.

Three cows (in calf or milk), open to cattle dealers.—First prize, C. W. Brierley; second, J. Coates, Toad Lane, Rochdale.

Fat calf, open only to butchers within the parliamentary borough of Rochdale.—Prize, J. Coates, New Market.

TENANT-FARMERS' PREMIUMS.

Bull of any breed.—Prize, T. Statter, jun.

Cow (in calf or milk).—Prize, C. W. Brierley.

Heifer, not exceeding three years old.—First and second prizes, C. W. Brierley.

Heifer, not exceeding two years old.—Prize, C. W. Brierley.

Heifer, if not exceeding twelve months old.—Prize, C. W. Brierley.

Silver cup, given by Mr. C. M. Roysds.—C. W. Brierley, (three year old heifer).

TENANT-FARMERS MAINLY DEPENDENT ON FARMING,
RENTAL NOT EXCEEDING £100 PER ANNUM.

Cow (in calf or in milk).—Prize, R. Turner, Norden.

Heifer, not exceeding three years old.—Prize, J. A. Mason, Milnarrow.

Heifer calf, not exceeding twelve months old.—Prize, J. Crossley, Waitworth.

Silver cup, £5, given by Mr. E. A. N. Roysds.—W. Peacock, Littleborough.

HORSES.

DRAUGHT HORSES.

Cart stallion.—First prize, T. Statter, jun.; second, J. Edmondson, Entwistle, Burnley.

Horse.—First prize, C. W. Brierley; second, Mayor, Aldermen, and Burgesses of Rochdale.

Horse, under sixteen hands.—Prize, Mayor, Aldermen, and Burgesses of Rochdale.

Pair of horses.—Prize, C. W. Brierley.

AGRICULTURAL HORSES.

Brood mare, to bring foal with her.—Prize, T. Statter.

Horse.—Prize, C. W. Brierley.

Pair of agricultural horses.—Prize, C. W. Brierley.

Three years old gelding or filly.—Prize, T. Statter, jun.

Two years old gelding or filly.—Prize, T. Statter, jun.

One-year-old colt or filly.—Prize, T. Statter, jun.

Foal.—Prize, W. Rawstron, Hopwood, Middleton.

Pony not exceeding 14½ hands.—Prize, J. Uttley, Rochdale.

Pony not exceeding 13½ hands.—Prize, W. Lumb, Brotherod, Rochdale.

Pony 12½ hands.—Prize, J. C. Rogerson, Manchester.

Stallion, as a roadster.—Prize, J. Gill, Silsden, Leeds.

Brood mare, as a roadster.—Prize, Mrs. W. Rhodes, Huddersfield.

Three years old gelding or filly, adapted for saddle or harness.—Prize, H. Newall, Littleborough.

One-year-old colt or filly, adapted for saddle or harness.—Prize, J. F. Crowther, Todmorden.

Foal, adapted for saddle or harness.—Prize, T. Statter, jun.

Mare or gelding, adapted for harness.—Prize, J. Schofield, Greenroyd, Rochdale.

Mare or gelding, not exceeding 15 hands, adapted for harness.—Prize, T. Fildes, Lytham.

Mare or gelding, adapted for saddle.—Prize, T. Barcroft, Waterfoot, Manchester.

Mare or gelding, not exceeding 15 hands, adapted for saddle.—Prize, T. Statter, jun.

Best turn-out, with two-wheeled conveyance.—First prize, G. Hardy, Ellesmere Brewery, Manchester. Mr. Hardy's chesnut mare and drag (the latter a light, compact, neat, and admirably finished specimen of coach workmanship by Mr. E. Mather, of Manchester) were much admired. Mr. Robinson, Salkelk, was second in the competition, the principal prize for which was given by Mr. Brierley.

HUNTERS.

Best aged hunter.—First and second prizes, C. Captain Patrick, Rossendale; third, T. H. Newton, Oldfield, Altrincham.

Juniper.—First prize, T. H. Newton; second, Dr. J. Wilson, Newchurch.

PONIES.

Best jumper, not exceeding 14 hands.—First prize, E. Stanley Bent, Manchester; second, W. Lumb, Brotherod, Rochdale.

Best jumper, not exceeding 12 hands.—Prize, A. M. Roysds.

SHEEP.

Tap, long or speckled-faced breed.—Prize, L. Duckworth, Ramshotton.

Tap hogg.—Prize, L. Duckworth.

Tap lamb.—Prize, J. Pickup, Newchurch.

Three ewes.—Prize, J. G. Bridge, Rawtenstall.
 Three ewe lambs.—Prize, J. G. Bridge.
 Ewe lamb.—Prize, J. Pickup.
 Three wethers.—Prize, T. Statter.
 Tup, any other breed of sheep.—Prize, J. and W. Pinder, Clitheroe.
 Three ewes.—Prize, J. and W. Pinder.
 Three tup lambs.—Prize, T. Statter.
 Three ewe lambs.—J. Tattersall.
 Fat sheep (open only of sheep in Rochdale).—Prize, J. Coates.
 Tup hogg, long or speckled-faced breed (confined to the parish of Rochdale).—Prize, Squire Jackson.
 Tup lamb.—Prize, Squire Jackson.
 Three ewes.—Prize, Squire Jackson.
 Three ewe lambs.—Prize, J. Hill.
 Ewe lamb.—Prize, Squire Jackson.
 Three wethers.—Prize, C. Hill.
 Three wether lambs.—Prize, C. Haworth.

PIGS.

Large breed boar.—Prize, P. Eden, Salford.
 Breeding sow.—Prize, P. Eden.
 Middle breed boar.—Prize, P. Eden.
 Breeding Sow.—Prize, P. Eden.
 Small breed boar.—Prize, P. Eden.
 Breeding sow.—Prize, C. R. N. Beswicke Royds.
 Fat pig (any breed, sow).—Prize, R. E. Duckering.
 Large breed boar (the property of residents within the parish of Rochdale).—Prize, C. R. N. Beswicke Royds.
 Breeding sow.—Prize, S. Robinson.
 Litter of sucking pigs, age not to exceed seven weeks.—Prize, J. Wolfenden.
 Middle breed boar.—Prize, B. Butterworth.
 Breeding sow.—Prize, T. Bolton.
 Small breed boar.—Prize, C. R. N. B. Royds.
 Breeding sow.—Prize, C. R. N. B. Royds.
 Litter of sucking pigs, age not to exceed seven weeks.—Prize, S. Robinson.

THE LAND QUESTION IN ENGLAND.

On his accession to the title Lord Derby would seem to have readily taken shelter in the sacred shade of the Upper House. From the politician he drops down into the country-gentleman; and we hear of him now far more frequently as the leading spirit of some local Society than as the hope of a party or the hero of a debate. But whatever Lord Derby does he does with all his might; and, perhaps, no man more carefully considers the purport of anything he is about to utter. He thus becomes something of an authority upon any subject which he touches; associating, as he almost invariably does, a singularly dispassionate judgment with a very extensive knowledge of the question to which he speaks. The lesson to landlords which he has just delivered at Liverpool becomes consequently only the more impressive when we remember the quarter from which it emanates. There is nothing impulsive here, no outbreak of mere after-dinner oratory; as the probability is that every sentence had been prepared and settled by some elaborate note long previous to this falling into the consecutive connection of an address which reads like an essay.

Additional weight, moreover, is given to this lecture from the fact that Lord Derby himself speaks and feels as a landlord. He is no outsider, hotly advocating reforms which would verge on revolution; but, on the contrary, his sympathies are evidently with his class, and his principles over the land question eminently Conservative. The purport of Lord Derby's speech is to keep landlord and tenant together very much as they are, at the same time that he impresses the necessity for some improvement in the relations between the two; while he regards this as a duty which must spring from the landlord. If more is to be made from the cultivation of the soil more in the outset must be done by the owner. And this, as we take it, is the moral lesson which Lord Derby would inculcate.

There are sentences in this Liverpool speech which might be written in letters of gold; as at least we have ever endeavoured to give such wholesome ethics all due prominence: "We want to move on, but we want also, if possible, to move on together—to live and let live—not for a few to make fortunes and the rest go to the dogs; and I will add that if this work of agricultural improvement is to be carried on as it should be, it is the landlord, quite as much as the farmer, who must put his shoulder to the wheel." And the very heading to this paper, the text-words to which we speak are LIVE AND LET LIVE and PROPERTY HAS ITS DUTIES AS WELL AS ITS RIGHTS.

It will be noticed that in the single sentence we have quoted Lord Derby enunciates these two very precepts; but his lordship goes even still further with us, when he says that in order to encourage the use of more capital by the tenant, "security is the first requisite," and again we may turn to our own motto of TENANT-RIGHT, to which through evil and good repute we have held for the last quarter of a century. Lord Derby would offer such security by means of a lease, but of course to ensure the land being kept in a permanently high state of cultivation a lease cannot stand alone. The influence of Lord Derby's speech is already shown by the leader in *The Times* which immediately followed; one penned in a far better spirit towards agriculture than anything that has proceeded from the same quarter for many a long day, and wherein it is urged that "many have much to say against leases, and not without reason. A lease is a contrivance to induce a tenant to get out of the land in the last years of his holding all and more than all he put into it at the beginning. This is, no doubt, often the case, and yet it is difficult to believe that it is impossible to frame an agreement which shall prevent a tenant from racking the land while giving him security for his investments in it." This is well and fairly put, and yet until very recently *The Times* would countenance nothing but a long lease as the only penance for all the ills of agriculture. Again, *The Times* tells us how "Security is the first requisite of good cultivation. Farmers, in nine cases out of ten, have faith enough in their landlords, but it is the tenth case which demands attention, and we have seen that in Ireland the absence of security in the tenth case has driven the Legislature to sanction coercive restraints on the authority of owners which every one regretted even while allowing their necessity. There is no fear of anything of the same kind in England or Scotland; but if the principle of free contract is to continue to govern the relations of landlord and tenant, 'good' tenants wanting leases can no more be expected to forego security for their capital than 'good' landlords can be expected to forego security for their rents." This is clearly in advocacy of English TENANT-RIGHT, a claim against which, acting under certain Scotch instincts, *The Times* at one period could find no language too strong. The thing was an encroachment on the rights of property, it tended rather to lock up than employ capital, and so forth; the simple truth being that as the

principle comes to be better understood the more will its justice be admitted.

The reference here made to the Irish Land Question brings us to another point in Lord Derby's speech with which we cannot go so readily. He says, truly enough, that "the landlord has not very often the capital required," that is to put his estate in a proper condition; while his lordship fails to see that this inability to fulfil the duties of property is "very often" traceable to the difficulties attendant on the transfer of land, or to the entailed embarrassments of generations of owners. In Ireland this difficulty has been solved by Act of Parliament, and landlords unable to discharge their duties by the land have been freed of the obligation through the very simple process of buying them out. But even waiving this phase of the question, certain further facilities and reforms are required before any full or *general* security of capital can be warranted from the

owner to the occupier. Mr. Stewart, the barrister, and an acknowledged authority on the Laws and Customs of Land, said before a Committee of the House of Commons that "a very large class of landowners, or of persons standing in the relation of landowners, were incapacitated by law from binding themselves and successors to remunerate their tenants at the termination of the tenancy for temporary or permanent improvements. He thought that two-thirds of the lands of England were settled in this way." Admirably, in fact, as Lord Derby treats many of the cases and phases which arise in considering the Land Question, it is doubtful whether he attaches sufficient importance to the abuses necessarily attendant on the present system of proprietorship. There are two ugly facts which still stare us in the face, and still impede our progress: too many landlords cannot find capital, and too many more cannot give proper security for its employment.—*The Mark Lane Express*.

THE MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.

MEETING AT LIVERPOOL.

Successful as are many of the autumn meetings, these necessarily lack the attraction of novelty, and great as was the entry and good the quality at Liverpool, the show was something of an oft-told tale. Thus, amongst the Shorthorn bulls were Edgar, Lord Irwin, Telemachus, Royal Windsor, Grindelwald, Iron Master, and Lord of the Manor, with most of these doing much as they have done, while Charlie, own brother to Bolivar, out of all form at Wolverhampton, was now reduced to merely local competition. Then the cows and heifers included Vivandiere, Concert, and Fleur-de-lis, all again winners of course, for the country is pretty well run through by the beginning of September. Once more did A.I. and Young Lofty fight their battle amongst the cart stallions, whilst Sincerity was still the pick of a poor show of thorough-breds, and Banner Bearer, Borderer, and Loiterer, were as usual amongst the hunters. Banner Bearer was put out of it, and Borderer won; while, according to *The Field* "in the light weight class there were forty-nine entries—a large muster—including many excellent horses. For about the first time, Mr. Welfitt's Loiterer was beaten, the first prize and cup for best hunter in both classes being awarded to Mr. Riggs's Chang." This is rather strongly put, as Loiterer was nowhere during this very season at Islington, second at Wolverhampton, nowhere at Brigg, nowhere at Driffield, and nowhere at Keighley; so that being beaten at Liverpool "for about the first time," must carry with it some peculiar interpretation. There was otherwise a capital show of horses, a great entry of Shropshire sheep, as well as some famous Leicesters, where Mr. Hutchinson, however, swept the decks; and as the prize list will prove, the best of pigs, with such exhibitors as the Duckerings, Mr. Eden, Mr. Knowles, Mr. Fox, and the Cirencester College.

There were 197 entries of Shorthorns, and 17 entries of bulls above two years old, amongst those exhibited being several which were prize-takers at the Royal Agricultural Society's show at Wolverhampton. The winner was Mr. H. Thompson's Edgar, bred by Mr. C. R. Saunders, of Nunwich Hall, Penrith. The second was Lord Irwin, belonging to Mr. W. Linton, of Sheriff Hutton, Yorkshire. The third prize was the Marquis of Exeter's Telemachus, the second prize at the Royal Show, where two others only com-

mended here were also prize-takers. Nine bulls were shown of above one but under two years old, the winner being the property of the Rev. Walter Sneyd, of Keele Hall, Newcastle, Staffordshire. He took the first prize as a bull-calf twelve months ago at the Walsall show. In the class of cows above three years old in milk or in calf the chief prize was taken by Mr. J. Outhwaite, of Catterick, with Vivandiere. In under three years old, Mr. F. J. S. Foljambe, M.P., was the winner with Concert and Fleur-de-lis; and the best heifer calf was also shown by Mr. Foljambe. The prize list will speak to the other breeds. There were 349 entries of horses, ranging from the finest thoroughbreds to the draught breed. Four thoroughbred stallions were shown. The draught stallions numbered 16. There were 84 hunters entered, and 21 ladies' hackneys. There were 161 entries of sheep, and 135 entries of pigs.

P R I Z E L I S T .

JUDGES.

CATTLE.—H. W. Beanford, Formby-hall, Southport; B. Baxter, Elslack-hall, Skipton; W. Parker, Carleton-hill, Penrith.

HORSES (cart).—J. H. Wood, Humberstone, Great Grimsby; J. Bromley, Lancaster.

HORSES (light).—J. M. K. Elliott, Heathencote, Towcester; G. Clay, Minton-house, Wem; W. S. Atkinson, Barrowley-hall, Leeds.

SHEEP.—J. Wood, Harewood-hill, Darlington; T. Horley, The Fosse, Leamington.

PIGS.—C. M. Sexton, Wherstead-hall, Ipswich; R. H. Watson, Bolton-park, Wigton.

CHEESE AND BUTTER.—R. Pedley, Crew; H. Warburton, Manchester.

GRAIN AND ROOTS.—J. Kay, Warburton-park, Lynn; J. Hornby, Minshull-Vernon, Middlewich.

IMPLEMENTS.—R. Whalley, Bold, Warrington; W. Scotson, Aigburth, Liverpool; M. Scott, engineer, Trammere.

HORSES.

(Open for competition to the United Kingdom.)

Stallions, thoroughbred, most suitable for getting weight-carrying hunters.—First prize, J. Casson, Burgh-by-Sands, Carlisle; second, R. C. Naylor, Hooton-hall; third, G. Holmes, Bar-house, Beverley.

Stallions for getting horses for draught purposes.—First

prize, W. Wynn, Crauhill-leys, Grafton, Warwickshire; second, H. Tomlinson, Blithford, Rugeley, Clydesdale; third, A. Cook, Much Hoole, Preston. Highly commended: T. Statter, jun. Commended: W. Shawe, Lathom, near Ormskirk.

Stallion colts, draught breed, foaled in 1869.—First prize not awarded; second, R. Ashcroft, Rufford; third, L. A. Mawdsley, Ormskirk.

Stallions most suitable for getting horses for carriage or road purposes.—First and second prizes, B. Mitchell, Downham Market, Norfolk.

Mare or gelding, for draught purposes, four years old and upwards.—First prize, C. W. Brierley; second, W. Robinson; third, J. Wright, Walton. Highly commended: The Earl of Crawford and Balcarres.

Three years old gelding or filly, cart breed.—First prize, T. Statter, jun.; second, C. W. Brierley; third, J. Hampson, Wigan.

Two years old gelding or filly, cart breed.—First prize, T. T. Parker, Chorley; second, J. Wright, Walton; third, T. Statter.

One year old gelding or filly.—First prize, J. Waterworth, North Ashton; second, W. Shawe, Lathom, Ormskirk; third, J. Pover, Chester.

Three years old gelding or filly, half-bred.—First prize, J. Rigg, Windermere; second, W. Roberts, Thornholme, Burnley; third, R. Reade, Chester.

Two years old gelding or filly, half-bred.—First prize, T. Horrocks, Singleton, Poulton-le-Fylde; second, T. M. Tattersall, Musgrave, Beverley; third, W. Roberts, Thorneyholme, Burnley.

One year old gelding or filly, half-bred.—First prize, T. Horrocks; second, E. L. Wright, Wigan; no merit for third.

Brood mares for breeding hunters.—First prize, T. Horrocks; second, T. Statter, jun.; third, S. Kirkby, 3, City-terrace, City-road, Manchester.

Brougham horse, gelding, above four years old.—First prize, T. Percival, Wausford, Northamptonshire; second, A. Heywood, West Derby; third, T. Jefferson, Scaleby, Carlisle.

Hack or roadster, mare or gelding, 15 hands or upwards.—First prize, W. Murray, Broughton Mews; second, J. Schofield, Greenroyde, Rochdale; third, H. S. Woodcock, Wigan.

Cobs, mare or gelding, under 15 hands.—First prize, F. Hollins, Wavertree; second, C. Smith, Rugby; third, J. Williams, 145, Bedford-street South, Liverpool.

Mare or gelding pony, above 12 hands 2 inches and under 13 hands 2 inches.—First prize, W. S. Gladstone, Gateacre, Liverpool; second, E. Ashton, Parkfield, Middleton, Manchester; third, A. Earle, Childwall Lodge, Wavertree.

Mare or gelding pony, under 12 hands 2 inches.—First prize, T. Gray, Bradshaw-gate, Bolton; second, J. C. Rogerson, 73 and 75, Oldham-street, Manchester; third, M. A. Balli, Fairfield, Liverpool.

Stallion for getting cart-horses, the property of landlords who allow them to serve the mares of their tenants gratis.—Silver medal, W. J. Leigh, M.P., Lyme Park, Stockport.

Brood mare for breeding horses for draught purposes.—First and third prizes, T. Statter, jun., Stand Hall, Whitefield; second, W. Dale, Thornton Lodge.

Brood mare for breeding roadsters or carriage horses.—First prize, W. Mawdsley, Speke Town Farm, Liverpool; second, E. L. Wright, Hindley Hall, Wigan; third, T. H. Miller, Singleton, Poulton-le-Fylde, Lancaster.

Pair of draught horses, mares or geldings, the property of tenant-farmers principally dependent on farming.—First prize, J. Roberts, Saltney, Chester; second, W. Shawe, Lathom, Ormskirk.

Pair of ditto, open to all members.—First and second prizes, C. W. Brierley, Middleton, Manchester; third, T. Statter, jun., Stand Hall.

Three-year-old gelding or filly, cart breed.—First prize, G. Halsall, Hale-bank, Warring; second, J. Henshaw, Hale-bank, Warrington; third, T. Statter, jun.

Two-year-old gelding or filly, cart breed.—First prize, W. Dale; second, R. Barnett, Wettenhall-hall, Winsford; third, T. Statter, jun.

One-year-old gelding or filly, cart breed.—First prize, J. Roberts, Saltney; second, H. Neild, The Grange, Worsley; third, Earl of Crawford and Balcarres, Haigh-hall, Wigan.

Three-year-old gelding or filly, half-bred.—First prize, J.

Robinson, Lee Green-hall, Church Mithull; second, R. Barton, Cady Manor, Birkenhead; third, W. Dutton, Garden Lodge, Gateacre.

Two-year-old gelding or filly, half-bred.—First prize, H. Neild, Worsley; second, J. Wright, Minshull Mill, Middlewich; third, W. Birch, Aintree, Liverpool.

One-year-old gelding or filly, half-bred.—Prize, Earl of Crawford and Balcarres.

HUNTERS.

Mare or gelding, up to 14 stones and upwards.—First prize, T. H. D. Bayley, Edwinstowe House, Ollerton, Notts; second, T. Percival, The Haycock, Wansford, Northamptonshire; third, G. Van Warb, The Shrubbery, Edgbaston, Birmingham.

Mare or gelding, up to 12 stones and upwards.—First prize, F. Rigg, Brook House, Lea-green; second, S. J. Wellitt, Tathwell-hall, Louth; third, T. Percival, The Haycock, Wansford.

CATTLE.

(Open for competition to the United Kingdom.)

SHORTHORNS

Bulls above two years old.—First prize, and silver cup, H. Thompson, Penrith; second, W. Linton, Sheriff Hutton, York; third, the Marquis of Exeter, Stamford. Highly commended: J. Outhwaite, Catterick; Rev. W. Sneyd, Keele-hall, Newcastle; J. Knowles, Wetherby. Commended: E. J. Smith, Islanmore, Croom, Limerick; T. Stamper, Highfield-house, Oswal Kirk.

Bulls above one, but under two years old.—First prize, Rev. W. Sneyd; second, T. Lace, Grenaby, Isle of Man; third, R. Parker, Fern-hill, Burnley.

Bull calf above six, but under twelve months old.—First prize, J. Knowles, Wetherby; second, T. Statter, junior, Stand-hall, Whitefield, Manchester; third, Rev. W. Sneyd.

Cow above three years old, in milk or in calf.—First prize, and silver cup, J. Outhwaite, Catterick; second, J. W. Kirkham, Cadeby-hall, Grimsby. Highly commended: Rev. L. C. Wood, Singleton-lodge, Kirkham. Commended: F. Lythall, The Spittall Farm, Banbury.

Heifer above two, but under three years old.—First and second prizes, F. J. S. Foljambe, M.P., Osberton-hall, Worksop; third, the Earl of Harrington, Elvaston-castle, Derby. Highly commended: J. R. Chaplin, Ridgewell, Halstead, Essex.

Heifer above one, but under two years old.—First prize, and silver cup, E. J. Smith, Islanmore, Croom, Limerick; second and third, Rev. W. Sneyd.

Heifer calf above six, but under twelve months.—First prize, J. Farrer, Thorneyholme, Burnley; second, E. H. Cheney, Gaddesby-hall, Leicester; third, the Earl of Harrington.

OTHER BREEDS.

Ayrshire cow or heifer above two years old, in-milk or in-calf.—First prize, the Earl of Crawford and Balcarres, Haigh-hall, Wigan; second, A. Woods, Sefton; third, T. Stratter, jun., Whitefield.

Welsh cow or heifer above two years old, in-milk or in-calf.—First prize, F. W. Earle, Edenhurst, Huyton; second and third, T. Statter, jun.

Kerry cow or heifer above two years old, in-milk or in-calf.—First prize, Rev. J. C. Macdonald, Hillbre-house, Cheshire; second, J. G. Morris, Allerton; third, H. Inman, Stretford, Manchester. Highly commended: Rev. J. C. Macdonald. Commended: R. Gladstone, jun., Court-hey.

French or Channel Islands cow or heifer above two years old, in-milk or in-calf.—First prize, G. Maples, jun., Wavertree; second and third, J. P. Duff, Lydiate-house. Highly commended: W. Pritchard, Aigburth.

French or Channel Island bull, of any age.—First prize, Williamson Brothers, Ramsdell-hall, Cheshire; second, H. S. Woodcock, Wigan.

Kerry bull.—First prize, Rev. J. C. Macdonald; second, R. Gladstone, jun.

Welsh bull of any age.—Prize, T. Statter, jun.

Ayrshire bull of any age.—First prize, J. Tweddle, Askerton Castle, Cumberland; second, R. Kerr, Fazakerly, Liverpool.

Best bull of any breed, belonging to a landlord resident in the district, that is allowed to serve the cows of his tenants

gratis, the Society's silver medal to the Earl of Crawford and Balcarres.

There were other classes, with the competition limited to members resident in the Society's district.

SHEEP.

(Open for competition to the United Kingdom.)

LEICESTERS.

Shearling ram.—First and second prizes, T. H. Hutchinson, Catterick; third, J. T. Clifton, Lytham Park. Commended: T. H. Hutchinson.

Ram of any other age.—First and second prizes, T. H. Hutchinson; third, E. Riley, Beverley; silver medal, G. F. Statter, Carlisle. Commended: T. H. Hutchinson.

Ram lamb.—First, second, and third prizes, P. Hutchinson.

Three shearling ewes.—First and second prizes, T. H. Hutchinson; third, E. Riley. Highly commended: E. Riley.

Three ewes of any age, having reared lambs this year.—First and second prizes, T. H. Hutchinson; third, G. F. Statter.

Three ewe lambs.—First and second prizes, T. H. Hutchinson.

SHROPSHIRE DOWNS.

Shearling ram.—First prize, J. Coxon, Freeford, Lichfield; second, Lord Wenlock, Escrick Park, York; third, Sarah Beach, The Huttons, Brewood. Highly commended: W. Yates, Shifnal, Salop.

Ram of any other age.—First prize, W. Baker, Atherstone Warwick; second, Lord Wenlock; third, S. Griffiths, Overton, Ruabon. Highly commended: B. Wainman, Newport, Salop.

Ram lamb.—First and third prizes, T. Nock, Sutton Madock, Shifnal; second, T. Johnson, Frodsham. Highly commended and commended: J. Coxon, Freeford.

Three shearling ewes.—First prize, Sarah Beach (and the silver cup for the best pen of three ewes); second, W. Baker; third, Lord Wenlock. Highly commended: J. Coxon. Commended: W. Baker and T. Nock.

Three ewes of any age, having reared lambs this year.—First prize, S. Beach; second and third, W. Baker. Highly commended: J. H. Bradburne, Lichfield. Commended: T. Nock and J. H. Bradburne.

Three ewe lambs.—First prize, J. H. Bradburne; second, S. Beach; third, W. Yates. Highly commended: T. Nock and J. Coxon. Commended: W. Baker and T. Johnson.

SOUTH DOWNS.

Shearling ram.—First and second prizes, Col. R. N. Fitzharding Kingscote, Wotton-under-Edge, Gloucestershire; third, J. and A. Heasman, Angmering, Arundel, Sussex.

Ram of any other age.—First prize, H. S. Waller, Farmington, Northbeach; second and third, Col. R. N. Fitzharding Kingscote.

Three shearling ewes.—First, second, and third prizes, Col. R. N. Fitzharding Kingscote.

Three ewes of any age that have reared lambs this year.—First and second prizes, H. S. Waller.

CHEVIOTS.

Shearling ram.—First and second prizes, R. Shortreed, Kelso, N.B. Commended: J. Robson, Rochester.

Ram of any other age.—First and second prizes, J. Robson.

Three shearling ewes.—First and second prizes, R. Shortreed.

Three ewes of any age, having reared lambs this season.—First and second prizes, R. Shortreed.

CROSS-BRED SHEEP.

Three shearling ewes.—Prize, S. Davies, Eardswick Hall.

PIGS.

Boar of large white breed above one year old.—First and second prizes, P. Eden, Salford; third, R. E. Duckering, Northorpe, Kirton Lindsey.

Sow of large white breed above one year old, for breeding.—First prize, P. Eden; second, R. E. Duckering; third, C. R. Nuttall, Beswicke Royds, Lyke House, Littleborough, Lancashire.

Boar of large white breed under one year old.—First prize, P. Eden; second and third, R. E. Duckering.

Pair of sows of large white breed under one year old.—First prize, P. Eden; second, R. E. Duckering.

Boar of small white breed above one year old.—First prize and cup, and second, P. Eden; third, C. R. Nuttall.

Breeding sow of small white breed above one year old.—First prize, C. Roberts, Railway Waggon Works, Wakefield; second, C. R. Nuttall; third, R. E. Duckering.

Boar of small white breed under one year old.—First and third prizes, P. Eden; second, C. R. Nuttall.

Pair of sows of small white breed under one year old.—First prize, C. R. Nuttall; second, P. Eden; third, R. E. Duckering.

Boar of middle-breed above one year old.—First prize, J. E. Fox, Mansion House, Great Horton, Bradford; second, F. Ambler, Haugh Shaw, Halifax.

Breeding sow of middle-breed above one year old.—First prize and cup, P. Eden; second, R. E. Duckering; third, J. Kenyon, Brighton-street, Redbank, Manchester.

Boar of middle-breed under one year old.—First and third prizes, P. Eden; second, H. Neild, The Grange, Worsley, Manchester.

Pair of sows of middle-breed under one year old.—First and second prizes, P. Eden; third, R. E. Duckering.

Boar of the Berkshire breed above one year old.—First prize and cup, J. Smith, Henley-in-Arden, Warwickshire; second, Earl of Harrington, Elvaston Castle, Derby; third, J. J. Briscoe, Thornton-hall, Sutton, Chester.

Breeding sow of the Berkshire breed above one year old.—First and cup, R. Swanwick, Royal Agricultural College Farm; second, C. Morris, Holmleigh, Grassendale; third, F. Rigg, Lea-green, St. Helens.

Boar pig of the Berkshire breed under one year old.—First and second prizes, R. Swanwick; third, Earl of Harrington.

Pair of sow pigs of the Berkshire breed under one year old.—First prize, Marquis of Westminster, Moat House, Tarporley, Cheshire; second, R. Swanwick; third, T. Atherton, Chapel-house, Garston.

Boar, improved Essex breed, above one year old.—First prize and cup, and second, J. Knowles, Wetherby House, Wetherby; third, P. Eden.

Breeding sow, improved Essex breed, above one year old.—First prize and cup, J. Knowles; second, H. N. Abbinett, Finch House, West Derby; third, R. E. Duckering.

Boar, improved Essex breed, under one year old.—First and second prizes, J. Knowles; third, H. N. Abbinett.

Pair of sows, improved Essex breed, under one year old.—First and second prizes, J. Knowles; third, T. Comber, Redcliffe, Newton-le-Willows.

EXTRA STOCK.—A medal was awarded to M. Walton, Foundry-street, Halifax, for litter of black pigs, aged twelve weeks.

CHEESE.

(Open for competition to the United Kingdom.)

Four coloured cheese, above 40lbs. weight each.—First prize, G. Prescott, Hulgrave, Minshull Vernon; second, T. Balmer, Tattenhall, Chester; third, T. Simon, Ternhill, Market Drayton. Commended: W. Dean, Ledsham, Sutton, Chester; G. Ridout, Leighton, Middlewich; J. Cornes, New Farm, Hurlston, Nantwich.

Four white or uncoloured cheese, above 40lbs. weight.—First prize, T. Balmer; second, J. Cliffe, Whitley Hall, Northwich; third, H. Wood, Pucknall Farm, Romsey, Hants. Highly commended: J. Wood, Town Fields, Over.

EXTRA PRIZE.—The judges recommend the Society's silver medal as a premium to G. Murray, Elvaston Castle, Derby, for model of cheese factory and the whole of the working plant.

FRESH BUTTER.

Six half-pounds, production of exhibitor's own dairy.—First prize and champion prize, Rev. A. Wright, Tilston Rectory; second, E. Turner, Gooden Farm, Heywood; third, T. Harrison, Aughton, Liverpool; fourth, H. Wood, Romsey. Commended: B. G. D. Cooke, Colmenny, Mold; and S. Davies, Eardswick Hall, Middlewich.

SEEDS.

(Open to competition to seedsmen or gardeners.)

Stands of farm and garden seeds, grain, and roots.—First prize, J. Carter and Co., London; second, J. Dixon and Son, Chester.

GRAIN AND ROOTS.

(Grown by exhibitors in 1871: Open for competition to the United Kingdom.)

GRAIN.

White wheat, not less than two bushels.—First prize, T. H. Hodson, Nantwich; second, J. K. Fowler, Aylesbury, Bucks; third, J. Cornes, Hurlleston, Nantwich.

Yellow or red wheat, not less than two bushels.—First prize, F. Lythall, Banbury; second, W. Sheffield, Tattenhall, Chester; third, J. Greatorex, Stretton, Burton-on-Trent.

White oats, any variety, not less than two bushels.—First prize, J. Southern, Culcheth, Warrington; second, F. Lythall; third, J. Cornes.

Yellow oats, any variety, not less than two bushels.—Prize, H. Neild, Worsley, Manchester.

Barley, any variety, not less than two bushels.—First prize, J. K. Fowler; second, J. Cartwright, Speke; third, T. H. Hodson.

Beans, any variety, not less than two bushels.—First prize, F. Lythall; second, J. K. Fowler.

ROOTS.

Six roots of Swedish turnips of any kind.—First prize, T. Beakbane, Lunt, Liverpool; second, J. K. Fowler; third, W. Birch, Aintree.

Six roots of any other kind of turnips.—First prize, H. Neild, Worsley, Manchester; second, S. Allen, Onston, Weaverham; third, J. Greatorex, Stretton, Burton-on-Trent.

Six roots of long red mangel wurzel.—First prize, T. Balmer, Tattenhall, Chester; second, J. Birch, Sefton, Maghull; third, G. W. Crump, Woolas-hill Farm, Pershore.

Six roots of yellow mangel wurzel.—First prize, J. K. Fowler; second, T. Balmer; third, J. McGregor, Weaverham, Cheshire.

Six roots of any kind of globe mangel wurzel.—First prize, G. W. Crump; second, J. Cornes, Hurlleston, Nantwich.

Two Scotch cabbages.—First prize, H. Neild; second, J. Greatorex.

Samples of twenty round potatoes (kind to be stated on entry).—First prize, J. Sorley, Roselands, Aigburth; second, J. Cartwright, Speke; third, F. Lythall, Banbury.

Samples of twenty flat potatoes (kind to be stated on entry).—First prize, F. Lythall; second, H. Simecock, Barton Moss; third, H. Neild.

Samples of twenty bovine or other cattle potatoes (kind to be stated on entry).—First prize, F. Lythall; second, R. Beckett, Harford, Northwich; third, H. Neild.

Collection of samples of grain and roots, all of exhibitor's own growing in 1871.—First prize, J. K. Fowler; second, J. Greatorex.

EXTRA PRODUCE.—A medal to A. Baruchson, Waterloo, for white Silesian sugar beet, and collection of various sorts of sugar manufactured therefrom, also of spirits distilled from the best molasses, and potash made from the refuse after distillation. A medal to J. Sorley, for samples of seedling potatoes, of exhibitor's own growing from the potato apple of the third year's growth.

IMPLEMENTS, MACHINERY, &c.

Agricultural machinery in motion.—First prize, J. and H. Keyworth and Co., Liverpool.

Collection of farm implements and tools.—First prize, J. and W. Keyworth, Liverpool.

Dairy vessels and utensils.—First prize, John Gidman, King-street, Knutsford; second, W. and F. Richmond, Colne.

Articles of domestic use.—First prize, G. Peet, 13, Great George-street, Liverpool; second, W. Bennett, jun., Liverpool.

Useful articles in slate.—First prize, W. Orme Carter, Liverpool; second, Belcher and Gee, Gloucester.

Best stand of carts, waggons, and drays, for farm and town purposes.—First prize, H. Bracewell, Uriehe, Burnley.

Best stand of carriages, whitechaps, &c.—First prize, J. Evans, 46, Seel-street, Liverpool; silver medal, Hy. Farr, Market-place, Wigan; medals, Francis Mulliner, Liverpool, and M'Naught and Smith, Worcester.

Best assortment of stable and cowhouse fittings.—First prize, Musgrave Brothers, Belfast.

Best field-gate and posts of any material, with self-adjusting fastening.—First prize, F. Morton and Co. (Limited), Naylor-street, Liverpool.

Best and most useful waggon for farming purposes.—Medal to H. Bracewell, Burnley.

Best two-horse cart for general farm purposes.—Medal to H. Bracewell, Burnley. Best one-horse ditto: Medal to Wm. Ball and Son, Rothwell, Kettering.

At the dinner, Lord DERBY, the chairman, said: I rise to propose "Prosperity to the Manchester and Liverpool Agricultural Society," and fortunately the figures in my hand enable me to assure you that that prosperity is not merely a wish in your mind or in mine, but an accomplished fact. The Society has existed now in its present form for nearly a quarter of a century, and its history is one of steady rapid growth. In 1850 the number of persons who paid for admission to the show-yard was 3,300, in 1860 it was over 20,000, and three years ago at Manchester it was 33,000, or just tenfold the number of seventeen years before. The entries of like stock, produce, and of implements, stand higher than in any former year, and in implements especially the increase has been enormous. In that department the entries at the present meeting are 2,600, which, I am told, is 1,600 more than at any previous show. We have 750 members, of whom 150 were admitted within the last twelve months. We have £1,000 laid by for a rainy day; we have an income which was last year over £3,000, not including the balance from the year before. Our yearly subscribers are 20 per cent. more in number than they were in 1870, and an extra fund of more than £2,000 has been raised by the local committee in aid of this exhibition. I think you will want no further proof that the Society is doing its work and holding its own. Nor is it necessary that I should stop to argue the question as to the usefulness of societies of this kind. Experience has decided that matter for us. There is hardly a parish in England which does not help to support one, and in these parts so far from their falling off the tendency is rather to multiply them to excess. Their object is, in one word, to show the farmer how to make the most of his land. Now, if there is one thing more certain than another, it is this, that where farming has to be applied to a limited area like that of England, where an acre costs more than a square mile in some countries, it can only be made to answer. Foreign competition and home competition, too, can only be met by the combination of chemical and mechanical appliances, requiring some capital to attain them and some knowledge to manage them. Of course a man may go on after the fashion of the Irish cottiers, scratching the earth for a bare subsistence, but that is not farming; and I am only repeating an opinion which I have expressed before, and which I hold very strongly, when I say that the cottier, the peasant cultivator, honest and industrious and frugal as he may be, has just as much chance of holding his own against the combination of capital and science as bows and arrows have of superseding breech-loading rifles, or hand-loom weaving of driving the power-loom out of the field. And do not let anyone imagine that this question of skilled or unskilled farming is a small one. It may very well be that the enormous wealth due to manufactures and commerce, the wealth which is represented by 200 millions yearly of British exports, the wealth for which we lay the whole world under contribution, should make us comparatively indifferent to what we get out of the spoil, and, apart from that, there is a claim which may be put forward, and which, within fair limits, is a very reasonable claim, for the preservation of a moderate proportion of our little island for purposes of beauty and enjoyment, whether to the owners or to the public. High farming is apt not to be picturesque, and some sacrifices of profit may reasonably be made in the interest of that kind of taste which we all desire to see more and more extended. But, after setting apart all that can be required for that purpose on a liberal allowance, the fact still remains that we do not get, as yet, out of English earth one-half of what we probably might with advantage if all our present resources were brought to bear on the soil. Mr. Mechi, who, as most of you know, is rather enthusiastic in this matter, puts the estimate much higher, but I don't want to overstate my case. No doubt there has been, and there is great improvement. We hear talk now and then about the reclamation of waste lands, and it is endeavoured to raise a cry on that subject. Why, ever since I can remember, we have been

reclaiming our waste lands in Lancashire, without any fuss or noise about it, and in half a century we have pretty well succeeded in changing the face of the country; and if anyone complains that this process of improvement does not go on fast enough, they must remember that in the nature of the case where tenant-farmers are concerned it must be a gradual one. There are other besides economical considerations which affect us. We may wish that all our tenants had capital and science and energy, but I think that very few landlords would choose to lay it down as a principle that anyone not possessing these qualifications should be turned off from a farm on which he and his fathers before him may have lived. We want to move on, but we want also, if possible, to move on together—to live and let live—not for a few to make fortunes and the rest go to the dogs; and I will add that if this work of agricultural improvement is to be carried on as it should be, it is the landlord, quite as much as the farmer, who must put his shoulder to the wheel. It may be said that he has not very often the capital required. Well, I believe that what is wanted from the landlord is much less than he should put a large amount of capital of his own on to the soil—though of course, that is desirable—than that he should offer no obstacle to its being put on by the tenant. Security is the first requisite, and I hold that any tenant good enough to be kept permanently on the land ought to have a lease if he wants one. I say “kept permanently,” because there are, of course, cases where tenants are retained from kindly feelings, though not very fit to do justice to their farms, and in such cases the landlord may reasonably desire some check upon mismanagement. As to conditions of letting, they would vary in different places, but I have not altered the opinion which I expressed some years ago, that as a rule they ought to be few and simple. If a man is not able or willing to do the work, he is in the wrong place, and would be better away, though I admit that in practice you cannot always act upon that view. If he is fit for his business he will probably do it best in his own way. Then there is that ticklish question of game—a word I am almost afraid of uttering on such an occasion, though I do not think I shall have anything to say upon it that can provoke controversy. I have always thought it a question which, with moderation and good sense on both sides, ought not to give trouble. Nobody can doubt that there is a great deal of over-preserving in England, and that in some places it has been carried so far as to amount to a public nuisance, and when that is the case I hold that what is in fault is not the love of sport, but a love of ostentation and display, and it can hardly assume a more objectionable shape. We are told that there is to be some legislation on the subject. Now, personally I am not a very keen sportsman, and I shall acquiesce heartily in whatever Parliament may decide; but I would just point out that it is possible for you to go so far as to defeat your own object. The absolute sweeping away of the power of keeping game on farms, however brought about, would of course imply, under their changed conditions, a general revaluation for rents, and by that operation the tenant would certainly not be a gainer; while in other cases it might probably lead to this—the rich men, fond of their sport, and willing to make sacrifices in order to keep it, would take more and more of their estates into their own hands in order to enjoy their amusement undisturbed. That would not be an arrangement, I think, for the benefit of any party. One thing, I think, the tenant really has in many cases to complain of, and that is the difficulty of making a fair bargain with his landlord where game is concerned; because, not knowing what the quantity of it will be, he cannot form an estimate beforehand as to the probability of loss. If that can be remedied—and I do not see why it should not be—I cannot see that there is any injustice or grievance remaining so far as that is concerned. I ought to apologize for the length at which I am detaining you, but there is a far wider and graver question which many have for years past been discussing at public meetings, and which I do not like to leave entirely untouched—I mean the question of ownership of the soil. I have but little to trouble you with in regard to it, and I shall carefully avoid touching on anything that can be considered political ground. What I most wish to point out is the curious uncertainty as to the facts of the case in which we are, and the expediency of doing something to have that uncertainty removed. I have seen it repeated again and again that the whole soil of these islands is in the hands of less than 30,000 persons, but it is perfectly

well known to every one much interested in such matters that that assertion rests on a mere mistake—on the misreading of a statement made in the Census of 1861. In that Census about 30,000 persons returned themselves under the head of landowners, the great majority who held land having entered themselves, as they were free to do, under other designations; and the best proof of the fallacy of the figures is this—that 15,000 out of the whole so returned were women. Now, we know that half the land is not in female hands, and that probably not one-tenth of our landowners, if so many, are women. I won't set guess against guess, but if I were compelled to do so I should say you might multiply the figure I have given of 30,000 by ten at least, and still be below the mark. Another fallacy constantly repeated, and which I can with similar confidence contradict, even from my own limited experience, is that it is a very difficult matter for anyone to buy a landed estate, that land is so locked up that it cannot be brought into the market. Now, inasmuch as people having estates to sell are fond of pressing them on the notice of those whom they suppose may wish to buy, I have some personal knowledge of that matter, and I affirm with confidence that there is at this moment hardly a county in England where a man looking for a landed investment cannot find what he wants. If it were otherwise, we should have plenty of complaints from the capitalists of these parts; but the fact is, I believe, that at the present time there are, of the two, more sellers than buyers. We live in days of change. There are a great many people who prefer to have their property where they can, at a few hours' notice, move it to any part of the world, and that is a feeling more likely to increase than diminish. It may be the fact—I believe it is—that a man who wants only a few acres does not always find it easy to buy them, but if there is any real demand for small freeholds, surely it would be worth the while of speculators to buy up large estates as they come into the market and to sell them again piecemeal. If that is not done, the only reason can be that it does not pay. Then there is another notion afloat—that estates are constantly tending to become fewer in number and bigger in size. That is the point on which no man's observation can be wide enough to enable him to speak with certainty; but I greatly doubt whether the fact is so. Some large estates, no doubt, are growing, but many also break up, and the one process probably balances the other. Near great towns, especially near London, there is certainly, as a rule, more of disruption than of accumulation. My belief is—though I give it only as a thing which seems to me probable, not as a thing proved—that both very great and very small properties are becoming fewer, and those of a middle size more numerous. Poor landowners prefer ten per cent. in trade to two per cent. from land—they sell and go into business; and, on the other hand, there is a limit beyond which most men do not desire to extend their holding of what is essentially an unremunerative investment. But why should we be left on this subject to mere speculation? Is it impossible to get at the facts? Is a Domesday Book more difficult now than in the days of the Conqueror? If what is called the Land Question is to come to the front, as I suppose it will, surely we ought to discuss it with as much positive knowledge as we can bring to bear. I am not insensible—no man who keeps his eyes open can be so—to the value, in a social point of view, of having a numerous body of men concerned in land owning. My contention is only this, that the supply of land in the market fully equals the present demand, and that the popular theory, that it is so locked up that nobody can buy, rests on no solid foundation.

Mr. CHRISTOPHER BUSHELL proposed Success to the Royal Agricultural Societies of England, Ireland, and Scotland.

Mr. B. Gibbs responded on behalf of the Royal Agricultural Society of England; Mr. R. A. Macfie, M.P., on behalf of the Highland and Agricultural Society of Scotland; and Mr. E. Purdon on behalf of the Royal Agricultural Society of Ireland.

Mr. J. M. K. ELLIOTT responded for the judges. In the classes he had to deal with he could not please himself. It was in this way: all the classes were so numerous and so good that, if possible, he would have had great pleasure in giving many more prizes.

During the three days of this Meeting 75,000 visited the Show-yard, and the receipts amounted to £4,850.

LEOMINSTER AGRICULTURAL SOCIETY.

The first exhibition of cattle, horses, sheep, pigs, and implements, under the auspices of the revived Leominster Agricultural Society, was held on the first Monday in September. The Leominster show of olden days was a sight worth the seeing, and well deserved its popularity. Just as the Society was in its zenith, and on the very eve of the holding of its show, came the out-break of the cattle plague, and the meeting had of necessity to be postponed. This was in 1865; nor has any exhibition till now been held since that time. Hereford cattle again formed the principal element in the show, and for the best bull and offspring Mr. Philip Turner carried off the prize with Bachelor, the second prize at Wolverhampton, and Mr. H. N. Edwards, the only other competitor in this class came in for a commendation with Sir John. For the best pair of two-year-old steers Mr. Edward Hughes, Lady Court, took the prize, and came in for a commendation with another pair. The competition in this class also was limited, there being only one other exhibitor, Mr. Philip Turner. The prize heifers in class 3 (best pair calved since 1st March, 1869) were the property also of Mr. Turner. The prize takers in the next class (best pair of steers calved since 1st March, 1870) were exhibited by Mr. George Bedford, Milton; and the best yearling heifers were shown by Mr. T. Fenn, of Downton. There was a more extended competition in this class, and besides the prize takers Mr. George Yeld, Twyford, and Mr. H. N. Edwards, of Broad-street, were each commended. In the class of bull calves Mr. H. N. Edwards's calf, though it gained the first prize at the Royal, came in for only second honours here, Mr. S. Edwards's calf taking first. In class 9 again (best rear of yearlings) there were only two competitors, Mr. Edward Hughes, Lady Court, and Mr. R. H. Ridler, Gattertop. The prizes were taken by Mr. Hughes with 28, while Mr. Ridler showed 24. In the extra stock class Mr. J. H. Arkwright showed a lot of breeding cows, and also some heifers; Mr. G. Yeld a lot of heifers, and Mr. Smith, Monkland, and Mr. Meredith, Wharton, each some steers, those of the first-named exhibitor (twelve in number) being not for competition. There was a fair amount of competition in the sheep classes. Mr. Pinches's Headsman took the prize as the best whiteface, and Mr. Fenn's Shropshire as the best of the blackfaced breed. Mr. Pinches and Mr. Fenn occupied the same relative positions in the classes for ewes, Mr. Pinches taking the prize for the best pen of ten whitefaced, and Mr. Fenn for the best pen of blackfaced; while Mr. John Thomas, of Cholstrey, was commended for a pen of whitefaced ewes, and Mr. T. D. Edwards for a pen of ten blackfaced sheep. Mr. Thomas was first also with whitefaced wether lambs, and Mr. T. A. Turner, Staunton-on-Arrow, with blackfaced wether lambs. Mr. Pinches was again successful in whitefaced yearling ewes, Mr. John Thomas receiving commendation. The honours in the last class of blackfaced yearlings were taken by Mr. Turner, of Staunton, and Mr. Fenn commended. Mr. Pinches exhibited several ram and yearling lambs and some ewes as extra stock, for which he took some prizes, and Mr. Thomas sundry lots under the same head, for which he also was awarded a prize. The pig classes were the worst represented of any at the show, there being only two entries, and those by the same exhibitor, Mrs. Prescott, of Bockleton. In the horse classes there was a capital show. For the best colt or filly under five years old, suitable for hunting purposes, Mr. G. Bedford, Milton, took the prize with a gelding by Stepping Stone. There were five entries in the hunter's class, and Mr. Bonham Caldwell's Gemma Junior was declared the winner. In the cob class the prize-taker was the property of Major Pelpoe; while a good-looking animal, exhibited by Mr. T. Cranston, Little Dilwyn, came in for a commendation. There were only two entries for the best nag mare and foal, Mr. Edwards, of Broadward, taking the prize. For the best yearling nag colt or filly, Captain Stevenson, of Hennon House, Leominster, received the prize with a colt by Double X, Mr. Edward Hughes being commended. In the class for cart horses the prize-takers were Mr. R. J. Dent, Alton Court, Dilwyn, cart gelding; Mr. W. Hinton, Lady

Meadow, Yarpole, cart mare and colt, and Mr. W. K. Godfrey, Stoke Prior, Leominster, colt; and Mr. Lane, Ryelands, and Mr. G. Bedford, Milton, were each commended, the former for a filly, and the latter for a colt. There was a terrible "wrangle" over the hunters' prize award, the Judge having increased the strength of the fences.

The judges were: For cattle, sheep, and pigs, Mr. John Wigmore, Lower Wesson, Ross, and Mr. James Williams, Stretford Bury; and for horses, Mr. John Walker, Knights-wick. At the dinner

Mr. EDWARDS, the Vice-Chairman, said that with regard to the number of entries that they were as numerous as under the circumstances could have been expected, because, as all present were aware, it was something like seven years since the last show was held, and naturally it was a matter of some difficulty to resuscitate a thing that was half defunct. But they had got in the Leominster district agriculturists who were doing their best to produce good stock, and they had also got in that district some of the very best Herefords that could be produced. They had men, too, who were trying to produce sheep the best calculated for the country. He saw no reason, therefore, why they should not have a tolerably good show of cattle, sheep, and horses, once a year and every year. It had been brought to his knowledge within the last few days that there was some talk of an amalgamation between Herefordshire, Shropshire, Worcestershire, and Gloucestershire; and should such amalgamation take place he believed it would be to the advantage of all the counties. We could help the other counties, and they could help us, and if only we could part with that little bit of jealous feeling which we had we might both give and receive a good deal of good; but if no such amalgamation should take place he thought they might be able to have a fair show in Leominster every year.

Sir HERBERT CROFT referring to the allusion made by the vice-chairman to an amalgamation of the Herefordshire, Shropshire, Worcestershire, and Gloucester Societies into one, said he saw the challenge thrown down the other day at Malvern for the amalgamation of the four societies, and he must honestly confess he would be very glad indeed to see it take place for this especial reason, that as there was no chance of having the Royal at Hereford for the next ten years, and as when it did come it was rather an expensive amusement, he would be glad to see a society established in this part of the world something after the model of the Bath and West of England as an amalgamated society of the four counties of Hereford, Gloucester, and so on, would be. But although Mr. Edwards had alluded to the possibility of an amalgamation taking place, he did not observe that Mr. Walker, who came from Worcestershire, seemed at all delighted with the idea; but he must say that amongst those with whom he had talked the opinion seemed to be that such a show would be an extremely good thing, provided it could take place not at the expense of the local shows. It came therefore to this. At present there did not seem to be any inclination to do away with the local shows, which were feeders to the larger shows; and the starting of such a show as had been spoken of seemed to resolve itself simply into a question of money. He would be extremely glad himself to subscribe to such a society as he had hinted at. If the four counties could be united, and the meetings held on the same principle as the music festival at the county town of each in turn, he thought it would be an extremely desirable thing for all parties. He expressed no opinion of his own on the question; he simply said he did not think the farmers generally seemed at all in the humour to give up their local shows in order to have a show once in four years.

Mr. WALKER said that, as a member of the committee of the Worcester Agricultural Society, he would only say, in rejoinder to Sir Herbert Croft's allusion to his silence on this point when he spoke before, that Worcester would be pleased to join the other three counties in the way suggested. He had not, he said, expressed any opinion on the matter when speaking before, considering that he was then speaking as a

judge, and as a judge only. But, being appealed to, he could assure the company that it was the sincere wish of the Worcester Society to join the other three counties.

Mr. WATTS said he could remember the time when the plough was drawn by four or five horses. Now, only two were used. The land, too, had been much improved of late years by draining, though it was not by draining only, but the knowledge that had been diffused that had led to the improvements which had taken place in agriculture. With regard to the white-faced breed of cattle, he should be glad to subscribe or do anything he could to maintain that breed. He had seen them in many places, and that celebrated man, Mr. Heath, always said there was no cattle equal to the Herefords. Then with regard to horses, when he was a boy there were a great many better horses bred in Herefordshire than there were at the present time. There used to be some very good breeding mares in the neighbourhood of Ivington, but they had all gone. As to sheep, there had been great improvement in those animals. The black-faced sheep came originally from Norfolk,

and crossed with what were called the Shropshire-down; but they were then very different animals from what they now were. He recollected that old Mr. Edwards, of Broadward, used to have a very fine flock of Leicester sheep.

Mr. THOMAS said: As to the amalgamation of Herefordshire with Shropshire and the other counties, his opinion was that the Hereford being a distinct breed no such amalgamation ought to be allowed to take place. If they did amalgamate and did away with the Hereford show it would be a serious thing for the breeders, for people came from all parts of the world to buy cattle at that show. He was an advocate for local shows, but he would say let the Hereford show be kept up by all means. These local societies brought people together, and a great deal of good arose from them. He was sorry to find that they were not better supported by the county gentry. They had been favoured with the company of two of the county members at that meeting, but he certainly felt regret that there were not more local gentry present.

THE CLEVELAND AGRICULTURAL SOCIETY.

The annual show was held at South Stockton. With the exception of cattle, the entries in all the departments were good, but not equal to the show of last year when held at Guisborough. No doubt the extensive prevalence of the cattle disease in the district had influenced the entries, and hence the smaller number in comparison with previous years. The total amount of money offered in prizes was £400. The entries comprised the following: Horses 260, Shorthorns 22, sheep 50, pigs 25, poultry 140, dairy produce 13.

JUDGES.

CATTLE, SHEEP, AND PIGS.—S. Rowlandson, Newton Morrell; T. Wetherell, Claypath, Darlington; T. Outhwaite, Knaresborough.

HORSES.—Hunters: C. Wood, South Dalton; J. Parrington, Brancepeth; A. L. Maynard, Newton Hall. Cleveland Bays and Coaching: R. Hodgson, jun., Langton Grange; J. S. Darrell, West Ayton; J. Furness, Ferryhill. Draught, Roadsters, and Ponies: T. Scott, Boroughbridge; J. Thomas, North Otterington; J. S. Stowell, Darlington.

POULTRY.—E. Hutton, Pudsey.

EGGS, BUTTER, AND CHEESE.—G. Watson, Middlesbrough; A. C. Knowles, Stockton-on-Tees.

SHORTHORNS.

OPEN TO ALL PARTS OF THE UNITED KINGDOM.

Bulls of any age.—First prize, T. M. Cleasby, Redcar; second, Earl Vane.

Cows in calf or milk.—Prize, R. Emmerson, jun., Darlington.

DISTRICT CLASSES.

Bulls of any age.—First prize, Representatives of the late T. Johnson, Stockton-on-Tees; second, R. Brunton, Middlesbrough.

Bulls under eighteen months old.—First prize, Mrs. Kitching, Northallerton; second, J. Pierson, Great Ayton.

Cows in calf or milk.—First prize, D. Webster, Northallerton; second, W. Wilson, South Stockton.

Cows for dairy purposes in calf or milk.—First prize, J. Herring, Middlesbrough; second, T. Robinson, Stockton.

Two-year-old heifers in calf or milk.—First prize, R. Beach, Stockton; second, W. Callender, Stockton.

SHEEP.

LEICESTERS AND BLACKFACED.

(DISTRICT PRIZES.)

Shearling rams.—First and second prize, R. P. Petch, Marske-by-the-Sea.

Two shear and upwards.—First prize, R. P. Petch; second, R. Beach.

Pens of five breeding ewes.—First prize, R. Beach; second, R. P. Petch.

Pens of five shearling gammers.—First prize, H. Elliff, Yarm; second, R. Beach.

Pens of five gimmer lambs.—First prize, F. Tidyman, Stockton; second, Mrs. Kitching.

Tup lambs.—Prize, F. Tidyman.

Blackfaced tups.—First and second prize, W. Rudsdale, Yarm.

Pens of five blackfaced breeding ewes.—First prize, Messrs. C. and J. Smith, Yarm; second, W. Rudsdale.

PIGS.

Boar, under two years old, large breed.—First prize, J. Dinsdale, South Stockton; second, W. Rudsdale, Yarm.

Boar, under two years old, small breed.—First prize, W. Rudsdale; second, J. Nightingale, Guisboro'.

Sow of any age, large breed, in pig or milk.—First prize, P. Sturdy, Middlesbro'; second, W. Rudsdale.

Sow of any age, small breed, in pig or milk.—Prize, J. Nightingale.

Grazing pig.—First and second prize, J. Starling, Guisboro'.

Litter of pigs under eight weeks of age.—First prize, J. Nightingale; second, F. Carter, Middlesbro'.

Two store pigs, any breed, not exceeding twelve months old.—First prize, W. Appleton, Stokesley; second, T. Curry, Great Ayton.

HORSES.

Cleveland bay brood mare.—First prize, L. Manfield, Thirsk; second, R. J. Sayer, Great Ayton.

Cleveland bay colt foal.—First prize, W. Wise, Northallerton; second, T. Wood, Marske-by-the-Sea.

Cleveland bay filly foal.—First prize, J. Porritt, Saltburn-by-the-Seas; second, I. Ward, Guisbro'.

Cleveland bay yearling filly.—First prize, T. Wood; second, I. Plews, Whitby.

Coaching brood mare.—First prize, R. Watson, Stockton-on-Tees; second, W. L. Robinson, Easingwold.

Coaching colt foal.—First prize, J. Snowball, Hemlington; second, J. Dodsworth, Stockton-on-Tees.

Coaching filly foal.—Prize, W. Hutchinson, Yarm.

Coaching yearling gelding.—First prize, L. Manfield; second, T. Curry, Great Ayton.

Coaching two-year-old gelding.—Prize, G. Robinson, Middlesbro'.

Coaching two-year-old filly.—First prize, J. and W. Garnett, Northallerton; second, J. Featherstone, Middlesbro'.

Coaching three-year-old gelding.—First prize, J. and G. Leng, Darlington; second, J. S. Stowell, Darlington.

Coaching three-year-old filly.—First prize, J. Coulson, Yarm; second, H. Carter, Stockton-on-Tees.

Roadster brood mare.—First prize, W. F. Pilter, South Preston; second, P. Sturdy.

Roadster foal, colt, or filly.—First prize, W. Wallis, Redcar; second, J. Davison, Darlington.

Roadster yearling colt or filly.—First prize, P. Sturdy; second, M. Brunton, Darlington.

Roadster two-year-old colt or filly.—First prize, J. W. Pease, M.P., Guisbro; second, J. Kirby, Knayton.

Roadster three-year-old colt or filly.—First prize, J. Carter, Richmond; second, M. Law, Darlington.

Draught brood mare.—First prize, R. Watson, Stockton-on-Tees.

Draught colt foals.—First and second prizes, Mrs. Kitching, Whorlton, Northallerton.

Draught filly foals.—Prize, T. Curry, Morton Carr, Great Ayton.

Draught yearlings, geldings, or fillies.—First prize, H. Emmerson, Iazenby, Redcar; second, A. H. T. Newcomen, Kirkleatham Hall, Redcar.

Draught two-year-old geldings or fillies.—First and second prizes, J. Raine, Nunstainton, Ferry Hill.

Draught three-year-old geldings or fillies.—First prize, Ann Heddon, Baldersby, Thirsk; second, J. W. Pease, M.P., Guisbro'.

In pairs for agricultural purposes, mares or geldings, under eight years old, the property of a tenant farmer.—First prize, N. Stonehouse and Son, Marske-by-the-Sea; second, J. Peirson, Ayreholme, Great Ayton.

Pairs of young draught horses, mares or geldings, either two or three years old, the *bona fide* property of one or two persons resident within the district.—First prize, N. Stonehouse and Son; second, T. Curry.

Ponies, mares or geldings, under eight years of age, from 13 to 14 hands 2 inches high.—First prize, W. Stephenson, Cottingham; second, W. Snowden and Sons, Slingsby, York.

Mares or geldings, under eight years of age, not to exceed 13 hands high.—First prize, H. Smith, South Stockton; second, A. Kitching, Ayton Firs, Northallerton.

HUNTERS.

Hunting brood mares.—First prize, J. T. Robinson, Asenby, Thirsk; second, R. Jackson, Normanby, Middlesbro'.

Hunting colt foals.—First prize, R. Ward, Pinchingthorpe, Guisbro; second, T. Curry.

Hunting filly foals.—First prize, T. Blackburn, Great Broughton, Northallerton; second, J. Walton, Acklam, Middlesbro'.

Hunting yearling geldings.—Prize, J. Mewburn, Redcar.

Hunting yearling fillies.—First prize, A. H. T. Newcomen; second, P. Shummins, Whitby.

Hunting two-year-old geldings.—First prize, G. Carter, Bedale; second, J. Mewburn.

Hunting two-year-old fillies.—First prize, R. Emmerson, jun., Over Dindsdale, Darlington; second, J. W. Pease.

Hunting three-year-old geldings.—First prize, C. M. Newcomen, Kirkleatham; second, R. F. Treulholm, Butterwick, Sedgfield.

Hunting three-year-old fillies.—First prize, T. Darrell, West Ayton; second, J. B. Booth, Catterick.

EXTRA STOCK.

Horses.—First prize, Hopkius, Gilkes, & Co., Middlesbro'; second, T. Webster, Stainsby, Stockton-on-Tees.

SPECIAL PRIZES.

Four-year-old hunting geldings, by a thorough-bred horse.—First prize, R. Brunton, Marton, Middlesbro'; second, E. Nesfield, Scarbro'.

Four-year-old hunting mares, by a thorough-bred horse.—First prize, J. Kirby, Knayton, Thirsk; second, G. Blackburn, Stokesley.

Hunting gelding or mare of any age (by a thorough-bred horse), which shall have been hunted during the last season with the Cleveland or Hurworth Hounds. The exhibitor to be a tenant-farmer and a member of the Cleveland Hunt Club, cup, R. Brunton, Marton, Middlesbro'; for leaping, R. Jackson.

BURNLEY AGRICULTURAL SOCIETY.

PRIZE LIST.

JUDGES.

CATTLE.—T. Dodd and T. Hood.

HORSES.—J. Bromley and R. Bond.

SHEEP, PIGS, AND BUTTER.—R. Riley and J. Mercer.

POULTRY, PIGEONS, AND RABBITS.—H. Smith, Douglas, and Tate.

CATTLE.

Bull, two years old and upwards.—Prize, silver cup or £5, T. Statter, jun., Stand Hall, Whitefield, Manchester.

Bull above one and under two years old.—Prize, cup or £5, R. Parker, Hollin Cross, Burnley.

Bull calf under twelve months old.—Prize, T. Statter, jun.

Bull calf under six months old.—Prize, B. Bee, Bullsnap Hall, Goosnargh, near Preston.

Cow, in-calf or milk, above three years old.—Prize, T. Statter, jun.

Heifer, in-calf or milk, under three years old.—Prize, T. Statter, jun.

Heifer under two years.—Prize, T. Statter, jun.

Heifer calf under twelve months old.—Prize, T. Statter, jun.

Bull, two years old and upward, the property of a tenant farmer.—Prize, cup or £5, J. Farrer, Thorueyholme, near Burnley.

Bull above one and under two years old.—Prize, cup or £5, R. Whittam, Mount Pleasant, near Burnley.

Bull calf under twelve months old.—Prize, R. Whittam.

Bull calf under six months old.—Prize, R. Parker.

Cow, in-calf or milk, above three years old.—Prize, J. Farrer.

Heifer, in-calf or milk, under three years old.—Prize, J. Farrer.

Heifer under two years old.—Prize, J. Farrer.

Heifer under twelve months old.—Prize, Farrer.

Fat cow, fed by the exhibitor.—Prize, R. Riley, Hapton Hall.

HORSES.

Brood mare for agricultural purposes.—Prize, T. Statter, jun.

Brood mare for draught purposes.—Prize, T. Statter, jun.

Brood mare for road or field.—Prize, Mrs. Dugdale and Sons, Mytton Bridge, Mytton.

Gelding or filly, for road or field.—Prize, T. Barcroft, Gaghills House, Waterfoot, near Manchester.

Three years old gelding or filly, for road or field.—Prize, W. Roberts, Thorneyholme, near Burnley.

Two years old gelding or filly, for road or field.—Prize, W. Roberts.

Yearling colt or filly, for road or field.—Prize, P. Parker, Old Carr Head, Crosshills, Leeds.

Gelding or filly, for agricultural purposes, of four years old and upwards.—Prize, C. W. Brierley, Rhodes House, Middleton.

Gelding or filly, for draught purposes, of four years old and upwards.—Prize, C. W. Brierley.

Three years old gelding or filly, for draught or agricultural purposes.—Prize, C. W. Brierley.

Two years old gelding or filly, for draught or agricultural purposes.—Prize, T. Statter, jun.

Yearling colt or filly, for draught or agricultural purposes.—Prize, T. Statter, jun.

Foal for road or field.—Prize, Mrs. Dugdale and Sons.

Foal for draught or agricultural purposes.—Prize, J. Dawson, Overtown, near Burnley.

Foal got by Young Sampson.—Prize (given by owner of sire), H. Tatham, Burnley.

Cob not exceeding 15 hands.—Prize, T. Fildes, East Beach, Lytham, Douglas.

Cob not exceeding 14 hands.—Prize, L. Uttley, Newsham Lodge, near Preston.

Cob not exceeding 13 hands.—Prize, T. Statter, jun.

Pony not exceeding 12 hands.—Prize, J. Houliker, Revidge Blackburn.

Stallion for road or field.—Prize, J. Gill, Howden Park, Silsden, near Leeds.

Stallion for draught purposes.—Prize, J. Forshaw, Burley, near Leeds.

Hunter.—Prize, cup or £7, Major Starkie, Huntroyd, near Burnley.

Best jumper, not to exceed 14 hand.—Prize, E. Stocks, Burnley.

Jumper, not to exceed 13 hands.—Prize, W. Lumb, Brotherhood Hall, near Rochdale.

Donkeys.—Prize, A. Smith, Accrington.

SHEEP.

Ram, Leicester or long-woolled breed.—Prize, J. and R. Earnshaw, The Hill, Grindleton, Clitheroe.

Shearling ram, Leicester or long-woolled breed.—Prize, J. and R. Earnshaw.

Tup lamb, Leicester or long-woolled breed.—Prize, W. Smalley, Grindleton, Clitheroe.

Mountain or lonk ram.—Prize, T. Howarth, Cheesden, near Rochdale.

Mountain or lonk shearling ram.—Prize, L. Stanworth, Worthorne.

Mountain or lonk tup lamb.—Prize, B. Dobson, Ilkley.

Pen of five ewes of the Leicester or long-woolled breed.—Prize, J. and R. Earnshaw.

Pen of five shearling gimmers, Leicester or long-woolled breed.—Prize, J. and R. Earnshaw.

Pen of five gimmer lambs, Leicester or long-woolled breed.—Prize, J. and W. Pinder, Waddington.

Pen of five lonk ewes.—Prize, J. G. Bridge, Edge Coates, Rawtenstall.

Pen of five lonk gimmer hogs.—Prize, J. G. Bridge.

Pen of five gimmer lambs of the mountain or lonk breed.—Prize, J. Pickup, Tarn Hill, Dean, near Newchurch.

Pen of half-bred ewes.—Prize, W. and T. Holgate, Asker Hill, Grindleton, Clitheroe.

Pen of five half-bred shearling gimmers.—Prize, W. and T. Holgate.

PIGS.

Boar large breed.—Prize, P. Eden, Cross Lane, Salford.

Boar middle breed.—Prize, H. R. W. B. Roysds, Pyke House, Littleborough.

Boar small breed.—Prize, P. Eden.

Breeding sow large breed.—Prize, P. Eden.

Breeding sow middle breed.—Prize, P. Eden.

Breeding sow small breed.—Prize, H. R. W. B. Roysds.

Store pig.—Prize, C. Harrison, Burnley.

Cottagers' class store pig.—Prize, T. Warah, Adamson's farm, Burnley.

AGRICULTURAL IMPLEMENTS.

For the best collection of agricultural implements.—Prize, £5, W. and F. Richmond, Colne.

SALE OF THE LATE MR. THOS. BARNES' SHORTHORN HERD,

AT WESTLAND KELLS, IRELAND, ON WEDNESDAY, AUG. 23.

BY MR. THORNTON.

The history of Irish Shorthorns traces through a period of little more than forty years. Prior to 1829 little account can be found of any pedigree cattle of high character crossing the Channel, though it is known that Lady Ross imported Teeswaters and good cattle from the neighbourhood of Darlington. The late Mr. Robert Holmes was, however, the great improver of Irish stock, for by introducing thoroughbred horses and afterwards pure-bred Shorthorns, he paved the way to that permanent improvement in horses and cattle that has given them such a good demand in that country. It is with the Shorthorns we have now to do. Mr. Holmes bought many good animals from Mr. Mason's sale, Mr. Booth, Mr. Champion, and other breeders at that time, and his example was soon followed by his young friend Mr. Thos. Barnes, who, after having used Mr. Holmes' Prince George (2464) started on his own account, and by the advice of Mr. Holmes bought two animals of the Mantalini tribe. One of them produced a bull called Albion, and after using him, Mr. Barnes hired Hamlet (S126) from Mr. John Booth, and then followed a succession of the best-bred bulls on hire from Messrs. John and Richard Booth, until the herd, after the dispersion of Mr. Holmes in 1853, took rank as the best stock in the country; indeed he fairly earned the title of the Booth of Ireland. His stock was much sought by English breeders. Mr. Torr used several of his bulls, Mr. Walde, Mr. J. Robinson, and Mr. Chas. Howard were also hirers. Lady Pigot gave him 500 guineas for Victoria, a heifer of the Mantalini tribe, and the Rev. T. Stanforth about two years ago bought a cow and heifer of the same tribe at an enormous price. The death of his eldest son in 1868 fell so heavily upon him that he contemplated selling his entire stock, but his health continuing very feeble, it was put off and put off until last spring, when he quietly passed away, having earned the gratitude of his countrymen in the improvement of their stocks, by the use of his bulls in all parts of Ireland, as well as the respect of his neighbours by his uprightness and consideration as an extensive land agent. His son William succeeded to the Westland estate, and in order to carry out his father's wishes the herd save a half-dozen old cows, and the bull Lord Napier, was announced for sale. It excited much attention in Ireland, but misfortune befel the stock. The foot-and-mouth disease broke out in the county, and a week before the sale it smote the Westland herd very seriously. Too late to postpone the sale it went on, and though those who had talked of going

from England were advised, it deferred only one or two. The cattle the day before the sale presented a melancholy appearance, some were so lame they could scarcely walk, others were frothing at the mouth and not eating, whilst the whole stock had sunk stones in condition. The morning of sale brought the most prominent breeders from Ireland and a few from Scotland, and several were for begging of the sale until the end of October or next spring. Mr. Barnes, however, concluded that the company should not be disappointed, and ordered the sale to go on. Liberal conditions were then drawn up. The cattle were to be kept until the Inspector had given a clean bill of health, and no money was to be paid until the certificate had been forwarded to the purchaser, Mr. Barnes taking all the risk and expense of the herd upon himself until such was given. When these conditions were announced, they were received with the approval, indeed the applause of the company. Some of the old cows, newly calved, came in very lame, and made, as will be seen below, but comparatively low prices. Although two or three made 70 and 80 guineas each, the company waited for the first Mantalini, lot 7, Grand Duchess 3rd. It should here be said that some few years ago Mr. Barnes introduced a slight cross on this tribe by sending his best cow, Sylph, to Mr. Bolden's Grand Duke 3rd. Beneficial as the cross may have been, it did not meet with the thorough approval of the company, as the price of the only pure specimen will eventually show. Lot 7 was started at a 100 gs., and, after competition between Irish and English breeders, fell at 220 gs. to Mr. E. J. Smith, a rising young breeder in County Limerick. Some of the Bright Eyes tribe descended from Mr. Lawson's herd were beautifully-formed, good cattle, as also were the Isabellas obtained from Mr. Knox, but having some objectionable crosses. The fine structural formation of the cattle was very striking, as they hobbled in dreadfully reduced in condition; and had they been covered with flesh and in full bloom, as the stock generally is at this season, shown on the splendid grass-lands of Meath, they would doubtless have realized far higher prices. Lot 18, Bracelet, having a double cross of the Third Grand Duke, was a splendid young heifer: the biddings gradually rose to £300, and the excitement of the comparatively small company could scarcely be restrained: they cheered. Five more was bid, and Mr. Downing's ten secured her for Co. Cork. Necklace, of the same

tribe, by King Richard, was very much cut up, and people thought she would not make half Bracelet's price, still the biddings were very rapid, and Mr. G. Allen bought her to go to Co. Down for 335 gs. The excitement became intense: the crack heifer of the sale, the only pure specimen, stood at the gate; whilst Brunette, a fine heifer of the Bright Eyes tribe, went cheap at 105 gs. to Mr. Whyte, of Aberdeen. When Mantalina came in there was a pause. After Mr. Thornton had given her pedigree, a hundred was bid; this was followed by two, three, four, five hundred, and it was announced afterwards ten bidders were in at five hundred. The company cheered; then followed "and ten" from Mr. W. Bolton, of Co. Wexford; this went on up to 700, "and ten" came again, until 740; "two bidders at 740" (the Rev. T. Staniforth and Mr. Booth); "five" said Mr. C. T. Booth, "and ten Thornton" came instantly from Mr. Bolton; a pause ensued; "at 750, and the glass runs, going at 750 gs., and—gone." Mr. W. Bolton, Co. Wexford, for "ould Ireland." The company took off their hats, shouted, cheered, and were immensely excited. As an animal the heifer was a very fine specimen, of a beautiful rich roan, well formed, and of excellent quality; she was greatly reduced in condition, but still in her low state a very symmetrical splendid creature. Several of the other heifers were very good and full of style and character; they sold remarkably well, chiefly to Irish breeders. A white twin heifer to a bull, also a pure Mantalina, was looked upon as doubtful, still Mr. Bolton also secured her at 72 gs.

The bulls were a good lot, though often lame. White Duke, a fine-topped, very symmetrical animal, was like a prize winner; several Irish breeders wished to secure him, but Mr. G. Atkinson finally got him cheap at 160 gs. Favourite, a promising roan calf of the same strain, went to Mr. H. C. Pole Gell at 190 gs., and two little white bull calves of the Mantalini tribe looked very indifferent, from the want of milk and effects of the disease. Viewing the sale under these extraordinary circumstances, it is certainly one of the most memorable on record. To think that a herd of 44 head should make over a £100 a-piece when reduced by disease, is in itself the great evidence of the value and excellence of the herd and the confidence and esteem the public had in the late Mr. Barnes as a breeder. Subjoined are the prices.

COWS AND HEIFERS.

Medora, roan, calved June 1, 1862, by Dr. Mc Hale (15887), dam Sweetbrier by Nimrod (13388)—T. Rose, Norfolk, 47 gs.
 Speranza, white, calved June 11, 1864 by British Flag (19351), dam The Nun by Dr. Mc Hale (15887).—R. Jefferson, Whitehaven, 58 gs.
 Brilliant, roan, calved April 26, 1865, by Ravenspur (20628), dam The Nun by Dr. Mc Hale (15887).—H. Robinson, Yorkshire, 81 gs.
 Bright Eyes, red, calved April 26, 1865, by Ravenspur (20628), dam The Nun by Dr. Mc Hale (15887).—Mr. Beattie, Canada, 80 gs.
 Cherry, red, calved April 21, 1865, by Ravenspur (20628), dam Sweetbrier by Nimrod (13388).—J. Rose, 86 gs.
 Grand Duchess 3rd, red and white, calved April 3, 1866, by Royal Sovereign (22802), dam Grand Duchess by Grand Duke 3rd (16182).—E. J. Smith, Islanmore, Limerick, 220 gs.
 Isabella Ravenspur, roan, calved February 7, 1866, by Ravenspur (20628), dam Isabella by British Prince (14197).—R. M. Gumbleton, Cork, 71 gs.
 Eye Bright, roan, calved January 28, 1867, by Royal Sovereign (22802), dam Speranza by British Flag (19351).—A. A. Ashworth, Bolton, Lancashire, 61 gs.
 Minerva, roan, calved June 28, 1867, by Duke of York (23804), dam Medora by Dr. Mc Hale (15887).—J. Bamford, Kells, 55 gs.
 Roseleaf, red and white, calved April 18, 1868, by Royal Duke (25104), dam Rosebud by Ravenspur (21628).—Hon. J. Massy, Limerick, 35 gs.
 Gift 7th, roan, calved May 3, 1868, by Royal Duke (25014), dam Gift 5th by the Druid (18981).—Mr. Beattie, Canada, 80 gs.
 Bright Duchess, red, calved December 27, 1868, by Royal Duke (25014), dam Bright Eyes by Ravenspur (20628).—Hon. J. Massy, 42 gs.
 Royal Rose, roan, calved January 3, 1869, by Royal Duke

(25014), dam Moss Rose by Hopewell (10832).—A. Mitchell, Alloa N.B., 56 gs.
 Cherry Blossom, red, calved January 17, 1869, by Royal Duke (25014), dam Blossom by Duke of York (23804).—J. Bomford, Ireland, 40 gs.
 Charlotte, red, calved January 24, 1869, by Royal Duke (25014), dam Cherry by Ravenspur (20628).—R. Reynell, jun., County Westmeath, 62 gs.
 Rosary, red, calved February 23, 1869, by Royal Duke (25014), dam Red Rose by The Druid (18981).—H. Smith, Ireland 46 gs.
 Bracelet, roan, calved March 13, 1869, by Royal Duke (25014), dam Grand Duchess by Grand Duke 3rd (16182).—J. Downing, County Cork, 310 gs.
 Isabella Royal, roan, calved March 11, 1869, by Royal Duke (25014), dam Isabella by British Prince (14197).—A. S. Montgomery, County Meath, 67 gs.
 Gift 8th, roan, calved June 25, 1869, by King Richard (26523), dam Gift 5th by The Druid (18981).—A. Metcalf, Westmoreland, 40 gs.
 Necklace, red, calved May 21, 1869, by King Richard (26523), dam Grand Duchess 3rd by Royal Sovereign (22802).—G. Allan, County Down, 335 gs.
 Brunette, roan, calved October 29, 1869, by King Richard (26523), dam Brilliant by Ravenspur (20628).—J. Whyte, Aberdeen, 105 gs.
 Mantalini, roan, calved March 27, 1870, by King Richard (26523), dam Alpine by British Prince (14197).—W. Bolton, County Wexford, 750 gs.
 Sweetmeat, roan, calved January 12, 1870, by King Richard (26523), dam Sweetheart by Duke of York (23804).—D. Nesham, Durham, 38 gs.
 Richard's Blossom, roan, calved February 22, 1870, by King Richard (26523), dam Blossom by Duke of York (23804), E. J. Smith, County Limerick, 97 gs.
 Richard's Rose, roan, calved February 22, 1870, by King Richard (26523), dam Rose by Royal Sovereign (22802).—J. B. Booth, Yorkshire, 100 gs.
 Woodbine, red and white, calved, March 31, 1870, by King Richard (26523), dam Sweetbrier by Nimrod (13388).—A. Ashworth, Lancashire, 82 gs.
 Richard's Maid, roan, calved April 13, 1870, by King Richard (26523), dam Medora by Dr. Mc Hale (15887).—A. S. Montgomery, County Meath, 77 gs.
 Memnonia, red and white, calved April 18, 1870, by King Richard (26523), dam Minerva by Duke of York (23804).—E. J. Smith, County Limerick, 55 gs.
 Richard's Gift, red and a little white, calved June 2, 1870, by King Richard (26523), dam Gift 5th by The Druid (18981).—W. Smith, County Down, 80 gs.
 Royal Princess, white, calved January 22, 1871, by Royal Prince (27384), dam Sweetheart by Duke of York (23804).—J. Shane, Ireland, 50 gs.
 Royal Maiden, white, calved April 15, 1871, by Royal Prince (27384), dam Alpine by British Prince (14197).—W. Bolton, County Wexford, 72 gs.
 Radiance, roan, calved April 19, 1871, by Royal Duke (25014), dam Bright Star by Royal Sovereign (25014).—R. Reynell, jun., County Westmeath, 27 gs.
 Maid of Westland, white, calved May 23, 1871, by Royal Prince (27384), dam Minerva by Duke of York (23804).—A. S. Montgomery, County Meath, 48 gs.

BULLS.

Lord Spencer, red and white, calved April 27, 1868, by Royal Duke (25014), dam Strawberry by Ravenspur (20628).—A. Mitchell, Scotland, 71 gs.
 White Duke, white, roan ears, calved May 11, 1870, by King Richard (26523), dam Grand Duchess; by Grand Duke 3rd (16182).—G. Atkinson, Durham, 160 gs.
 Cupid, red, calved July 11, 1870, by Royal Duke (25014), dam Cherry by Ravenspur (20628).—Rev. Mr. Bradshaw, County Down, 40 gs.
 Bright Duke, roan, calved August 13, 1870, by Royal Duke (25014), dam Speranza by British Flag (19351).—R. Reynell, jun., County Westmeath, 35 gs.
 Pilot, red, calved January 2, 1871, by Royal Duke (25014), dam Isabella by British Prince (14197).—H. Kernan, Ireland, 30 gs.
 Favourite, roan, calved November 21, 1870, by Royal Prince

(27384), dam Grand Duchess 3rd by Royal Sovereign (22802).—H. C. Polegill, Derbyshire, 190 gs.
 Sovereign Prince, roan, calved March 14, 1871, by Royal Prince (27384), dam Blossom by Royal Sovereign (22802). R. Rynd, County Westmeath, 25 gs.
 Brightness, white, calved March 10, 1871, by Royal Prince (27384), dam Eye Bright by Royal Sovereign (22802).—E. O'Beime, County Meath, 25 gs.
 Lord Ross, roan, calved April 3, 1871, by Royal Prince (27384), dam Rosleaf by Royal Duke (25014).—R. G. Cosby, Queen's County 43 gs.

Remus, white, roan ears, calved April 15, 1871, by Royal Prince (27384), dam Alpine by British Prince (14197).—R. Reynell, County Westmeath, 64 gs.
 Grand Prince, white, roan ears, calved April 19, 1871, by Royal Prince (27384), dam Grand Duchess by Grand Duke 3rd (16182).—J. Doran, County Louth, 60 gs.

AVERAGE.

33 Cows and calves...	£110 10 8	...	£3,647 14 0
11 Bulls	71 14 2	...	783 6 0
—			
44 Averaged	£100 14 1	...	£4,431 0 0

SALE OF MR. GROVE'S SHORTHORN HERD,

AT CASTLE GROVE, LETTERKENNY, IRELAND, ON FRIDAY, AUGUST 23, 1871.

BY MR. THORNTON.

A long and tedious journey to the extreme north of Ireland brought most of the Westland company to Castle Grove, a beautiful estate on the banks of Loch Swilly. Its owner, Mr. Grove, who is better known among breeders by the name of Wood, has been before the public as a breeder for more than 30 years. Few men now-a-days act as he did at starting. He visited the best herds in England, and started with a few animal of Bates' blood, using a son of Second Duke of Northumberland. He then tried some of the Booth stock, and finding they thrived better than others, and were adapted to the climate, he took up the Booth strain and endeavoured to breed from the best. He obtained some of the Broughton tribe, and these were sold privately about ten years ago, in a lot, to Mr. Carr at an average of about 300 gs. He also obtained some of the Fame tribe, with two or three crosses of different blood, and these, known as the Norma family, produced some remarkably fine cattle. Mr. Grove has often exhibited very successfully at the Irish shows, and at the North West Society has generally carried all before him; so much so that he has had all the bull trade of the North of Ireland, and a ready sale for his bulls ere they reached a year old. The stock were shown on the morning of sale, save two or three of the show animals, in the fine grass lands near the house, and a very magnificent lot of cattle they were. In good condition, and many heavy milkers too, they possessed a similarity of character that was charming to see. The cows were large, grand-looking cattle, of great substance and hair, rich roan or red in colour, and very symmetrical. The small number of the company took the Englishmen by surprise, and some thought there was scarcely a lot apiece. Only forty-seven sat down to the lunch; but at the ring-side, beautifully situate in a grove of plane trees, more gathered together; still for a Shorthorn sale it was a very short company. Many of the cows were very old, and two or three in a doubtful state; still they were grand cattle, especially lot 2, which, although doubtful, fell to Mr. Downing at 60 guineas. Norman Lady, the first cow without Mr. Ambler's Comet cross, excited great competition, and, to the surprise of the company, after opposition from English buyers, went to Mr. J. Downing for 200 gs. Chemisette, a magnificent heifer, but very doubtful breeder, went only at butcher's price. Mr. Barnes bought the Lady Sarah tribe, considered the best of Booth and Mason blood, and which under the name of Ruby was well known years ago, but had become extinct, at Westland. Mr. Barnes bought all save one of the family, which fell to the Rev. T. Staniforth, at 260 gs., and for which he was the last bidder but one.

Cinderella, a young cow very thin, and milking heavily, but a splendid breeder, with five crosses of the best Warlabby bulls, was keenly contested for by Mr. Cather, of Co. Derry, Ireland, and Mr. Whyte, of Aberdeen, Scotland, who took her at the high price of 270 gs. The two stood close together, and bid quietly their single and five guineas, until, after a long struggle, the Scot won. It was indeed, truly, a giant's struggle, as of old, but in a better cause, and scarcely thirty miles as the crow flies from the Causeway.

One of the most beautiful cows in the sale, with a head and body and elegance of character worthy of Lady Fragarant herself, and with five Warlabby crosses upon Mr. Torr's old Hohenlinden by Pilgrim to boot, went at last to the Rev. T. Staniforth for 305 gs., after competition from all parts of the ring, both by English, Irish, and Scotchmen. Northern Lady, a fine young heifer, having lost her calf, went to Cumberland cheap for 170 gs.; and Ringlet, a very beautiful heifer, newly calved, with three Booth crosses on the Fame tribe, fell to Mr. Hugh Aylmer for 280 gs., perhaps the cheapest lot in the sale. Nepenthe, a red, prize two-year-old heifer, had been hurt with the bull; still, she made 125 gs. The competition for all the best specimens was very keen, and several of the best were retained in Ireland, Mr. Downing giving 310 gs., the highest price, for a beautiful roan, daughter of Coquette. Two heifers out of Cinderella were splendid specimens, one going to Lancashire, and the other to Mr. Smith, of County Limerick. The first bull, the only yearling in the sale, was a rich roan of great growth and substance, who goes to Australia for 93 gs. A young calf, Cato, of the Norma tribe, was very promising, and went, like several of the other lots, into Norfolk, whilst a few of the Irish breeders and local farmers competed for and bought the bull-calves. The sale, interrupted by heavy showers, was thus brought to a conclusion, at an average of 10s. short of a hundred a-piece.

COWS AND HEIFERS.

Coquette, roan, calved December 31, 1854, by Comet (11298), out of Norma.—Mr. T. Rose, Norfolk, 40 gs.
 Ciboulette, roan, calved February 5, 1859, by Prince Arthur (13497), out of Coquette.—Mr. John Downing, Cork, 60 gs.
 Colleenette, red and white, calved June 8, 1860, by King Arthur (13110), out of Coquette.—Mr. R. Jefferson, Whitehaven, 70 gs.
 Rosalie, roan, calved January 1, 1862, by Sir Roger (16991), out of Ciboulette.—Mr. R. M. Gumbleton, Cork, 46 gs.
 Nonsense, red and white, calved July 6, 1862, by Sir Roger (16991), out of Norah 9th.—Mr. T. Rose, Norfolk, 30 gs.
 Norman Lady, roan, calved September 7, 1862, by Sir Roger (16991), out of Norma.—Mr. John Downing, Cork, 200 gs.

Ruth 15th, roan, calved March 30th, 1863, by Sir Roger (16991), out of Ruth 13th.—Mr. T. Rose, Norfolk, 40 gs.
 Lady Martha, roan, calved June 21, 1863, by Elfin King (17796), out of Lady McHale.—Mr. W. Barnes, Co. Meath, 75 gs.
 Patience, roan, calved January 10, 1864, by Elfin King (17796), out of Pansy.—Mr. E. J. Smith, Co. Limerick, 50 gs.
 Lady of the Lake, red and white, calved April 22, 1865, by Sir James (16980), out of Lady McHale.—Mr. W. Barnes, Co. Meath, 150 gs.
 Ruth 16th, roan, calved April 29, 1865, by Sir James (16980), out of Ruth 13th.—Major Follitt, Co. Sligo, 35 gs.
 Gertrude, roan, calved August 6, 1865, by Sir James (16980), out of Graston.—Rev. T. Staniforth, Windermere, 70 gs.
 Cinderella, roan, calved November 20, 1865, by Sir James (16980), out of Clematis.—Mr. J. Whyte, Aberdeen, 270 gs.
 Vaudeville, white, calved November 15, 1865, by Sir James (16980), out of Vanity.—Mr. J. Carson, Co. Derry, 31 gs.
 Chemisette, roan, calved February 1, 1866, by British Crown (21322), out of Ciboulette.—Mr. W. Scott, Co. Tyrone, 41 gs.
 Ruth 18th, red, calved April 30, 1866, by British Crown (21322), out of Ruth 13th.—Mr. W. Fox, Whitehaven, 61 gs.
 Hyaciuth, roan, calved June 3, 1866, by British Crown (21322), out of Hare Bell.—Rev. T. Staniforth, Windermere, 305 gs.
 Gay Lass, red and white, calved January 4, 1867, by British Crown (21322), out of Graston.—Mr. E. K. Cox, Australia, 62 gs.
 Nicety, red, calved April 7, 1867, by British Crown (21322), out of Nonsense.—Archbishop Beresford, Armagh, 63 gs.
 Ruth 22nd, red, calved August 14, 1867, by British Crown (21322), out of Ruth 17th.—Mr. D. Nesham, Darlington, 53 gs.
 Northern Lady, roan, calved January 22, 1868, by British Crown (21322), out of Norman Lady.—Mr. R. Jefferson, Whitehaven, 170 gs.
 Novelty, red, calved February 18, 1868, by British Crown (21322), out of Nonsense.—Mr. T. Lindsey, Co. Down, 50 gs.
 Ringlet, roan, calved April 14, 1868, by British Crown (21322), out of Rosalie.—Mr. Hugh Aylmer, Norfolk, 280 gs.
 Purity, white, calved April 24, 1868, by British Crown (21322), out of Patience.—Messrs. F. and J. McElderry, Co. Antrim, 49 gs.
 Nepenthe, red, calved January 2, 1869, by British Crown (21322), out of Norman Lady.—Mr. W. Barnes, 125 gs.
 Lady of the Manor, red and white, calved February 25, 1869, by British Crown (21322), out of Lady of the Lake.—Rev. T. Staniforth, Windermere, 260 gs.
 Ruth 24th, red, calved May 7, 1869, by The Suttler (23061), out of Ruth 18th.—Messrs. J. and J. Gaitskell, Whitehaven, 55 gs.
 Countess, roan, calved May 23, 1869, by The Suttler (23061), out of Coquette.—Mr. J. Downing, Fermoy, 310 gs.
 Maid of the Mist, red, calved May 19, 1869, by The Suttler (23061), out of Fairy Queen.—Messrs. J. and J. Gaitskell, Whitehaven, 255 gs.
 Noteworthy, roan, calved April 18, 1870, by The Suttler

(23061), out of Nonsense.—Earl of Castle Stuart, Co. Down, 30 gs.
 Ruth 25th, white, calved May 19, 1870, by The Suttler (23061), out of Ruth 16th.—Mr. R. M. Gumbleton, Cork, 51 gs.
 Cantiniera, white, calved May 16, 1870, by The Suttler (23061), out of Cinderella.—Mr. A. Ashworth, Bolton, Lancashire, 180 gs.
 Cynosure, roan, calved April 3, 1871, by Great Hope (24082), out of Cinderella.—Mr. E. J. Smith, Islandmore, 110 gs.
 Vanilla, roan, calved April 12, 1871, by Great Hope (24082), out of Vanity.—Earl of Castle Stuart, 26 gs.
 Nemesis, red, calved June 6, 1871, by Great Hope (24082), out of Nonsense.—Mr. R. M. Gumbleton, Co. Cork, 25 gs.
 Lady of the Valley, red, calved June 9, 1871, by Great Hope (24082), out of Lady of the Lake.—Mr. W. Barnes, 61 gs.
BULLS.
 Commander, roan, calved June 3, 1870, by The Suttler (23061), out of Coquette.—Mr. Dangar, Australia, 93 gs.
 Victor, roan, calved February 10, 1871, by Great Hope (24082), out of Vaudeville.—Mr. S. Watt, Londonderry, 38 gs.
 Rollo, red and white, calved March 18, 1871, by Great Hope (24082), out of Ruth 22nd.—Messrs. F. and J. McElderry, Co. Antrim, 31 gs.
 Nestor, roan calved April 22, 1871, by Great Hope (24082), out of Novelty.—Mr. J. R. Boyd, Co. Donegal, 17 gs.
 Reporter, red, calved May 12, 1871, by Great Hope (24082), out of Ruth 18th.—Earl of Caledon, 18 gs.
 Cato, red and white, calved May 16, 1871, by Great Hope (24082), out of Colleenette.—Rev. J. Micklethwaite, Norfolk, 86 gs.
 Ganymede, red and white, calved June 5, 1871, by Great Hope (24082), out of Gertrude.—Mr. D. Glen, Londonderry, 17 gs.
 Counsellor, red and white, calved June 9, 1871, by Great Hope (24082), out of Coquette.—Mr. G. Allen, Co. Down, 42 gs.

SUMMARY.

	AVERAGE.			£	s.	d.
36 cows	111	12	5	...	4,018	7 0
8 bulls	44	17	9	...	359	2 0
44 head averaged	99	9	9	...	£4,377	9 0

Mr. Reynell's small herd, advertised for sale at Westland, could not be removed from Killynon, on account of foot-and-mouth disease, and will probably be sold later in the autumn. Mr. Barnes' and Mr. Grove's herds amounted to £8,808 9s., or 2s. over £100 each. They are the greatest sales that have ever been known in Ireland, as indeed they were two of the best herds. It is very satisfactory to see that so many of the best were retained in Ireland, and is a great credit to the rising young breeders of the country. Several go to England and a few to Scotland; while the result confirms a great fact, that where good animals of pure blood come into the market, even at the outside corners of the kingdom, the public will go there for them, and encourage those who labour to produce a good class of cattle for the welfare and improvement of their district and country.

SALE OF THE DUKE OF DEVONSHIRE'S SHORTHORNS,

AT HOLKER HALL, LANCASHIRE, ON WEDNESDAY, SEPTEMBER 6TH, 1871.

BY MR. STRAFFORD.

Holker, although not having the reputation of Wetherby, has nevertheless, for many years past, been considered by breeders the head quarters of the Bates Shorthorn. A quarter of a century ago Lord Carlisle's stock gave a start to the herd, and in '51 a sale took place, the fashion and goodness of the present Bracelet tribe being the best indication of what the stock then was. In 1853 Oxford 15th was bought at the

Tortworth sale, and this cow founded the tribe by which the herd has been chiefly known. Mr. Tanqueray's sale supplied some of the Barringtons, and Mr. Maynard's, in 1863, the Wild Eyes or Winsome family, then considered of slight value, but which has since risen to at least four times in worth. A first-class herd has rarely been dispersed without Mr. Drewry's good judgment being exerted in securing a fine

specimen for Holker. Thus the herd has run with the fashion of the times. A Charnier went from Milcote, a Grand Duchess from Preston Hall, a Wellingtonia (Waterloo) from Havering Park, yet no descendants have been left of these celebrated tribes, and it is to the Oxford and Wild Eyes families of the late Mr. Bates' Shorthorns that the public have looked. The merit of both tribes has been seriously canvassed by many breeders. After the Cleveland Lads were introduced upon the Duchesses a great stamp was placed upon the Oxford tribe; and although, perhaps not equal as some would have had it on Wednesday last, yet the family ranks now almost as high as the much-sought Duchesses. The 1864 Holker sale was considered a great success, but the average sinks into insignificance when compared with the £240 of Wednesday. Certainly, it may be said that since then the best tribes, with the help of noble patronage and Canadian enterprise, have more than tripled in value.

The sale was advertised as early as last spring, and has been looked upon as being the event of the year, though a few on the other side of the house did not hesitate to think it would require all the forces to top the Whitewell spring sale averages. The catalogue was very select, comprising but thirty-three females and twelve bulls, and of these eight were Oxfords, eleven Wild Eyes, and ten Blanches: two lots not being in a breeding state were withdrawn. The company was hardly so numerous as one might have expected to see, there being a comparatively small local attendance, whilst the "admirers of the sort" were particularly strong, and it would be difficult to name any fashionable breeders, save perhaps Messrs. Loney, who were not present. One of the Windermere Lake buses, with four-in-hand, brought the Storr's party, with Mr. T. C. Booth, Jacob Wilson, Beattie and others. Major Hamilton stood for Ireland, but it was difficult to see a Scotch breeder, saving the presence of the Earl of Dunmore and Mr. Beattie among the crowd at the ring side. Noticeable, too, was the absence of foreign or colonial buyers, save by deputy.

The stock showed very well in the splendid pasture adjoining the farm, and the good-looking, unnumbered lots told us that though the selection was of the very best, yet there were the moulds left from which many might yet be cast. The bulls were paraded, as per announcement, at 11.30, and a very fine lot they were, especially the white lot 6, whose thick, loose skin seemed to shake again over his thick, symmetrical carcase. The schoolroom seated about 250 to lunch, at which the Duke presided, supported by the Earls of Dunmore, Bective, Feversham, Lord Skelmersdale, the Speaker, Colonel Kingscote, Colonel Gunter, Captain Gandy, Messrs. Sartoris, Sheldon, Bowly, Beauford, Cheney, Foster, Moore, and others, whilst the representatives of Lord Penrhyn, Colonel Towneley, Sir W. C. Trevelyan, and Sir M. W. Ridley, were not far distant. The usual toasts preceded the sale, the Earl of Dunmore proposing the health of the Duke, who handsomely acknowledged Mr. Drewry's services. Mr. Strafford was punctual at his post, and, after the customary conditions, stated that the sale was intended to be worthy of the place, every lot was in such a state that from ordinary foresight disappointment could hardly ensue, and two lots somewhat doubtful were withdrawn. Mr. Bowly opened the business with a 50 gs. bid for Bright Star, a large useful eleven-year-old cow, which went at last to Mr. Barber for 75 gs. Cleopatra 5th, one of the purest and best looking of the tribe, brought out a new purchaser in Mr. Wakefield, of Kendal. The two following lots were not remarkable, and Mr. Cheney seemed determined to have the first Blanche, lot 5, a thick-fleshed, deep, but rather rough cow, which was also at 210 gs.

The first sensational lot was the seven-year-old cow, Grand Duchess of Oxford 7th, a large roan with big rumps and flatish sides, having a grand carriage and head erect, with rather dark elevated horns. There was a pause for a minute or two, which Lord Dunmore broke by bidding 500 gs.; after this the advances were slow but general until finally the Earl of Bective and Mr. Smith were the only two left in, the latter getting her for 915 gs., for Lord Penrhyn. The following lot, as in all dear sales, was cheap, and the Earl of Bective took the first Winsome, a red and white, but of a similar character to the Oxford cow, at 355 gs. Bracelet a very good broad-backed cow, a 70 gs. purchase at Mereold Hall last year, went to Mr. J. Dickinson, of Upholland, for 100 gs.; apparently cheap enough, though not near so cheap as Elvira 6th seemed to be, to Capt. Gandy at 105 gs. This cow was really a magni-

ficient animal, and was far and away the prima donna of the dowagers. Oxford Rose was a favourite with many, Mr. Sheldon and Lord Dunmore going for her. Winsome 7th put up at a 100 gs., ran away quickly to 200 gs., and finally to 300 gs. (Mr. Brogden), her yellowish red tinge not detracting from her general excellence.

Four heifers followed soon after this, by Grand Duke 17th. The first, Grand Duchess of Oxford 16th—minus the Earl of Warwick and Priam crosses—was rather short of hair and a trifle weak in the back; otherwise a good, strong, round-ribbed heifer. She was also put in at 500 gs., and as the expectancy was all for the roan yearling of this tribe, she fell, high as it may seem, yet cheap doubtless, as it will be in the end, to the Rev. P. Graham for 610 gs.; Lord Bective again taking the succeeding lot as well as lot 24, a hairy, thick, red Winsome, at 405 gs., the top tribe price. Blanche 9th, the last of the four, but by some considered the best, got, by some unhappy mischance into difficulties. After fair, good competition, 220 gs. was reached, and the glass run, but there was no buyer: she was then tried at 200 gs., but still no claimant; then "Who bid 150 gs.?" "I'll take her," and the Rev. P. Graham got one of the prettiest and cheapest yearlings, though he made it up in the 370 gs. for Winsome 10th, a pleasing, nice heifer.

Grand Duchess of Oxford 18th was at the head of the young heifers, and with her fine rich colour, good coat, and great depth and substance, was a very taking lot. Started at 500 guineas, the biddings ran in fifties to 800, which Lord Dunmore bid. Then came several odd shots, until finally Lord Feversham, who sat beside Lords Bective, Skelmersdale, and Captain Oliver, took up the opposition against Mr. Fair, one of Lord Bective's agents, until Mr. Fair's "five" at 965 provoked a solemn "thousand" from his Lordship. The "five" came again instantly, and the heifer went to Lord Bective at 1,005 guineas, the best price yet given for an Oxford, and the highest price ever reached at an auction. Mr. Angerstein was lucky in taking the two next lots—one of which, Blanche 10th, many considered a better heifer than the Oxford—before the astonishment of the company had subsided; but Lord Bective and Lord Feversham took the last three heifers between them.

The order of sale was broken with the bulls, lot 6, a white Oxford, taking the lead, and the other bulls in order of age. The white was undoubtedly one of the largest and finest calves that had been seen for a long time; as a little weakness on the legs may have arisen from his great weight and condition, but his handling was something to be felt and remembered. Many were in for him, several at five and six hundred, but Mr. Isaac Downing and Mr. Smith (Penrhyn) stayed the longest, up to indeed to 980 gs., when Lord Feversham's "thousand" again kept him for Yorkshire, amid the cheers of the company. Mr. Botterill, a new buyer, but of an old family of breeders in Holderness, took the strong-shouldered 19th Duke of Oxford at 335 gs., and the Speaker got apparently a cheap one in the 21st Duke at 155 gs. The two last Oxford bulls, both white, were mere caves, and very thin, Mr. Downing getting rather the better of the two at 305 gs. The other bulls were good, especially Barden, a rich roan of the Barrington tribe, which went to Mr. Marshall at 220 gs. for Australia; oddly enough Mr. Thornton, who was buying for Australia, being the opposition.

The sale concluded about five, and, although slow throughout, resulted in a total of £10,349 17s., being an average of £240 13s. 10d. for the forty-three head. This completely throws all other averages, save the Grand Duchesses, in the shade. Some were inclined to think it would have been greater had the entire herd been sold. This, however, seems doubtful, though there are about twenty fine heifers of the Oxford and Wild Eyes tribes, and the magnificent bull Baron Oxford 4th left behind. As a lot, those sold were large cows of great substance, deep colour, and in splendid condition; indeed, the fine land and genial climate at Holker would seem particularly well adapted for Shorthorns, and they come out fuller of hair and better in flesh than the same tribes appear in some more southerly districts.

COWS AND HEIFERS.

Bright Star, red with little white, calved January 12, 1860, by Red Duke (18676), out of Bright Eyes by 3rd Duke of York.—Mr. T. Barber, Hull, 75 gs.

Cleopatra 5th, roan, calved January 2, 1861, by 9th Duke of Oxford (17735), out of Cleopatra 3rd by Cambridge Barrington 2nd.—Mr. W. Wakefield, Kendal, 125 gs.

Lady Buttery Princess, roan, calved January 10, 1863, by Richard (16834), out of Buttery Princess 6th by D'Israeli.—Capt. Gandy, Westmoreland, 73 gs.

Alexandria, red and white, calved March 10, 1863, by Grand Duke 3rd (17994), out of America by Marnaduke.—Mr. H. De Vitre, Berks, 51 gs.

Blanche 3rd, roan, calved September 17, 1863, by 10th Duke of Oxford (17739), out of Blanche by Dundas.—Mr. M. Kennedy, Ulverston, 210 gs.

Grand Duchess of Oxford 7th, roan, calved May 23, 1864, by Lord Oxford (20214), out of Grand Duchess of Oxford by 3rd Grand Duke.—Lord Penrhyn, 915 gs.

Elvira 10th, roan, calved June 16, 1864, by Richard (16831), out of Elvira 4th by D'Israeli.—Mr. H. De Vitre, 44 gs.

Winsome 2nd, red and white, calved March 12, 1865, by Lord Oxford (20214), out of Winsome by Oxford 2nd.—Earl of Bective, 355 gs.

Bracelet, roan, calved March 23, 1866, by Sir James (22902), out of Blanc Mange by Magistrate.—Mr. J. N. Dickinson, Wigan, 100 gs.

Blanche 5th, roan, calved April 15, 1866, by Grand Duke 10th (21848), out of Sylph by Glo'ster.—Mr. G. Ashburner, Ulverston, 85 gs.

Elvira 6th, roan, calved June 25, 1866, by Grand Duke 10th (21848), out of Elvira 2nd by 8th Duke of Oxford.—Capt. Gandy, 105 gs.

Oxford Rose, red, calved September 28, 1866, by Imperial Oxford (18034), out of Rose of Raby by Lumley.—Earl of Dunmore, 215 gs.

Bland, roan, calved January 21, 1867, by Sir James (22902), out of Blanc Mange by Magistrate.—Lord Chesham, Herts, 52 gs.

Caroline, roan, calved January 10, 1868, by Grand Duke 10th (21848), out of Cleopatra 9th by Lord Oxford.—Mr. W. Angerstein, Norfolk, 160 gs.

Lady Bright Eyes, roan, calved August 24, 1868, by General Napier (24023), out of Bright Eyes 2nd by Royal Buttery 3rd.—Earl of Dunmore, 150 gs.

Blanche 7th, roan, calved November 22, 1868, by Grand Duke 10th (21848), out of Blanche by Dundas.—Mr. J. E. Denison, 125 gs.

Winsome 7th, red, calved January 9, 1869, by Grand Duke 10th (21848), out of Winsome by Oxford 2nd.—Mr. A. Brogden, Ulverston, 300 gs.

Blanche 8th, red and white, calved January 31, 1869, by Grand Duke 10th (21848), out of Blanche 3rd by 10th Duke of Oxford.—Mr. H. De Vitre, Berks, 110 gs.

Musical, roan, calved June 24, 1869, by Grenadier (21876), out of Minstrel 3rd by 10th Duke of Oxford.—Mr. R. Hetherington, Carlisle, 80 gs.

Grand Duchess of Oxford 16th, red, calved November 14, 1869, by Grand Duke 17th (24064), out of Grand Duchess of Oxford 6th by Imperial Oxford.—Rev. P. Graham, Lancashire, 610 gs.

Winsome 8th, roan, calved December 1, 1869, by Grand Duke 17th (24064), out of Winsome by Oxford 2nd.—Earl of Bective, 320 gs.

Winsome 9th, red, calved December 17, 1869, by Grand Duke 17th (24064), out of Winsome 2nd by Lord Oxford.—Earl of Bective, 405 gs.

Blanche 9th, roan, calved December 29, 1869, by Grand Duke 17th (24064), out of Blanche 3rd by 10th Duke of Oxford.—Rev. P. Graham, 150 gs.

Lady Jocelyn, roan, calved May 17, 1870, by Grand Duke 10th (21848), out of Elvira 10th by Richard.—Earl of Dunmore, 90 gs.

Winsome 10th, red with little white, calved June 13, 1870, by 18th Duke of Oxford (23995), out of Winsome 4th by Grand Duke 10th.—Rev. P. Graham, 370 gs.

Grand Duchess of Oxford 18th, roan, calved September 27, 1870, by Baron Oxford 4th (25580), out of Grand Duchess of Oxford 11th by Grand Duke 10th.—Earl of Bective, 1,005 gs.

Carry, white, calved October 10th, 1870, by Baron Oxford 4th (25580), out of Caroline by Grand Duke 10th.—Mr. W. Angerstein, Norfolk, 70 gs.

Blanche 10th, roan, calved November 3, 1870, by Grand Duke

10th (21848), out of Blanche 4th by Lord Oxford.—Mr. W. Angerstein, Norfolk, 170 gs.

Lady Laura Barrington, white, calved November 11, 1870, by Baron Oxford 4th (25580), out of Lady Ellen Barrington by Lord Stanley.—Earl of Bective, 355 gs.

Blanche 11th, white, calved January 2, 1871, by Baron Oxford 4th (25580), out of Blanche 7th by Grand Duke 10th.—Earl of Feversham, 100 gs.

Winsome 11th, roan, calved January 5, 1871, by Baron Oxford 4th (25580), out of Winsome 5th by Grand Duke 10th.—Earl of Feversham, 350 gs.

BULLS.

Sunshine, white, calved November 19, 1869, by Grand Duke 17th (24064), out of Morning Star by Lord Oxford.—Mr. Marsden, 50 gs.

Duke of Oxford 19th, roan, calved May 8, 1870, by Grand Duke 10th (21848), out of Grand Duchess of Oxford 7th by Lord Oxford.—Mr. R. Botterill, Hull, 335 gs.

Macgregor, red, calved May 19, 1870, by Grand Duke 10th (21848), out of Rose of Raby by Lumley.—Mr. Allen, 100 gs.

Barden, roan, calved February 22, 1870, by Grand Duke 10th (21848), out of Countess of Barrington 4th by Lord Oxford.—Mr. Marshall, Anstralia, 220 gs.

Sunlight, red and white, calved June 21, 1870, by Grand Duke 10th (21848), out of Bright Star by Red Duke.—Mr. Statter, 90 gs.

Duke of Oxford 20th, white, calved October 28, 1870, by Baron Oxford 4th (25580), out of Grand Duchess of Oxford 12th by 2nd Duke of Wetherby.—Earl of Feversham, 1,900 gs.

Wastwater, roan, calved January 26, 1871, by Baron Oxford 4th (25580), out of Winsome by Oxford 2nd.—Lord Chesham, 50 gs.

Duke of Oxford 21st, red, calved February 24, 1871, by Grand Duke 10th (21848), out of Grand Duchess of Oxford 5th by Priam.—Mr. J. E. Denison, 155 gs.

Duke of Oxford 22nd, white, calved April 26, 1871, by Baron Oxford 4th (25580), out of Grand Duchess of Oxford 7th by Lord Oxford.—Mr. I. Downing, 305 gs.

Stars and Stripes, red and white, calved April 30, 1871, by Grand Duke 17th (24064), out of Alexandria by 3rd Grand Duke.—Mr. Ormandy, 25 gs.

Dunbar, roan, calved May 19, 1871, by Baron Oxford 4th (25580), out of Blanche 5th by Grand Duke 10th.—Mr. Greetham, 47 gs.

Duke of Oxford 23rd, white, calved July 4, 1871, by Baron Oxford 4th (25580), out of Grand Duchess of Oxford 9th by 12th Duke of Oxford.—Mr. A. Brogden, 155 gs.

SUMMARY.

	AVERAGE.	£	s.	d.
31 cows	£248 2 0	7,691	5	0
12 bulls	221 11 0	2,658	12	0
43 averaged ...	240 13 10	£10,349	17	0

MR. SLYE'S SHORTHORNS,

AT BEAUMONT GRANGE, LANCASTER, ON THURSDAY, SEPT. 7TH, 1871.

BY MR. STRAFFORD.

Mr. Slye generally reduces his herd every two years by a draught sale, and Holker offered such attractions to south country buyers that his turn came in well after the Duke's. The foot-and-mouth disease had unfortunately been in the district, and the herd fell with it a few days previous to the sale. Although it had not very greatly affected the condition of the cattle yet they showed to great disadvantage, and had to be kept at the seller's risk and expense until a clean bill of health could be obtained. This was known at Holker, and doubtless deterred several from coming, the company being small and uncomfortably divided between the ringside and the lawn in front of the house. Some of the cows fetched fair prices. Golden Duchess, lot 3, going cheaply to Mr. Richards at 50 gs.; her daughter, lot 9, being competed for by

Mr. Sheldon and Mr. Barnes until the latter got her at 100 gs. The fashionable lot was a nice roan February calf, by Mr. Bowly's 2nd Duke of Tregunter from Lady Thorndale Bates of the Barrington tribe. The biddings went well along up to 450 gs., and although a reserve was talked about, it was not announced, "Who'll say 500?" Mrs. Fawcett, of Scaley Castle rose, and said, "I will," and the glass ran, and she got it at 500, though it was said Lord Bective intended giving 700 gs. Mr. J. K. Fowler secured a white Bates and Charmer calf at 58 gs., and Mr. McIntosh got quite a show lot in Fawsley Duchess 2nd; a Bates upon Knightley at 150 gs. Several of the females were of the old Farnley Millicent tribe, from which Mr. Slye bred the good roan bull he has been exhibiting; the highest priced one of this family was a two years old heifer, Cambridge Beauty, which fell to Mr. Haslam, at 65 gs.

Grand Duke of Kent 2nd, one of the Grand Duchess tribe, had also a reserve upon him; he was brought in first, and although he was a very useful bull, with a head a trifle more effeminate than is generally seen on the Dukes, there was no bid of 700 gs., the reserve price, so he was passed out. Barrington Duke, nearly own brother to the 500 gs. heifer, was a thick sappy vigorous calf, and after much competition Earl of Bective secured him for 200 gs. The others made fair prices, the last being not sold. The disease had doubtless a deterrent effect on some of the less fashionable tribes, still £71 10s. was a fine average for the twenty-eight, and we believe fully up to Mr. Slye's anticipations.

COWS AND HEIFERS.

Lady Spencer 2nd, rich roan, calved April 19, 1864, by Grand Duke of Lancaster (19853), out of Lady Spencer.—Mr. H. J. Gibbon, Holmscales, 30 gs.
 Moss Rose 5th, rich roan, calved January 12, 1866, by Royal Gwynne (22784), out of Moss Rose.—Mr. R. Parker, Milnthorpe, 41 gs.
 Golden Duchess, red and white, calved February 7, 1866, by Golden Duke (19860), out of Czarina.—Mr. R. C. Richards, Kirkham, 50 gs.
 Rose of Lancaster, roan, calved February 20, 1866, by Grand Duke of Lancaster (19883), out of Moss Rose 2nd.—Lord Chesham, 51 gs.
 Rose of Cambridge, white, calved March 10, 1866, by Grand Duke of Lancaster (19853), out of Cambridge Moss Rose.—Mr. J. P. Haslam, Bolton, 40 gs.
 Red Duchess 8th, red, calved November 11, 1868, by Grand Duke of Lancaster (19883), out of Red Duchess 6th.—Mr. J. Todd, Mireside, 32 gs.
 Cambridge Beauty, rich roan, calved February 23, 1869, by Grand Duke of Oxford (24070), out of Rose of Cambridge.—Mr. J. P. Haslam, 65 gs.
 Duchess 9th, rich roan, calved May 7, 1869, by Grand Duke of Oxford (24070), out of Duchess 8th.—Mr. R. C. Richards, 44 gs.
 Golden Duchess 2nd, roan, calved May 29, 1869, by Barrington Oxford (25607), out of Golden Duchess.—Mr. C. A. Barnes, Charleywood, 100 gs.
 Sweetheart 35th, roan, calved March 13, 1870, by Patrician (27428), out of Sweetheart 11th.—Rev. J. Swarbruk, 50 gs.
 Cambridge Beauty 2nd, rich roan, calved April 15, 1870, by Barrington Oxford (25607), out of Rose of Cambridge.—Mr. R. Parker, 26 gs.
 Red Duchess 9th, red, calved November 1, 1870, by Grand Duke of Lancaster (19883), out of Red Duchess 6th.—Mr. Starkey, 50 gs.
 Lady Tregunter Bates, rich roan, calved February 19, 1871, by 2nd Duke of Tregunter (26022), out of L. Thorndale Bates.—Mrs. Fawcett, 500 gs.
 Royal Charmer 5th, white with roan ears, calved March 23, 1871, by Grand Duke of Lancaster (19883), out of Royal Charmer.—Mr. J. K. Fowler, 58 gs.
 Fawsley Duchess 2nd, roan, calved March 24, 1871, by Barrington Oxford (25607), out of Lady Knightley.—Mr. J. Boyd, 150 gs.
 Duchess 10th, rich roan, calved March 30, 1871, by Barrington Oxford (25607), out of Duchess 8th.—Mr. J. Todd, 25 gs.
 Cambridge Beauty 3rd, rich roan, calved April 6, 1871, by Barrington Oxford (25607), out of Rose of Cambridge.—Lord Chesham, 33 gs.

Lady Barrington Spencer, red and white, calved April 30, 1871, by Barrington Oxford (25607), out of Lady Spencer 2nd.—Mr. H. J. Gibbon, 21 gs.
 Moss Rose 6th, rich roan, calved June 20, 1871, by Grand Duke of Lancaster (19883), out of Moss Rose 5th.—Lord Chesham, 50 gs.

BULLS.

Fawsley Baronet 2nd, rich roan, calved March 10, 1870, by Grand Duke of Lancaster (19883), out of Lady Knightley, —Mr. W. Parker, 41 gs.
 Grand Duke of Lancaster 2nd, red, calved March 26, 1870, by Grand Duke of Lancaster (19883), out of Dulcimer.—Mr. Brockebank, 36 gs.
 Royal Hubback, red and white, calved May 5, 1870, by Barrington Oxford (25607), out of Duchess 5th.—Mr. H. J. Gibbon, 31 gs.
 Faruley Duke 2nd, rich roan, calved May 21, 1870, by Barrington Oxford (25607), out of Moss Rose 5th.—Mr. Mercer, 17 gs.
 Lord Barrington Spencer 2nd, red, calved June 11th, 1870, by Barrington Oxford (25607), out of Lady Spencer 2nd.—Mr. Kendal, 41 gs.
 Sir Charles, red, calved June 19th, 1870, by Patrician (27428), out of Sweetheart 6th.—Mr. Bowling, 28 gs.
 The Emperor, rich roan, calved August 29th, 1870, by Barrington Oxford (25607), out of Sweetheart.—Mr. N. Eckersley, 57 gs.
 Prince of Oxford, white, calved October 19, 1870, by Barrington Oxford (25607), out of Oxford Gwynne.—Mr. R. C. Richards, 40 gs.
 Barrington Duke, red, calved November 25th, 1870, by 2nd Duke of Tregunter (26022), out of Lady Bates 3rd.—Earl of Bective, 200 gs.

SUMMARY.

	AVERAGE.			£	s.	d.
19 cows	478	5	0	1,486	16	0
9 bulls	57	5	8	515	11	0
28 head averaged	71	10	3	2,002	7	0

SALE OF A PORTION OF MR. FOSTER'S SHORTHORN HERD,

AT KILLHOW, CUMBERLAND.

ON FRIDAY, SEPTEMBER 8TH, 1871,

BY MR. STRAFFORD.

It seems scarcely three years ago since the whole of the Killhow herd was dispersed. Mr. Foster was, however, quickly in the market again, buying up fine thick heavy-fleshed cows, by first-class bulls from well-bred dam at most of the sales—viz., Lord Pearlyn, Earl of Aylesford, Sir C. Lampson, Messrs. Bowly, Howard, Leuey, Tracy, Rich, Slye, Angus, Fawcett, and other breeders. These were put to the 17th Duke of Oxford, a purchase from Holker, and some good calves, the better being the bulls, were brought in after him. Mr. Geo. Moore, whose estate at Whitehall almost adjoins Killhow, contributed half a dozen remarkably good cows and heifers, which realised some of the best prices of the day. The splendid pastures in the valley of the Ellen were envied by the southerners, and well they might be, for the cattle came out in that splendid trim—full of hair and blooming condition that rich grass invariably gives; indeed many breeders went so far as to remark that they were a wonderful even uniform lot such as is rarely seen together, and as a whole perhaps superior to those sold at Holker. The ring filled with seats inside after the Cumberland fashion was densely crowded with a larger company than at Holker, though many who were present there were absent here and a strong local attendance, who got but little chance of a "bargain," occupied their places. Two or three lots were of fashionable pedigree, lot 2 being one of the Sumrise tribe and in calf to the celebrated bull Second Duke of Collingham; so she was bought for Lord Dunmore at 190 gs., Mr. Cheney being the last bidder. Carolina 5th, a 205 gs. purchase at Didmarton, and with a pure Bates pedigree, made 10 gs. over

cost price (Mr. Mcintosh), her heifer, by Grand Duke 10th, going for 325 gs. to Mr. Angerstein, who was indeed the great buyer of the sale, for he took ten lots at an average of nearly £140. Young Strawberry, lot 5, of the old Anguf blood crossed with Booth's and one of the finest cows in the sale, went very cheap to Mr. H. C. Pole-Gell at 76 gs.; her two-year-old heifer, of immense size, being also secured by him at one guinea more. Mr. Bowly's Musicals and Mr. Rich's Ursulas had greatly improved on their appearance in Gloucestershire, and Mr. Angerstein took most of them into Norfolk, where they will require all their robustness and quality to stand against the poor light soil of that county. The Fantails, bred by the Brothers Graham, with Knightley blood upon a Bell Bates cow, were much in demand. Mr. Cheney secured the old cow at 90 gs., and he fought bravely, but unsuccessfully, against Mr. Angerstein for the others. Grand Duchess 6th, a long, fine cow of the Wild Eyes tribe, from Penrhyn, was much admired, and great was the competition, Sir Curtis Lamson getting her at 325 gs. Duchess Gwynne, a purchase at Packington, lost both money, hair, and bloom since last May, and went to Colkiingscote, for Lord Bective, at 150 gs. Red Rose, a very fine red heifer, was kept in the county by a new beginner. Mr. Sheldon seemed very determined on Twin Duchess 3rd, a level, beautiful cow, as she cost him 250 gs.; her heifer, a nice roan, was also much sought, but Sir Wilfred Lawson got her at 175 gs. Two or three heifers by Royal Cambridge, Mr. Foster's previous bull of the Cambridge Rose sort, were particularly thick and massive, like their sire, though somewhat wanting in length. Sir W. Lawson put two of them up at 100 guineas each, and there was no opposition. A promising Surmise calf by Grand Duke 10th went to Mr. Sartoris for 210 gs. The heifer calves also sold well. The bulls were mere calves, and only four of them; they went chiefly among the local company at a £36 average.

COWS AND HEIFERS.

Belinda, red, calved March 21, 1860, by Sir Roger (16991), out of Berrington Lass.—Mr. H. C. Pole Gell, Derbyshire, 36 gs.
 Princess, red, calved December 24, 1861, by May Duke (13320), out of Surmise.—Earl of Dunmore, 190 gs.
 Fatima Gwynne, white, calved July 20, 1862, by 2nd Duke of Thorndale (17748), out of Frances Gwynne.—Mr. F. Sartoris, 60 gs.
 Fantail, red and white, calved April 10, 1863, by Barleycorn (17348), out of Fair Helen.—Mr. E. H. Cheney, 90 gs.
 Young Strawberry, roan, calved November 27, 1863, by Knight of Windsor (16349), out of Strawberry.—Mr. H. C. Pole Gell, 76 gs.
 Carolina 5th, roan, calved January 8, 1865, by 7th Duke of York (17754), out of Carolina 2nd.—Mr. D. McIntosh, Essex, 215 gs.
 Lily Cardigan, white, calved March 8, 1865, by Majestic (22263), out of Lily.—Mr. Shepherd, 33 gs.
 Butterfly Princess, red, calved May 9, 1865, by Federal (21734), out of Butterfly Princess 8th.—Mr. Jennings, 28 gs.
 Ursula 19th, roan, calved June 8, 1865, by 7th Duke of York (17754), out of Ursula 12th.—Mr. W. Angerstein, Norfolk, 105 gs.
 Musical 6th, roan, calved October 4, 1865, by 7th Duke of York (17754), out of Chorus.—Mr. W. Angerstein, 105 gs.
 Persian, roan, calved October 16, 1865, by 7th Duke of York (17754), out of Peru.—Sir Wilfrid Lawson, 120 gs.
 Florentia 11th, roan, calved February 25, 1866, by 7th Duke of York (17754), out of Florentia 5th.—Mr. W. Angerstein, 61 gs.
 Jessy Cardigan, roan, calved April 20, 1866, by Majestic (22263), out of Jessy.—Mr. R. Jefferson, 67 gs.
 Fantail 3rd, red and white, calved April 21, 1866, by Touchstone (20986), out of Fantail.—Mr. W. Angerstein, 155 gs.
 Grand Duchess 6th, roan, calved August 31, 1866, by Duke of Geneva (19614), out of Grand Duchess.—Sir C. Lampson, Sussex, 325 gs.
 Duchess Gwynne, red, calved September 15, 1876, by 9th Grand Duke (19879), out of Jenny Gwynne.—Earl of Bective, 150 gs.
 Red Rose, calved in February, 1867, by Merry Mowarch (22349), out of Bloomer Girl.—Mr. J. Bowman, Cumberland, 68 gs.
 Fair Butterfly Princess, light roan, calved July 2, 1867, by

14th Duke of Oxford (21605), out of Butterfly Princess 10th.—Mr. E. H. Cheney, 80 gs.
 Twin Duchess 3rd, red and white, calved September 19, 1867, by Knightley (22051), out of Twin Duchess.—Mr. W. J. Sheldon, Brailes, 250 gs.
 Pink, red, calved March 19, 1868, by Worth (23244), out of Tulip.—Mr. W. J. Sheldon, 50 gs.
 Oxford Brilliant, red, calved March 10, 1868, by 14th Duke of Oxford (21605), out of Eliza.—Mr. W. Heskett, 71 gs.
 Musical 13th, roan, calved March 21, 1868, by 7th Duke of York (17754), out of Harpsichord.—Mr. W. Angerstein, 140 gs.
 Holly Lady, roan, calved June 7, 1868, by 14th Duke of Oxford (21605), out of Hollyhook 5th.—Mr. Shepherd, 32 gs.
 Placid, red and white, calved May 9, 1868, by Royal Cambridge (25009), out of Prosperous.—Mr. Baxter, 68 gs.
 Fantail 5th, red and white, calved June 19, 1868, by Royal Cambridge (25009), out of Fantail 3rd.—Mr. W. Angerstein, 360 gs.
 Ganymede, red, calved July 13, 1868, by Fair Lad (23905), out of Gertrude.—Mr. Richardson, 48 gs.
 Crauberry, rich roan, calved August 18, 1868, by 2nd Duke of Claro (21576), out of Yewberry.—Mr. A. P. Clear, Essex, 54 gs.
 Peruvian Queen, red, calved September 8, 1868, by 2nd Duke of Claro (21576), out of Peru.—Mr. C. Fisher, 43 gs.
 Ciderella, roan, calved in September, 1868, by Duke of Cumberland (21584), out of Dulcibella.—Mr. T. H. Parker, 38 gs.
 Princess Royal, white, calved October 2, 1868, by Lord Oxford 2nd (20215), out of Princess Alice.—Mr. J. Dalton, 33 gs.
 Keturah 7th, red roan, calved October 11, 1868, by 2nd Duke of Collingham (23730), out of Keturah 5th.—Mr. W. Angerstein, 51 gs.
 Cleopatra 13th, white, calved October 18, 1868, by 3rd Duke of Claro (23729), out of Cleopatra 9th.—Captain Gandy, 31 gs.
 Sweetheart 3rd, rich roan, calved October 28, 1868, by Sir Walter Gwynne (22921), out of Sweetheart 2nd.—Mr. T. H. Parker, 95 gs.
 Musical 15th, red and white, calved January 19, 1869, by Grand Duke 13th (21550), out of Musical 7th.—Mr. W. Angerstein, 160 gs.
 Fawsley Duchess, rich roan, calved March 10, 1869, by Grand Duke of Lancaster (19883), out of Lady Knightley.—Mr. D. McIntosh, 190 gs.
 Sprightley, roan, calved March 15, 1869, by Brigade Major (21312), out of Young Strawberry.—Mr. H. C. Pole Gell, 77 gs.
 Lady Cardigan, white, calved April 12, 1869, by Ravenshope (22631), out of Gowan Cardigan.—Mr. R. Jefferson, 36 gs.
 Elvira 14th, roan, calved April 14, 1869, by 14th Duke of Oxford (21605), out of Elvira 12th.—Mr. Dalton, 36 gs.
 Cambridge Witch, roan, calved June 6, 1869, by Royal Cambridge (25009), out of Oxford Witch.—Sir W. Lawson, 100 gs.
 Royal Gertrude, red, calved July 2, 1869, by Royal Cambridge (25009), out of Gertrude.—Sir W. Lawson, 100 gs.
 Maia, roan, calved July 28, 1869, by Grand Duke 10th (21848), out of Andromache.—Mr. W. Fox, 78 gs.
 Jenny Cardigan, white, calved January 18, 1870, by Ravenshope (22631), out of Jessy Cardigan.—Mr. R. Jefferson, 34 gs.
 Grand Duchess Surmise, red, calved June 2, 1870, by Grand Duke 10th (21848), out of Princess.—Mr. F. Sartoris, 210 gs.
 Florence Graham, red and white, calved June 17, 1870, by 17th Duke of Oxford (25994), out of Florentia 11th.—Mr. W. Angerstein, 93 gs.
 Grand Duchess Carolina, roan, calved September 26, 1870, by Grand Duke 10th (21848), out of Carolina 5th.—Mr. W. Angerstein, 325 gs.
 Charming Duchess, roan, calved November 11, 1870, by 17th Duke of Oxford (25994), out of Twin Duchess 3rd.—Sir W. Lawson, 175 gs.
 Grand Duchess Ursula, red, calved November 11, 1870, by Grand Duke 10th (21848), out of Ursula 19th.—Mr. J. Fawcett, 125 gs.
 Flora McIvor, roan, calved November 13, 1870, by 17th Duke

of Oxford (25994), out of Fairy Belle.—Earl of Bective, 61 gs.
 Countess of Roseberry, red and white, calved December 10, 1870, by 17th Duke of Oxford (25994), out of Belinda.—Sir W. Lawson, 36 gs.
 Countess Cardigan, red, calved February 8, 1871, by 17th Duke of Oxford (25994), out of Jessie Cardigan.—Sir W. Lawson, 30 gs.
 Blue Bell, red, calved March 14, 1871, by The Fiddler (27638), out of Pink.—Mr. A. P. Clear, 51 gs.
 Fairy Gwynne, white, calved June 28, 1871, by 17th Duke of Oxford (25994), out of Fatima Gwynne.—Earl of Bective, 60 gs.

BULLS.

Mnsic Master, white, calved November, 28, 1870, by 17th Duke of Oxford (25994), out of Persiani.—Mr. Dixon, 20 gs.
 Brilliant Prince, roan, calved January 27, 1871, by 17th Duke of Oxford (25994), out of Oxford Brilliant.—Mr. Hedley, 47 gs.

Favonius, red and white, calved February 19, 1871, by 17th Duke of Oxford (25994), out of Andromache.—Mr. J. Todd, 36 gs.
 Duke Gwynne, red and white, calved June 10, 1871, by Duke of Cambridge (25940), out of Duchess Gwynne.—Mr. R. Watson, 36 gs.
 Total £5,716 4s. 0d.
 Average of 56 head... £102 1s. 6d.

The three great north sales were thus brought to a close after an agreeable though slow business. Following with such great average prices after the two Irish sales last week they are the more remarkable, and tend to show the great demand for high bred stock there is throughout the country. Fashion no doubt lends a helping hand, but when men farming their own estates for profit and tenant farmers also give their hundreds for stock, as was the case this week, but more particularly in Ireland last week, it must be something more than mere fashion that tempts men to make such apparently rash outlays in high bred animals.

SALE OF MR. THOMAS BELL'S SHORTHORNS,

AT BROCKTON HOUSE, ECCLESHALL, TUESDAY, SEPTEMBER 12, 1871.

BY MR. THORNTON.

Mr. Bell, as many of our readers may be aware, is the compiler of the late Mr. Bates' papers on the improved Shorthorn, which have recently been published in a small volume, and doubtless drew attention to the sale of his herd on Tuesday last. A large company assembled, but we missed many of the faces that surrounded the Holker ring, though representatives were present from the leading aristocratic breeders. The attraction of the sale, was the white two-year-old bull Eighth Duke of York, which was owned conjointly with Messrs. Tunnicliffe and Allen, but who, a few days prior to the sale, allowed their third share also to be exposed, so that the full value of the bulls might be obtained, and the purchaser have him free from any partnership existing. The bull consequently, in the absence of lot 1, was brought in first; started at five hundred guineas, he rose in slow biddings to 800 gs., on which price Mr. Fawcett bid five more, and the Earl of Bective's agent, Mr. Punchedard, finally bid up to one thousand; the opposition was hard to check; the unceasing "five" came again and again; and Mr. Punchedard still opposed, until sixty was bid, and "five" answered instantly, at which sum he was knocked down to Mr. J. Fawcett, of Scaleby Castle, and friend; being at 1065 gs., the highest price that has yet been given for a bull, and the highest realised for any Shorthorn at public auction. The bull, a characteristic-looking animal, was low in condition, but of a creamy-white hue, and excellent in quality; whilst the few calves by him were full of hair and very promising. The first a white heifer from Pearl Blossom 6th, a thin, plain, white young cow (which Mr. Fawcett got very cheap at 30 gs.) went finally to Mr. Cheney at 81 gs. The next calf, a roan and also of the Peach Blossom tribe, was bought by Mr. J. K. Fowler at 36 gs. Col. Kingscote's agent securing the last, also a roan of the Georgiana tribe, for 50 gs., and some of this family he had previously purchased from Mr. Bell for the Colonel. Even the bull calves fetched extra prices, and exceeded the sums realized by the yearlings, which were very small and low in condition. The cows and heifers were in a somewhat similar state, though not so poor as the young bulls, but there was a roughness about their heads and a weakness in their backs which probably Eighth Duke of York would have improved had he been retained and the herd

kept any length of time. A few were, however, very promising. Mr. Fowler bought two or three useful cows, and his neighbour Mr. Barnes took the two specimens of the Babraham Celias to Charleywood, where the family is almost entirely located and becoming a herd tribe. Some of the in-calf heifers were thick and hairy, and, being served by the Eighth Duke of York, seemed worth a little more than was given for them, especially as their pedigrees were of pure Bates blood, though certainly not of the first water. Georgiana 10th, a newly-calved heifer, went for 66 gs. to Col. Kingscote; and Princess Victoria 7th, a fine roan heifer, to Lord Skelmersdale at 100 gs., about half her value, as some people considered. Sir Percival Heywood bought several very useful lots, and the only specimen of the Lady Hudsons went to Mr. Cheney for 75 gs. At the luncheon Mr. J. Fawcett, of Scaleby, presided; Mr. Thos. Bates, of Heddon Bank, supporting him.

COWS AND HEIFERS.

Peach Blossom, by Delhi (15865), 33 gs., Mr. Fowler.
 Tryphena, by Fourth Duke of Oxford (11387), 40 gs., Mr. Fowler.
 Georgina 7th, by Fourth Duke of Oxford (11387), 36 gs., Mr. Stubbs,
 Raspberry 2nd, by Baron Westbury (19287), 30 gs., Mr. Bates.
 Mary Jane 2nd, by Lord Ravensworth (20222), 30 gs., Mr. Chadwick.
 Ruby 3rd, by Lord Ravensworth (20222), 30 gs. Rev. E. C. Barry.
 Dablia 3rd, by Lord Ravensworth (20222), 38 gs., Mr. Blundell.
 Hilpa, by General Garibaldi (21812), 50 gs., Mr. Barnes.
 Ruby 4th, by Second Baron Westbury (19288), 36 gs., Mr. Spencer.
 Georgina 9th, by Second Baron Westbury (19288), 33 gs., Mr. Allen.
 Nina 6th, by Roan Prince, 31 gs., Mr. Bostock.
 Countess of Brocton, by Lord Liverpool (22168), 44 gs., Mr. Allen.
 Raspberry 3rd, by Lord Liverpool (22168), 44 gs., Lord Fitzhardinge.
 Georgiana 10th, by Northern Light (26984), 66 gs., Colonel Kingscote.
 Lady Mary, by Northern Light (26984), 21 gs., Mr. Spencer,

Henrietta 7th, by Prince of Oxford (27172), 25 gs., Rev. E. C. Perry.
 Princess Victoria 7th, by Thirteenth Duke of Oxford (21604), 100 gs., Lord Skelmersdale.
 Peach Blossom 6th, by Earl of Glo'ster (21644), 30 gs., Mr. Fawcett.
 Nina 9th, by White Prince 5th, 31 gs., Sir P. Heywood.
 Raspberry 4th, by Earl of Glo'ster (21644), 28 gs., Lord Fitzhardinge.
 Georgiana 12th, by Earl of Glo'ster (21644), 45 gs., Mr. G. Allen.
 Lady Mary 2nd, by Earl of Glo'ster (21644), 46 gs., Mr. J. Fawcett.
 Laura 2nd, by White Prince 5th, 25 gs., Mr. T. Bates.
 Dahlia 4th, by Earl of Glo'ster (21644), 42 gs., Sir Percival Heywood.
 Hilpa 2nd, by Prince of Oxford (27172), 52 gs., Mr. C. A. Barnes.
 Tryphena 2nd, by Prince of Oxford (27172), 34 gs., Mr. J. K. Fowler.
 Nina 11th, by White Prince 5th, 29 gs., Sir P. Heywood.
 Lady Mary 3rd, by Prince of Oxford (27172), 21 gs., Rev. H. O. Wilson.
 Raspberry 5th, by Prince of Oxford (27172), 36 gs., Sir P. Heywood.
 Lady Hudson 11th, by Prince of Oxford (27172), 75 gs., Mr. E. H. Cheney.
 Dahlia 5th, by Prince of Oxford (27172), 24 gs., Mr. E. Bostock.
 Countess of Brockton 2nd, by Prince of Oxford (27172), 37 gs., Sir P. Heywood.
 Tryphena 3rd, by Second Duke of Wetherby (21618), 27 gs., Mr. G. Allen.
 Newlight 2nd, by Prince of Oxford (27172), 13 gs., Sir P. Heywood.
 Peach Blossom 8th, by Eighth Duke of York, 81 gs., Mr. E. H. Cheney.

Peach Blossom 9th, by Eighth Duke of York, 36 gs., Mr. J. K. Fowler.
 Georgiana 15th, by Eighth Duke of York, 50 gs., Col. Kingscote.

BULLS.

Eighth Duke of York, by Fourth Duke of Thorndale (17750), 1,065 gs., Mr. J. Fawcett and friend.
 Prince of Oxford (27172), by Second Lord Oxford (20215), 41 gs., Mr. J. Chadwick.
 Jonas Webb, by Prince of Oxford (27172), 18 gs., Mr. J. Riley.
 Clarence Duke, by Prince of Oxford (27172), 14 gs., Mr. T. Spencer.
 Fifth Earl of Glo'ster, by Second Duke of Wetherby (21618), 17 gs., Mr. T. Bates.
 Tichborne, by Second Duke of Wetherby (21618), 11 gs., Mr. B. Wainman.
 Orton, by Second Duke of Wetherby (21618) 12 gs., Rev. H. O. Wilson.
 Fourth Duke of Brockton, by Second Duke of Wetherby (21618), 32 gs., Mr. G. Allen.
 Second Earl of Pershall, by Second Duke of Wetherby (21618), 16 gs., Mr. W. Stubbs.
 Sixth Earl of Glo'ster, by Eighth Duke of York, 20 gs., Mr. G. H. Earp.
 Third Earl of Pershall, by Eighth Duke of York, 23 gs., Mr. J. Ritchie.
 Prince Bismarek, by Eighth Duke of York, 20 gs., Mr. H. Killick.

SUMMARY.

	AVERAGE.			£	s.	d.
37 cows	£ 41	2	4	1,521	9	0
12 bulls	112	15	9	1,353	9	0
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49 head averaged	58	13	5	2,874	18	0

SALE OF MESSRS. DUDDINGS' SHORTHORNS.

AT PANTON HOUSE, WRAGBY, THURSDAY, SEPT. 14, 1871.

BY MR. THORNTON.

Eleven years since the larger portion of the Panton herd was sold by auction, Richard Dudding having carefully bred it from his father's stock, and used the best and most fashionable bulls of the time, nearly a dozen having been at that time hired from Warlabry. Soon after the sale he retired from the business, and put his two sons, William and Henry, in possession. They added to the herd a number of cows and heifers from Mr. Henage and Mr. Topham's stocks, and used Lady Pigot's and the Rev. J. Storer's bulls, which were almost entirely of Booth blood. At the beginning of the year they went again to Warlabry, and hired Manfred and British Crown, and most of the cows and heifers were in calf to these bulls. The father went but little into the showyards with either his cattle or sheep; but the sons well and successfully advertised themselves by that method, and also made two or three advantageous sales. At the Oxford Royal they came second with yearling heifers, and sold their winner for 350 gs. for Canada. They also took first prizes the same year at the Royal and Yorkshire with a bull-calf, Robin Hood, which McDougall, the "canny chiel" from Australia, bought for 150 gs., and now prices at a thousand in the colony. This year they were again similarly successful with bull calves, and two or three other prize specimens were included in the catalogue. With this "blaze of triumph" the herd was announced for sale, and, saving a few old cows, comprised the whole of it. There was plenty of size, abundance of coat, and thickness of flesh in most of the animals for sale; but

there was rather a lumpiness or coarseness about them that was not to be seen in the father's herd; but then they were hardly so well bred nor had the judgment matured. It is one thing to breed Shorthorns, but it is quite another to keep a herd fine in appearance and uniform in character.

Many of the old cows were past the decade of life, and although said to be "safe," were looked upon as "doubtful" by the company. Countess of Wrangby, one of the best cows and the dam of three prize winners, as well as being a Sir Roger (16991) cow, was one of the best and cheapest lots, going to Mr. Adwick, of Straythorpe, after slow competition, for 56gs. There were plenty of bids up to a price for most of the many lots from the good people of the county, but those out of it took most of the best animals. Mr. Camm, the Speaker's representative, got several good cows, and a handsome pair went to Mr. Currie, of Hal-kerston, Edinburgh; Mr. T. C. Booth put in a few bids, which were generally pretty soon covered, as most of the animals he selected for his friend Mr. Armitage were the pick of the sale and the fancy of other people also. Lot 13 Agility, not a large cow, but a capital breeder, he bought at 61gs., and a capital heifer in Lady of the Lake. Earl Brownlow's agent also got some useful lots, and the Hebes all went, save one plain heifer, to Mr. Cruikshank, of Sittyton, and a very useful lot they were, combining size, hair, and flesh with good milking properties, and the best of Mr. Wilkinson's old Lenton blood. Mr. Yarborough bought several fine promising heifers and a fresh and youthful breeder. Mr. J. Lister made a good

start with a fine down-calving cow in Ruby Rose at 87gs. Miss Rich, a shocking specimen, was a very doubtful heifer, and went to a jobber. Nor were the buyers confined to the home counties. Mr. Hugh Gorringe, of Sussex, got a pretty heifer in Ada at 37 gs.; and one of the plums of the sale went to Mr. J. Beattie, of Annan, for 70 gs. Mr. George Bland, of Coleby, fought well for the county against distant buyers for Summer Flower, which he finally got at 86 gs. There are usually two good men who go to a sale—one buys the best, and the other the worst; we should think that Captain Pratt was in the light of the former, as he not only secured three good breeding heifers, but the beautiful show heifer, Virginia, at 95 gs., as well as the prize red bull, Standard Bearer at 81 gs., and the prize calf British Flag, after competition with Sir Thomas Whichcote, for 155 gs., at which figure he seemed very cheap. It is understood they are going out to Kentucky. The agent of the Rev. Mr. Torr took some of the cheapest lots, chiefly whites, into Hampshire. The white show heifer, Lady Grace, was not hotly contested. Mr. Statter was a languid bidder against the Rev. J. Storer; and at 81 gs. the heifer may win all the money in premiums. A very promising show calf in Countess of Oxford was bought by Mr. Stubbs for 43 gs. Neither Robin nor the Stuart were in great demand, as both were aged and the latter a better stock-getter than a bull. They made only beef prices, though neither went to the block. Adjutant, the roan Lincoln prize-calf, brought out strong competition, and was finally kept in the county by Mr. Ealand for 87 gs. The young bulls were all good and sold well at an average of nearly £60, the cows making £46 7s. Mr. Turner occupied the chair in the luncheon tent, at which over 300 sat down. Mr. William Dudding, in a very flowery effusion, returned thanks for his father and the firm, and the sale began precisely at one o'clock, as advertised. It was very lively throughout, Mr. Thornton's Irishisms giving humour to the proceedings, which were finished soon after four o'clock.

COWS AND HEIFERS.

Springflower, by Vanguard (10994), 33 gs., J. C. Pickin.
 Countess of Wragby, by Sir Roger (16991), 56 gs., T. Adwick.
 Anna Maria, by Sir Roger (16991), 34 gs., C. F. Paddison.
 Rose of Castile, by Sir Roger (16991), 34 gs., J. Codling.
 Hawthorn, by Iighthorn (13028), 33 gs., T. Pears.
 Attraction, by Prince Alfred (13494), 26 gs., J. Ashlin.
 Judith's Joy, by Prince Alfred (13494), 61 gs., J. Currie.
 Almack's Princess, by Prince Alfred (13494), 36 gs., The Speaker, Right Hon. J. E. Denison.
 Vixen, by Sweetmeat (18952), 34 gs., F. Frudd.
 Duchess Second, by Storm King (18933), 34 gs., J. Greetham.
 Ruby, by Colonel Colling (17587), 80 gs., The Speaker.
 Abess, by Friar Tuck (17592), 25 gs., R. Cowton.
 Agility, by Woodranger (21128), 61 gs., T. C. Booth for W. Armitage.
 Lady Augusta, by Lord Panton (22204), 39 gs., W. Knapton.
 Royal Bride, by Welford (23196), 51 gs., J. Codling.
 Alice Hawthorn, by Friar Tuck (17592), 31 gs., T. W. Cadman.
 Hawthorn Blossom, by Lord Panton (22204), 52 gs., P. Brown.
 Attraction Royal, by Royal Buckingham (20718), 40 gs., W. Knapton.
 Alice Buckingham, by Royal Buckingham (20718), 35 gs., G. B. Skipworth.
 Fancy 14th, by Royal Buckingham (20718), 51 gs., Earl Brownlow.
 Eugenie 4th, by Royal Buckingham (20718), 43 gs., J. Currie.
 Hebe 24th, by Colonel Colling (17587), 50 gs., A. Cruickshank.
 Rose of Panton, by Royal Buckingham (20718), 42 gs., The Speaker.

Ladybird, by Royal Buckingham (20718), 81 gs., Y. Yarborough.

Ruby Rose, by Feudal Chief (21740), 87 gs., J. D. Lister.
 Miss Rich, by Feudal Chief (21740), 20 gs., M. Marshall.
 Bouquet, by Baron Rosedale (21239), 27 gs., J. C. Pickin.
 Lady Tuck, by Colonel Tuck (23596), 32 gs., A. Sharpley.
 Rosary, by Baron Rosedale (21239), 30 gs., Rev. J. Storer.
 Lady Blanche, by Baron Rosedale (21239), 30 gs., H. Sharpley.
 Almack's Flower, by Baron Rosedale (21239), 27 gs., W. Chapman.
 Hawthorn 3rd, by Baron Rosedale (21239), 28 gs., Y. Yarborough.
 Rosebud 2nd, by Ravenshope (22681), 50 gs., R. Taylor.
 Amelia, by Ravenswood (22682), 51 gs., H. Pratt.
 Ruth, by Ravenswood (22682), 52 gs., Earl Brownlow.
 Venetia, by Ravenswood (22682), 55 gs., Y. Yarborough.
 Hebe 27th, by Ravenswood (22682), 42 gs., A. Cruickshank.
 Ada, by Ravenswood (22682), 37 gs., Hugh Gorringe.
 Frize Flower, by Ravenswood (22682), 50 gs., H. Pratt.
 Fancy 18th, by Ravenswood (22682), 70 gs., J. Beattie.
 Actress, by Ravenswood (22682), 44 gs., T. W. Bartholomew.
 Summerflower, by Ravenswood (22682), 86 gs., G. Bland.
 Amelia 3rd, by Ravenswood (22682), 62 gs., H. Pratt.
 Virginia, by Ravenswood (22682), 95 gs., H. Pratt.
 Rose of Promise, by Ravenswood (22682), 30 gs., R. Cowton.
 Duchess 4th, by Ravenswood (22682), 40 gs., T. W. Cadman.
 Lady of the Lake, by Knight of the Thistle (26555), 48 gs., T. C. Booth, for W. Armitage.
 Rose of Summer, by Knight of the Thistle (26555), 36 gs., Rev. T. J. Torr.
 Attractive, by Robin (24968), 70 gs., T. Pears.
 Eugenie 5th, by Knight of the Thistle (26555), 30 gs., Rev. T. J. Torr.
 Hebe 28th, by Robin (24968), 42 gs., —. Stafford.
 Hebe 26th, by Knight of the Thistle (26555), 26 gs., A. Cruickshank.
 Admirer, by Robin (24968), 45 gs., The Speaker.
 Vanity, by Robin (24968), 60 gs., R. Burchinal.
 Adeline, by Robin (24968), 38 gs., Rev. T. J. Torr.
 Judith's Duchess, by Knight of the Thistle (26555), 36 gs., E. Paddison.
 Rosebud 3rd, by Knight of the Thistle (26555), 25 gs., R. Cowton.
 Fancy 19th, by Robin (24968), 35 gs., T. C. Booth, for W. Armitage.
 Royal Bridesmaid, by Robin (24968), 51 gs., W. Knapton.
 Pretty Maid, by Robin (24968), 51 gs., The Speaker.
 Almack's Queen, by Robin (24968), 44 gs., Earl Brownlow.
 Amelia 4th, by Robin (24968), 31 gs., Rev. T. J. Torr.
 Lady Grace, by Robin (24968), 51 gs., T. Statter.
 Camp Flower, by Robin (24968), 31 gs., J. Codling.
 Archduchess, by Robin (24968), 36 gs., Rev. T. J. Torr.
 Hebe 29th, by Robin (24968), 41 gs., A. Cruickshank.
 Lady Bertha, by The Stuart (27650), 22 gs., H. Sharpley.
 Countess of Oxford, by Standard Bearer, 43 gs., C. Stubb.
 Royal Princess, by The Stuart (27650), 26 gs., G. Bland.
 Amy Buckingham, by The Stuart (27650), 20 gs., G. B. Skipworth.
 Amelia Fifth, by Standard Bearer, 9 gs., W. Richardson.

BULLS.

Robin (24968), by Imperial Windsor (18086), 41 gs., T. Statter.
 The Stuart (27650), by King Charles (24040), 33 gs., E. Wortley.
 Standard Bearer, by Ravenswood (22682), 81 gs., H. Pratt.
 British Flag, by Robin (24968), 155 gs., H. Pratt.
 Lord Hawthorn, by Robin (24968), 51 gs., H. Minta.
 Adjutant, by Robin (24968), 87 gs., J. R. Ealand.
 Prince Imperial, by The Stuart (27650), 34 gs., G. P. Watson.
 Fancy Stuart, by The Stuart (27650), 50 gs., W. J. Gilliat.
 Hermit, by Standard Bearer, 31 gs., T. Marris.
 Victor, by The Stuart (27650), 40 gs., J. Chatterton.
 Adonis, by The Stuart (27650), 23 gs., J. Abraham.

SUMMARY.

	AVERAGE.			£	s.	d.
71 cows	46	7	0	3,290	14	0
11 bulls	59	15	1	657	6	0
—						
82 head averaged	48	3	0	£3,948	0	0

THE ROYAL BUCKINGHAMSHIRE AND CENTRAL BUCKS AGRICULTURAL ASSOCIATION.

MEETING AT AYLESBURY.

The old Royal Bucks True Blue and No-Surrender Society has celebrated a very successful anniversary in conjunction with its younger relative the Central Association. The cattle diseases, now so prevalent, did not appear to have in any way interfered with the entries, which were pretty generally good, although these did not often extend beyond the county itself. A marked improvement was observable in the show of horses since we last visited a meeting at Aylesbury, as this was more especially noticeable in the cart classes, where the competition was often both large and creditable. There were upwards of twenty entries of all-aged horses in work, of whom a great weighty black from Adderbury was put aside from his bad shallow feet, and the chief prize went to a better looking and better moving bay, if not with quite so much power as the "cast" horse. Beyond the winner, Mr. Badrick's smart compact short-legged mare, there was nothing of any particular merit in the mare and foal class, although the judges "agreed to differ" as to the next best, and Mr. Bulford had to be called in to give the casting vote. Mr. Terry's two-year-old filly was about the best of all the horses, while the same exhibitor backed the winner with another very nice mare, which took the second prize. The best hunter, a showy well-grown five-year-old, is by Wingrave, a horse who promises much as a sire of cross-country stock from half-bred mares; but the class was altogether a curious collection of cobs, weeds, screws, machiners, and so forth, while with a row of hurdles ready the judges declined to have anything to do with such a business, leaving it to the exhibitors to "jump" or not as they pleased after the awards were declared. The best hack was a clever three-year-old, with quite a "set" furnished look about him, as well as a bit of temper which will need looking after; and the best yearling by D'Estournel, out of Archeress by Longbow, a pedigree good enough to race a bit. The brown is, indeed a very charming colt, with clean limbs, a neat head, and a famous back and body. He went, moreover, very straight and true, and so settled it against the other two commended colts, which were both bad awkward goers, but otherwise good looking enough for anything. By way of improving the breed of horses hereabouts, a Vale of Aylesbury Horse Company has been started, with the object as it would seem of putting a Norfolk trotting stallion on to any sort of hack or harness mare. The notion is not a very promising one, nor so far does much seem to have come of it, as the foals shown by the Company's horses were a very ragged lot, with the winner out of a long way the best looking mare. It may be as well to say here that the effect and enjoyment of the horse section of the show was thoroughly destroyed by noising having been provided into which the several classes might be taken; as, moreover, making anything like a critical examination under such circumstances was a service of some danger, as the horses crowded about you. To show how utter was the confusion which reigned, it may be stated that the steward of an exhibitor attempted to force his conversation on one of the judges while a class was under inspection! But by another year a promise has already been made that a horse-ring shall be provided.

The cattle classes included such exhibitors of Short-horns as Mr. Aubrey Mumford, Mr. J. K. Fowler, and Mr. Barnes, of Chorley, with some very highly-bred animals in the entry. The best of all the cattle, however, was declared to be Mr. Senior's fat Devon, Princess, who lacks much of the length and elegance of Perfection, and does not accordingly threaten any immediate repetition of the Smithfield Club performance. The best cow, again, beating Sweetheart 30, and sundry other Shorthorns, was Mr. Senior's Young Daisy, another Devon of more character and style than the fat cow, but standing very badly behind. The second-prize bull was one of the Duke of Buckingham's Longhorns, and indeed these single entries of other breeds were continually beating whole tribes of Shorthorns. The two yearling Short-horns, however, were put first and second as they were at Rugby, and Mr. Barnes and Mr. Mumford had some further success in the younger cow classes. Still the strength of the cattle show centred in the cows entered in lots of three, and into which the Messrs. Denchfield sent quite a little herd of useful, kindly, really milking cows, which fairly took both the prizes, although the whole class was commended. And here, again, the high-bred ones were put out of it, as the plan adopted at Burston is to buy in dairy cows and to put these to a pure-bred bull, but *never to breed from a bad milker*. The result is in every way a success, as it is not so long since that the Denchfields refused an offer of £45 a-head for thirty cows in their herd. The production of milk is of course one of the first considerations, but the cows are good enough to stand the ordeal of the show-ground, as was proved at Aylesbury, for rarely has there been encountered a more legitimate exhibition of farmers' stock; and these cows were an exhibition of themselves. We doubt if Lord Chesham or Mr. Treadwell sent quite their best sheep, and Mr. Longlands won with a two-shear ram. In fact, the pride of the sheep show was to be found amongst the fat wethers, where Mr. N. Stilgoe had quite a grand pen of Oxfords, which of course have in these parts rather the pull of the Shropshires and other sorts.

Beyond the pigs, a Royal Bucks prize-list runs on to an infinite variety of poultry, ploughing, roots, shepherds, herdsmen, and dairymaids, culminating in a dinner, to which Mr. Disraeli sent his excuses, and where the business of the evening was just beginning when the next up-train issued its peremptory summons.

P R I Z E L I S T .

JUDGES.

PLOUGHING AND PIGS.—N. Stilgoe, Adderbury Grounds, Banbury; J. Bulford, Hordley.
HORSES.—H. Corbet, The Farmers' Club, London; J. Bennett, Husbands Bosworth, Rugby.
CATTLE.—R. Newton, Campsfield, Woodstock; C. Hobbs, Maiseyhampton.
SHEEP.—J. Garne, Bushey; A. Howland, Thame.
BUTTER.—H. Pybus, Metropolitan Meat Market, London.
ROOT-CROPS.—L. Denchfield, Burston; E. W. Clarke, Had-denham.
ROOTS IN THE SHOW-YARD.—C. Elliott, Hulcott.
POULTRY.—E. Hewitt, Eden Coltage, Birmingham.

HORSES.

FOR AGRICULTURAL PURPOSES.

Geldings, three years old and upwards.—First prize, a silver cup or piece of plate value £5 5s., J. Seamons, Hulcott; second, £2, J. P. Terry, Putlowes. Commended: E. H. Baylis, Hogstone.

Geldings under three years.—First prize, a silver cup or piece of plate value £5 5s., W. and J. Rose, Eythorpe; second, £2, W. B. Clarke, Uppings, Weedon. Highly commended: J. K. Fowler, Prebendal Farm, Aylesbury.

Mare and foal.—First prize, a silver cup or piece of plate value £5 5s., R. Badrick, Bierton; second, £2, J. Barry, Chilton Grounds. Highly commended: W. and J. Rose.

Mares under three years.—First prize, a silver cup or piece of plate value £5 5s., J. P. Terry; second, £2, J. P. Terry. Highly commended: W. B. Clarke.

Horses and mares for hunting purposes.—First prize, a silver cup or piece of plate value £7 7s., G. A. Lepper, Aylesbury; second, £3 3s., A. R. Howland, Thame. Commended: J. Hughes, Whaddon Hill, Stone.

Nag geldings and mares for riding and general purposes.—First prize, £5 5s., A. R. Howland; second, £2, H. Gurney, jun., Aylesbury. Commended: G. A. Lepper.

A silver cup for the best yearling nag colt, the Right Hon. Lord Norreys, Ridgbarn Farm, Cuddington. Highly commended: The Right Hon. Lord Norreys; J. and E. Denchfield.

A silver cup value £10 10s. for the best sucking colt or filly, by either of the company's horses, J. A. Mumford, Chilton Park Farm, Thame.

CATTLE.

Bulls, any breed, two years old and upwards.—First prize, a silver cup or piece of plate value £5 5s., J. A. Mumford; second, £2, His Grace the Duke of Buckingham and Chandos, Stowe Park.

Bulls under two years.—First prize, a silver cup or piece of plate value £5 5s., C. A. Barnes, Chorley Wood; second, £2, J. A. Mumford.

Cows in milk or in calf.—First prize, a silver cup or piece of plate value £5 5s., T. L. Senior, Broughton House; second, £2, J. A. Mumford.

Three cows in milk or in calf.—First prize, a silver cup or piece of plate value £10 10s., J. and E. Denchfield, Burston; second, a silver cup or piece of plate value £5 5s., J. and E. Denchfield.

Heifers, in milk or in calf, under three and over two years.—First prize, a silver cup or piece of plate value £5 5s., G. Underwood, Little Gaddesden; second, £2, G. Underwood. Highly commended and commended: J. A. Mumford.

Heifers, in pairs, under two years.—First prize, a silver cup or piece of plate value £5 5s., C. A. Barnes; second, J. A. Mumford.

Fat cows.—First prize, a silver cup or piece of plate value £5 5s., T. L. Senior; second, £2, J. A. Mumford.

SHEEP.

Rams, any breed.—First prize, a silver cup or piece of plate value £5 5s., J. Longland, Grendon, Northampton; second, £2 2s., J. Treadwell, Upper Winchendon.

Five (store) ewe lambs for breeding purposes.—First prize, a silver cup or piece of plate value £5 5s., J. Treadwell; second, £2, J. Treadwell.

Five fat ewes, any breed or age.—First prize, a silver cup or piece of plate value £5 5s., J. Treadwell; second, £2, R. Fowler, Broughton.

Five fat wethers.—First prize, a silver cup or piece of plate value £5 5s., N. Stilgoe, Adderbury Grounds, Banbury; second, £2, N. Stilgoe. Highly commended: The Right Hon. Lord Chesham, Latimer, Chesham.

Five ewes of any breed, except Shropshire, intended for breeding purposes.—First prize, a silver cup or piece of plate value £5 5s., J. Treadwell; second, £2, Z. W. Stilgoe, Adderbury Grounds, Banbury.

Five Shropshire ewes intended for breeding purposes.—First prize, a silver cup or piece of plate value £5 5s., R. Fowler; second, £2, E. H. Baylis. Commended: E. H. Baylis.

Five theaves, any breed, intended for breeding purposes.—First prize, a silver cup or piece of plate value £5 5s., the Right Hon. Lord Chesham; second, £2, G. Underwood.

A silver cup value £5 5s., presented by His Grace the Duke of Marlborough to the owner of the best pen of breeding ewes or theaves in the yard, the Right Hon. Lord Chesham.

A gold pencil-case value £3, given by J. Gadsden to the owner of the best pen of fat sheep, N. Stilgoe.

PIGS.

Boars, any breed.—First prize, £3 3s., J. Wheeler and Sons, Long Compton; second, £2, J. Biggs, Cnblington. Commended: E. C. Clarke, Manor Farm, Haddenham.

Sows, any breed, either in pig or with litter.—First prize, a silver cup or piece of plate value £5 5s., E. C. Clarke; second, £2, J. Biggs. Highly commended: J. K. Fowler, Prebendal Farm, Aylesbury.

Three fat pigs.—First prize, £3 3s., J. Biggs; second, £2, C. Elliott, Hulcott. Commended: J. Wheeler and Sons.

EXTRA STOCK.

Lord Norreys highly commended for cart stallion (Black Prince).

BINGHAM HORSE SHOW.

At this the first annual horse show in connection with the Bingham Agricultural Society the animals entered were generally meritorious. Commencing with cart horses, in Class 1 for the best gelding of any age the first prize of £5 was awarded to Mr. Robert Watson, Scarrington, for a grey gelding five years old; Mr. John Burgess, of Holme Pierrepont, took the second prize of £2 with a three-year-old. In Class 2 for the best mare of any age there were seven competitors, and the first prize of £5 fell to Mr. J. Burgess, Holme Pierrepont, for a black mare nine years old; Mr. R. Fisher, of Whatton, taking the second prize with a red roan mare. Class 3 for the best mare in foal or with foal at foot Mr. Richard Marriott, of Langar, carried off the £4 prize with a mare and foal. In Class 4 for the best two-year-old colts or fillies there were twelve competitors; the first prize, £5, was taken by Mr. William James, Langar, and the second prize by Mr. John Pacey, Northfield House, Langar. In the best hunters mare or gelding class twenty were entered. The first prize, a silver cup, was taken by Mr. William Lambert, Clarendon House, Nottingham, with The Dane; and the second prize fell to Mr. Masters' True Blue. The whole class was a creditable one. In Class 6 for best three-year-old mare or gelding Mr. G. B. Davy took the silver cup with a chestnut gelding, Mr. Thomas Potter, of Trowell, showing an animal which was commended by the judges. The prize of

£4, given for the best brood mare for breeding hunters, in foal or with foal at foot, was carried off by Mr. G. H. Sanday, with Juanita Percz. Two other mares were commended, viz., those belonging to Miss Burnside, of Lamcote House, and Mr. John Foster, Bingham. Eighteen competitors appeared in a class for the best horse or mare for riding and driving purposes, not to exceed 15 hands 1 inch in height. Mr. Philip Hornsby, Barrowby Cottage, Grantham, secured the first prize of £4; Mr. Samuel Dakin, of Goose-gate, Nottingham, the second, £2; Mr. George Hassall, of Shelford Manor, was commended, and Mr. James Hornsby, Castle, Grantham, highly commended. In Class 9 for the best hackney brood mare in foal or with foal at foot the first prize, a silver cup value £6, was won by Mr. E. Smith's Kate, and the second taken by Mr. Thomas Morris, Cotgrave; Mr. G. Holbrook, of Attenborough, was highly commended for his mare and foal. Prizes were offered for the best jumpers in the hunting class. The awards were: First prize, £4, Mr. Howsin Spafford, Elston, Newark; second, Mr. W. R. Brockton. The judges were—Cart horses: Mr. T. Vincent, Harlaxton; Mr. L. W. Ladkin, Lutterworth. Hunters and hacks: Mr. J. E. Bennett, Husbands Bosworth; and Mr. T. Colton, Eagle Hall, Newark. After the show Mr. Bausor, auctioneer, Nottingham, offered several horses for sale.

NORTH LONSDALE AGRICULTURAL SOCIETY.

The annual show was held in Lightburne House Park. The season for harvesting is late, and has been protracted; this no doubt hindered many farmers from attending, who were engaged looking after the gathering of their crops, and who would otherwise have swelled the crowd on the field, and round the dinner table. The entries outnumbered those of any previous year, amounting altogether to three hundred and twenty-three.

PRIZE LIST.

JUDGES.

SHORTHORNS AND SHEEP.—Rev. A. L. Wood, Singleton Vicarage, near Preston; and M. T. Wilkinson, Gift Hall, Garstang.

HORSES AND PIGS.—Mr. J. Fearon, Keele House, Whitehaven, and Mr. Bolton, Rampside.

SHORTHORNS.

Bull, two years old and upwards.—First prize, T. Robinson, Ulverston; second, J. Bentham, Holmbank. Highly commended: J. Ashburner, Elliscales.

Bull, above one and under two years old.—First prize, W. and T. Robinson; G. Ashburner, Low Hall, Kirkby.

Bull calf, under one year and not less than six months old.—First prize, W. and T. Robinson; second, J. Croudson, Urswick.

Heifer calf, under one year and not less than six months old.—First prize, A. Brogden, M.P., Ulverston; second, G. Ashburner. Highly commended: W. Ashburner, Netherhouses.

Cow or heifer, in calf, three years old and upwards.—First prize, W. and T. Robinson; second, J. Croudson.

Heifer in calf or milk, two and under three years old.—First prize, G. Ashburner; second, W. Ashburner.

Heifer intended for breeding, above one and under two years old.—First prize, G. Ashburner; second, W. and T. Robinson. Commended: J. Croudson; W. Ashburner.

Dairy cow.—First prize, J. Croudson; second, G. Ashburner. Highly commended: W. and T. Robinson.

Yearling bullock.—First prize, J. Sharp, Bankfield House, Ireleth; second, W. Bolton, Parkhouse.

Two year-old bullock.—First and second prizes, J. Sharp.

Special prize offered by Myles Kennedy, Esq., J.P., for the best three Shorthorned cattle, above one year old, bred and reared in the district.—Prize, W. and T. Robinson.

A silver challenge cup, value 10 guineas, for the best bull, above one year old, the property of a tenant farmer resident in Lonsdale North.—Prize, W. and T. Robinson.

A silver challenge cup, value 10 guineas, for cow or heifer above one year old, the property of a tenant farmer resident in Lonsdale North.—Prize, G. Ashburner.

OPEN TO GENERAL COMPETITION.

Bull above one year old.—First and second prizes, Lady Pigot, Newmarket. Commended: H. W. Gibbons, Holmscales; A. Metcalfe, Ravenstonedale; W. and T. Robinson.

Cow or heifer above one year old.—First prize, Rev. J. C. Wood, Singleton; second, Lady Pigot. Highly commended: Lady Pigot.

SHEEP.

Leicester ram, two years old and upwards.—First prize, R. Jefferson, Preston Hows, Whitehaven; second, A. Brogden, Esq., M.P., Lightburne House, Ulverston. Highly commended: G. Lewthwaite, Broadgate, Millom, and J. Kellet, Windhill.

Yearling Leicester ram.—First prize, J. Stables, Scales; second, J. Ashburner, Scales. The whole class was commended.

Long-wooled ram, not being Leicester, two years old and upwards.—First and second prizes, W. Norman, Hall Bank, Aspatria, Winton.

Yearling long-wooled ram, not being Leicester.—First and second prizes, W. Norman.

Leicester ram lamb.—First and second prizes, R. Jefferson.

Woolled ram lamb, not being Leicester.—First prize, R. Coward, Moat Farm; second, W. Norman.

Leicester shearing ewes.—First prize, R. Jefferson; second, J. Ashburner.

Three long-wooled shearing ewes, not being Leicester.—Prize, W. Norman.

Three ewe lambs of the Leicester breed.—Prize, R. Jefferson.

Three long-wooled ewe lambs, not being Leicester.—Prize, W. Norman.

Shropshire or Southdown ram of any age.—Prize, J. Cranke, Ulverston.

Shropshire or Southdown ram lamb.—Prize, R. Atkinson, Tarn Green.

Three Shropshire or Southdown shearing ewes.—J. Ashburner, Elliscales.

Three Shropshire or Southdown ewe lambs.—Prize, G. Drewry, Holker.

Herdwick ram of any age.—First and second prizes, G. Browne, Troutbeck.

Three half-bred shearing ewes, from Herdwick ewes by a white-faced ram, or from Scotch horned ewes by a white-faced ram.—Prize, G. Ashburner, Low Hall.

Special prize presented by Myles Kennedy, Esq., for three ewes of any breed or age, bred and reared in the district, in the hands of the breeder.—Prize, silver cup, value £3, J. Ashburner.

HORSES.

Mare, in foal or with foal at foot, for agricultural purposes.—First prize, J. Haston, Greenside, Milnthorpe; second, R. and A. Deason, Hambleton.

Mare, in foal or with a foal at foot, for road or field.—First prize, J. Bentham, Urswick; second, T. Woodhouse, Thurstonville.

Gelding, rising five years old, for road or field.—Prize, J. Hodgson, Leece. Commended: Sarah Allison, Seathwaite.

Gelding, rising four years old, for road or field.—Prize, A. Orr, The Priory, Hornby. Commended: A. Brogden, M.P., and W. B. Coward, Colt Park.

Gelding, rising three years old, for road or field.—Prize, T. Dixon, Wreaks, Broughton.

Filly, rising four years old, for road or field.—J. Fisher, Dalton.

Filly, rising three years old, for road or field.—Prize, J. Mason, Marsh Grange.

Gelding or filly, rising four years old, for agricultural purposes.—Prize, J. Kendal, Harborow.

Gelding or filly, rising three years old, for agricultural purposes.—Prize, R. Simpson, Urswick.

Yearling colt, for road or field.—Prize, R. Ashburner, Gleaston Park. Commended: A. Orr.

Yearling filly, for road or field.—Prize, R. Ashburner.

Yearling colt or filly, for agricultural purposes.—Prize, R. and A. Deason, Hambleton. Commended: J. Ormandy, Gleaston Park.

Foal, for road or field.—Prize, G. H. Fenton, Kendal.

Foal, for agricultural purposes.—Prize, R. and A. Deason. Commended: J. Ormandy, Gleaston Castle.

Pony, not exceeding 13½ hands high.—Prize, J. Turner, Tunstall.

Cob, exceeding 13½ and not exceeding 15 hands high.—Prize, J. Fearon, Keele, Whitehaven. Highly commended: J. H. Schneider, Hall Garth.

Leaper.—First prize, J. Fearon; second, J. Turner.

A silver challenge cup, value 20 gs., for the best hunter (horse, mare, or gelding).—Prize, M. Kennedy, Hill Foot (light bay).

Special prize, offered by M. Kennedy, J.P. (colt or filly foal), by any thoroughbred horse in the district.—Prize, R. Ashburner.

PIGS.

Boar of the large breed.—Prize, J. Kendal, Little Mill.

Boar of the small breed.—First prize, I. M. Kennedy, Hill Foot; second, T. Ormandy, Barrow.

Sow of large breed.—First prize, J. Park, Ulverston; second, T. Ashburner, New Barns.

LANCASTER AGRICULTURAL SOCIETY.

At the annual show despite the prevalence of the foot-and-mouth disease raging amongst cattle in the neighbourhood there was a good show of Shorthorns, and the competition was very close, as was fully and strikingly evidenced in the case of bulls two years old and upwards, for which there were ten entries, and so evenly balanced were two of these animals that they were upwards of an hour in the ring before the judges could decide whether Mr. Knowles or Messrs. Gibson and Metcalfe were to have the first prize. It was, however, eventually awarded to Mr. Knowles. The silver medal for the best Shorthorn bull with not less than four pure Herd-book crosses, presented by Mr. John Bromley, fell into the hands of Mr. Jackson Irving, Conder Green; the silver cup presented by the Society for the best male animal was also awarded to Mr. Irving, and the silver medal for the second best to Mr. J. Smith. The silver cup for the best Shorthorn cow, fell to Mr. John Woodhouse of Scale Hall, and for the second best, the silver medal was awarded to the Rev. J. Swarbrick, of Thurnham. The challenge cup for the best male animal was awarded to Mr. J. Knowles, of Wetherby, Yorkshire, and that for the best female animal to the Rev. L. C. Wood, of Singleton Lodge. In sheep there was also a good show, and the judges had great difficulty in deciding upon the awards for the various prizes, especially in the shearing rams, the prize for which was carried off by the Exors. of the late Mr. Briggs, of Morecambe. The largest number of prizes in the sheep class was obtained by Mr. John Cock, of Coat Green, who in addition to other prizes carried off the silver challenge cup, for the best collection of Leicesters, consisting of one male and three female animals. The challenge cup for long-woolled sheep, not being Leicesters, was awarded to Messrs. R. and T. Escolme, Morecambe, and that for short-woolled sheep fell to the lot of Mr. Bowling, of Lancaster, and the special prize presented by Mr. S. Thompson, for the best collection of pure bred Leicesters, to Mr. Jacob Nelson, of Cockerham. The young horses were pronounced by competent judges to be the best show ever yet exhibited in Lancaster. The yearling geldings were also pronounced to be a remarkably good class. The challenge cup for the best three-year-old gelding or filly, for road or field, was awarded to Mr. Thomas Muckalt, of Priest Hutton; for agricultural purposes, to Mr. T. Cottam, of Beaumont; the silver cup for the best hackney, to Mr. T. Rigg, of Windermere, and the cup presented by Mr. J. Fenton for the second best, to Mr. Jackson Turner, of Tunstal. The silver cup for the best pony fell into the hands of Mr. T. Rigg, of Windermere, and the medal for the second best to Mr. S. Leece, West Cliff, Preston. The silver cup for hunters was awarded to Mr. Burrow, Whittington, and the silver medal, the second prize, to Mr. Jackson Turner of Tunstal; the silver cup for the best leaper to Mr. C. W. Wilson, High Park, and the medal, the second prize, to Mr. W. A. Fenwick, of Burrow Hall. The special prize for the best three-year-old hunter was awarded to Mr. Thomas Muckalt, of Priest Hutton, and the second to Mr. William Dobson, of Yealand. In pigs the show was very good, and several of the prizes remained in Lancaster and the immediate neighbourhood. The show of poultry was under the average, but some fine specimens were exhibited. Of cheese, butter, and oat cakes, there was only a limited quantity, and in roots the supply was but small though the specimens were very fine. Some very fine potatoes were exhibited, the American reds claiming a large share of attention. The wheat, oats, and barley were pretty generally good.

REPORT OF THE INSPECTORS OF CROPS.

To the Committee of the Lancaster Agricultural Society.

Gentlemen,—In giving our awards on the inspection of green crops, to which you directed our attention, we have great pleasure in doing so, as the account we have to present is very favourable. For the prizes for swede turnips, there are four entries, and the first we have awarded to Mr. R. Mackereith, Ashton, for a crop of 5½ acres, sown with artificial

manure, purchased from Messrs. Carruthers and Bagnall, and Mr. Hadfield, 8 cwt. to the acre. It is a very heavy crop, well grown, well shaped, and clear of weeds. The second we awarded to Mr. J. Lamb, of Glasson, for a crop of 8 acres, manured with farmyard and artificial manure. The crop is heavy, clean, and well managed. The first prize for the best crop of mangold wurtzel we have awarded to Mr. J. Cock, of Bolton, for a crop of one acre, and a better and heavier crop we have scarcely ever seen. The second we award to Mr. J. Smith, of Halton, for a most beautiful crop, so clean that we could scarcely find a scrap of weed amongst them. The last prize, given by J. P. C. Starkie, Esq., was for the best general green crop, we consider to be the most important of all the prizes, for it embraces crops of every description, and this demanded the utmost circumspection on the part of your inspectors, and to this our attention was most especially directed, and after the most minute investigation, we unanimously awarded the prize to Mr. R. Mackereith, of Ashton.

JACOB NELSON, Cockerham Hall.

JOHN WALKER, Aldcliffe.

J. HARRISON, Long Levens, Westmoreland.

PRIZE LIST.

JUDGES.

CATTLE.—J. Culshaw, Townley, Burnley, and R. Smith, Storr's Farm, Windermere.

SHEEP.—G. Brown, Troutbeck, and S. Jefferson, Preston Haws.

HORSES AND PIGS.—T. Cottrell, West Bronwich, and J. Greaves, Flexton, near Manchester.

POULTRY.—Dr. Jackson, Bolton, and T. Kew, Dale House, Burton, Westmoreland.

CHEESE, BUTTER, AND OATCAKE.—H. Welch, and T. Preston, Lancaster.

ROOTS.—W. Halstead, and R. Green, Lancaster.

GREEN CROP INSPECTORS.—J. Nelson, Cockerham, and J. Walker, Aldcliffe.

CATTLE.

Bull, two years old or upwards.—First prize, J. Knowles, Wetherby; second, H. J. Gibson and A. Metcalfe, Milnthorpe. Highly commended: J. Woodhouse, Lancaster.

Yearling bull.—First prize, G. Ashburner, Broughton-in-Furness; second, R. Whittam, Burnley. Highly commended: J. and I. Gaitskell, Whitthaven.

Bull calf, not less than six months old.—First prize, J. Knowles; second, J. and I. Gaitskell. Highly commended: R. Whittam; B. Bee, Goosnargh.

Cow, in-calf or in-milk, not fed for the butcher.—First prize, Rev. L. C. Wood, Singleton; second, Rev. J. Swarbrick, Thurnham. Highly commended: J. and I. Gaitskell.

Heifer, in-calf or in-milk, not fed for the butcher.—First prize, J. Cottam, Scotforth; second, J. and I. Gaitskell.

Yearling heifer, in-calf or in-milk, not fed for the butcher.—First prize, J. Ashburner; second, J. and I. Gaitskell. Highly commended: J. Woodhouse, Scale Hall.

Heifer calf.—First prize, G. Ashburner; second, J. Nelson, Cockerham.

Three dairy cows, in-calf or in-milk, not fed for the butcher.—First prize, J. and I. Gaitskell; second, R. Sandham, Lancaster. Highly commended: J. Woodhouse.

Fat cow or heifer.—Prize, T. Saul, Lancaster.

Shorthorn bull, with not less than four pure Herd-book crosses, in the hands of a tenant farmer, occupying not more than 150 statute acres.—Prize, a silver medal, J. Irving, Conder Green. Highly commended: Rev. J. Swarbrick.

There were also tenant farmer premiums.

SHEEP.

LEICESTERS.

Shearling ram.—First prize, J. Cock, Bolton-le-Sands;

second, J. Cock, Coat Green, Burton. Highly commended: J. Cock, Bolton-le-Sands; J. Park, Belmont.

Ram of any age.—First and second prizes, and highly commended, J. Cock, Coat Green.

Pen of three one-shear gimmers, not having been fed for the butcher.—First and second prizes, J. Cock, Coat Green. Highly commended: P. Kilsaw, Cockerham.

Pen of three ewes, which have suckled lambs this season, and not been fed for the butcher.—First prize, J. Cock, Coat Green; second, E. Briggs, Burton. Highly commended: R. G. Tickle. Commended: R. Chatburn.

Three gimmer lambs, not having been fed for the butcher.—First prize, J. Woodhouse; second, R. G. Tickle. Highly commended: P. Kilsaw.

Tup lamb.—First prize, J. Park; second, J. Kew, Dock-aces. Highly commended: P. Kilsaw.

Collection of Leicester sheep, to consist of one male and three female animals.—Prize, a silver challenge cup, J. Cock, Coat Green.

OTHER LONG-WOOLLED SHEEP, NOT BEING LEICESTERS.

Shearling ram.—Prize, Executors of Wm. Briggs, Morecambe.

Ram of any age.—First prize, E. Calvert, Slyne Hall; second, E. F. Manby. Highly commended: T. Muckalt, Priest Hutton; Executors of W. Briggs.

Three one-shear gimmers, not having been fed for the butcher.—First prize, J. Woodhouse; second, T. Altham, Morecambe.

Three ewes which have suckled lambs this season, and not been fed for the butcher.—First prize, R. and T. Escolme, Morecambe; second, C. Altham. Highly commended: H. Clarkson, Bolton-le-Sands.

Three gimmer lambs, not having been fed for the butcher.—First prize, J. Woodhouse; second, H. Clarkson. Highly commended: Rev. E. F. Manby.

Tup lamb.—First prize, E. Calvert; second, R. and T. Escolme. Highly commended: J. Woodhouse.

Long-wooled sheep, not being Leicesters, to consist of one male and three females.—Prize, silver challenge cup, R. and T. Escolme.

DOWN AND OTHER SHORT-WOOLS.

Shearling ram.—First prize, C. T. Royds, Heysham; second, J. Nelson.

Ram of any age.—First prize, R. Bowling, Lancaster; second, R. Hinde, Lancaster.

Three one-shear gimmers, not having been fed for the butcher.—First prize, R. Bowling; second, E. Barton, Carnforth.

Three ewes which have suckled lambs this season, and not been fed for the butcher.—First prize, R. Bowling; second, W. J. Garnett. Highly commended: R. Bowling.

Three gimmer lambs, not having been fed for the butcher.—First prize, W. J. Garnett; second, R. Bowling. Highly commended: R. Bowling.

Tup lamb.—First prize, R. Dugdale, Penny-street; second, W. J. Garnett (Shropshire Downs). Highly commended: E. Barton.

Collection of short-wooled sheep, to consist of one male and three female animals.—Prize, a silver challenge cup, presented by Mr. E. Barton, R. Bowling.

FAT SHEEP OF ANY BREED.

Three fat wethers.—First and second prizes, W. Burrow, Old Hall, Quernmore.

For tenant farmers resident within the Parliamentary boundary of Lancaster: Collection of pure bred Leicesters, to consist of one ram and six gimmers of any age.—Prize, silver cup, J. Park, Slyne.

HORSES.

Brood mare for road or field, which has produced a foal in 1871.—First prize, T. Fox, Avenham Hall, Singleton; second, R. Hutton, Milnthorpe.

Three years old gelding for road or field.—First prize, T. Muckalt; second, A. Orr, Priory, Hornby. Highly commended: J. Balshaw, Cockerham.

Three years old filly.—First prize, G. E. Wilson, Dallam Tower; second, H. Garnett, Wyreside.

Two years old gelding.—First prize, H. Garnett; second, J. Balshaw.

Two years old filly.—First prize, J. Dixon, Bulk; second, B. Bee. Highly commended: R. Gorst, Middleton.

Yearling gelding.—First prize, A. Orr; second, T. Helm, Cockerham. Highly commended: W. W. Slye, Beaumont Hall.

Yearling filly.—First prize, T. Muckalt; second, J. Alston, Goosnargh.

Colt foal.—First prize, J. H. Miller; second, R. Hutton, Milnthorpe.

Filly foal.—First prize, R. Stackhouse, Bolton-le-Sands; second, T. Fox.

Three years old gelding or filly for road or field, to be in the hands of the breeder.—Prize, challenge cup, T. Muckalt.

Brood mare for agricultural purposes, which shall have produced a foal in 1871.—First prize, J. Jemson, Mill House, Cockerham; second, G. Airey, Brookholme House. Highly commended: R. Stackhouse.

Three years old gelding or filly for agricultural purposes.—Prize, T. Cottam, Beaumont.

Two years old gelding or filly for agricultural purposes.—First prize, G. Airey, second, C. W. Wilson, High Park, Kendal. Highly commended: E. Jemson, Ridge Farm, Pilling.

Yearling gelding or filly, for agricultural purposes.—First prize, W. Clegg, Goosnargh; second, A. Deacon, Hambleton. Colt or filly foal for agricultural purposes.—First prize, J. Jemson; second, J. H. Waithman, Garstang.

Three years old gelding or filly for agricultural purposes, to be in the hands of the breeder.—Prize, challenge cup, T. Cottam.

Hackney, mare or gelding, over four years old, not under 14 hands nor exceeding 15½ hands high.—First prize, a silver cup, T. Rigg, Windermere; second, a silver cup (presented by J. Fenton), J. Turner, Tunstall.

Pony, under 14 hands, over four years old.—First prize, a silver cup, T. Rigg; second, Society's silver medal, S. Leese, Preston.

Hunting mare or gelding.—First prize, silver cup, R. Burrow, Whittington; second, Society's silver medal, J. Turner, Tunstall.

Leaper.—First prize, silver cup, C. W. Wilson; second, Society's silver medal, W. A. Fenwick, Burrow Hall.

Ass (free of entry).—Prize, W. Wilkinson, Morecambe.

Pair of draught horses, shown in harness.—First prize, E. Jemson; second, J. Jenkinson, Nateby.

Best groomed pair of draught horses.—First prize, J. Jenkinson; second, E. Jemson.

Special prize, given by Mr. T. G. Edmondson, master of the Vale of Lune Harriers, to the tenant farmer who gives free permission for the Vale of Lune Harriers to hunt over their land. Three years old colt or filly for hunting purposes, in the hands of the breeder.—First prize, T. Muckalt; second, W. Dobson, Yealand.

PIGS.

Boar of the large breed.—First prize, T. Newton, Cockerham; second, and highly commended, W. Lamb, Skerton.

Breeding sow of the large breed, in-pig or suckling.—First prize, J. Cottam, Well House; second, T. Newton.

Boar of the small breed.—Prize, R. Barker, Bolton-le-Sands.

Breeding sow of the small breed, in-pig or suckling.—First and second prizes, W. Halstead.

Store pig, in the hands of a cottager.—Prize, J. Speddy, Scorton.

Berkshire boar.—Prize, H. Curtis, Garstang.

Berkshire sow.—First prize, R. Bowling, Lancaster; second, — Jackson, Bleasdale.

CHEESE, BUTTER, AND OATCAKES.

Dairy of cheese, not less than 2 cwts.—First prize, Mrs. A. Mason, Tarnwater, Ashton; second, J. Shaw, Ellel.

Eight pounds of butter.—First prize, J. Cottam, Well House; second, P. Bowen, jun., Caton Green.

Six oatcakes.—First prize, H. Clarkson, Bolton; second, J. Parkinson, Elswick.

CHESHIRE AGRICULTURAL SOCIETY.

MEETING AT NORTHWICH.

The annual show was held last month. It was only moderately successful. Of horses there was a good show, especially in the agricultural classes, one of which was commended by the judges; but in the cattle there was a falling off as compared with last year, owing, in a great measure, no doubt, to the prevalence of the foot-and-mouth disease. Still, there were some good animals, and some of the best were exhibited by a non-resident in the county—Mr. Bradburn, of Wednesfield, Wolverhampton, and these were consequently disqualified. Amongst the bulls, that of the Rev. Walter Sucey, which won the third prize at the Wolverhampton Royal Show, took the first prize in the older bulls here, though it must be added that it was the only one exhibited. The dairy cattle comprised both good and indifferent pairs of cows, and there was a middling show of young stock. The exhibition of sheep, both long and short-woolled, was creditable; but the entries were not numerous, and the same may be said of the pigs, the large breed being the best. There was an extensive display of implements. The cheese show was not so good as that last year at Sandbach, and certainly inferior to former years. Still, the two prize cheeses were of very good quality.

PRIZE LIST.

JUDGES.

CATTLE.—Mr. Robinson, Saltney; Mr. Bell, Bodrhyddan, Rhyl.
HORSES.—Mr. Bromley, Lancaster; Mr. Roxburgh, Caerllo, Llanrwst.
SHEEP, WOOL, AND PIGS.—Mr. Allen, Knightley Hall, Staffordshire; Mr. J. Griffiths, The Rake, Hawarden, Flintshire.
CHEESE.—Mr. Atkinson, Leeds; Mr. Williamson, Bradford.
IMPLEMENTS AND SEEDS.—Mr. Hornby, Minshull; Mr. Finchett, Rushton.

CATTLE.

Bull of any age.—Prize, £10, W. Sneyd, Keele Hall, Newcastle (Ironmaster).

Bull above two years old.—First prize, £10, and also silver cup valve £5, R. Barnett, Wettenhall Hall (Buxton Hero); second, £6, J. Barker, Rushton (Alfred Fitz Windsor); third, £4, S. Artingstall, Brinn Farm, Northwich (Wragby).

Yearling bull.—First prize, £8, J. Walley, Mere House, Baddiley (Baron Mannhull); second, £5, T. Finchett, Rushton (Fire King).

Bull calf.—First prize, £3, J. Goolden, Clay House, Hale (Young Tanton Squire); second, £2, J. Ravenscroft, Hulse; third, £1, J. Baguley, Hulse.

Pair of dairy cows.—First prize, £8, R. Barnett; second, £5, J. Parr, Hatton; third, £3, R. Heath, Hefferston Grange.

Dairy cow in milk.—First prize, £5, R. Barnett; second, £2, J. Baguley.

Pair of heifers under three years old.—First prize, £5, J. Parr; second, £3, J. Barker; third, £2, J. Goolden.

Pair of stirks under two years old.—First prize, £4, J. Goolden (Hope); second, J. Hart, Bulkeley (Leonora); third, J. Hart (Grenadiue).

Pair of heifer calves.—First prize, £2, J. Goolden (Miss Charlie); second, J. Goolden (Princess); third, T. Wild, Weaverham Wood.

HORSES.

Pair of horses for agricultural purposes.—First prize, £6, Stonetrough Colliery Company, Lawton (Stanley); second, £4, R. Barnett.

Mare or gelding for agricultural purposes.—First prize, £4, J. Barlow, Leftwich; second, £2, T. Wild.

Stallion for agricultural purposes.—First prize, £5, T. Littler, Elton, Chester (True Briton); second, £3, E. Burgess, Smallwood.

Mare or gelding as a roadster.—First prize, £3, T. L. Shaw, Winsford; second, £2, W. C. Brocklehurst, Prestbury. Highly commended: E. L. Clarke, Acton, Northwich.

Brood mare, with foal, for agricultural purposes.—First prize, £5, Stonetrough Colliery Company; second, £3, J. Vernon, Willington. Highly commended: J. Barlow.

Two-year-old gelding or filly for agricultural purposes.—

First prize, £3, R. Barnett; second, £2, T. Balmer, Tattenhall. Highly commended: J. Vernon.

Yearling gelding or filly for agricultural purposes.—First prize, £2, J. Hornby, Minshull Vernon; second, £1, J. Pover, Elton Hall.

Brood mare for breeding hunters.—First prize, £5, T. Farish, Marston Hall (Vixen); second, Stonetrough Colliery Company (The Fawn).

Three-year-old colt for hunting purposes.—First prize, £5, W. C. Brocklehurst; second, C. Griffiths, Northwich.

EXTRA PRIZES.

Mare or gelding suitable for a hunter.—First prize, £6, T. H. Newton, Old Field, Altrincham (Skylark); second, R. Heath, Hefferston Grange (Garibaldi).

Mare or gelding who is the best performer as a hunter.—First prize, £6, P. Paylor, Congleton; second, £3, T. H. Newton (Woodbine).

Cob not exceeding 14½ hands.—First prize, £3, A. Woodhead, Hale (Kathleen); second, £2, P. Jackson, Plumley.

SHEEP.

Long-woolled ram.—First prize, £3, T. Richardson, Sandbach; second, £2, J. Cheers, Barrow.

Shearling long-woolled ram.—First prize, £2, Col. Cholmondeley, Abbot's Moss; second, 30s., J. Cheers.

Long-woolled tup lamb.—First prize, £1 10s., S. Davies, Eardswick Hall; second, £1, T. Dean, Nantwich.

Three long-woolled ewes.—First prize, £3, J. Cheers; second, £2, R. Richardson, Sandbach.

Three long-woolled shearling ewes.—First prize, £2, J. Cheers; second, £1 10s., S. Davies.

Three long-woolled ewe lambs.—First prize, £2, T. Richardson; second, £1, J. Cheers.

Short-woolled ram.—First prize, £3, T. Johnson, The Hermitage, Frodsham; second, £2, D. R. Davies, High Legh Hall.

Shearling short-woolled ram.—First prize, £2, T. Johnson; second, £1 10s., D. R. Davies.

Short-woolled tup lamb.—First prize, £1 10s., T. Johnson; second, £1, R. O. Lyecester, Toft Hall.

Three short-woolled ewes.—First prize, £3, D. R. Davies; second, £2, T. Johnson.

Three short-woolled shearling ewes.—First prize, £2, T. Johnson; second, £1 10s., D. R. Davies.

Three short-woolled ewe lambs.—First prize, £2, T. Johnson; second, £1, R. O. Lyecester.

PIGS.

Cottager's or labourer's fattened pig.—First prize, £2, J. Jackson, Church Minshull; second, £1, P. Carter, Over, Highly commended: T. Dale, Middlewich.

LARGE BREED.

Boar pig of any age.—First prize, £3, H. Goodall, Arclid; second, £1, S. Davies, Eardswick Hall.

Breeding sow of any age.—First prize, £3, A. C. Lockwood, Chester; second, £1, Sir P. Egerton, Bart.

SMALL BREED.

Boar pig of any age.—First prize, £3, H. Goodall; second, £1, S. Davies.

Breeding sow of any age.—Prize, £3, H. Goodall.

Litter of pigs.—Prize, £2, W. Glassford, Lostock Gramam.

Pair of gilts.—Prize, £2, S. Davies.

CHEESE.

Dairy of cheese not over 50lbs.—First prize, £12, — Brindley, Astbury; second, £8, — Balmer, Tattenhall.

Dairy of new cheese under 50lbs.—First prize, £6, — Hall, Kingsley, Frodsham; second, £3, — Lightfoot, Kelsall Hall.

Cheese not made on the Sabbath-day, over 40lbs.—Prize, £12, — Walley, Tilstone Farm, Tarporley.

Cheese not made on the Sabbath-day, under 40lbs.—Prize, £8, — Hough, Mere, Knutsford.

BUTTER.

Six dishes of butter.—First prize, £2, J. Parry, Weetwood; second, £1 10s., S. Willis, Clotton, Tarporley; third, £1, W. Glassford.

VEGETABLES AND SEEDS.

Sample of white wheat.—Prize, £2, W. Sheffield, Broxton.

Sample of yellow or red wheat.—Prize, £2, W. Sheffield.

Sample of oats.—Prize, £2, Executors of the late J. Hegan, Dawpool.

Sample of barley.—Prize, £2, W. Sheffield.

Sample of beans.—Prize, £2, T. Rigby, Darnhall Farm, Winsford.

Six roots of turnips.—Prize, £2, J. Robinson, Lea Green Hall.

Six roots of mangolds.—Prize, £2, Col. Cholmondeley.

Sample of potatoes.—Prize, £1, W. Glassford, Lostock Gralam.

WOOL.

Three fleeces of short wool.—Prize, £1 10s., T. Finchett, Rushton.

Three fleeces of long wool.—First prize, £1 10s., S. Davies; second, £1, R. Richardson.

LYDNEY AGRICULTURAL SOCIETY.

At the second annual show in cattle there were upwards of 80 head of Herefords and Shorthorns; while of these there were about 30 Herefords. The judges of Cattle, as will be seen from our Echoes, differed much in their opinions, one being a Shorthorn and the other a Hereford man. There was a large show of horses.

PRIZE LIST.

JUDGES.

CATTLE, SHEEP, and PIGS.—Mr. T. Morris, Maisemore Court; Mr. Pye, Hereford.

HORSES.—Mr. C. Lewis, St. Pierre; Mr. T. Laurence, Crick House.

CHEESE.—Mr. T. B. Lewis, Bristol.

IMPLEMENTS.—Mr. T. Williams, Ross; Mr. T. P. Williams, Beachley.

FARMS.—Mr. J. Pybus; Mr. J. Haines.

CATTLE.

Fat cow or heifer.—First prize, cup, value £5 5s., Rev. W. H. Bathurst (Shorthorn); second, £2 10s., J. P. Rymer.

Pair of cows most adapted for the general use of a tenant farmer.—First prize, cup, value £5 5s., T. Cadle (Hereford); second, £2 10s., Rev. W. H. Bathurst (Shorthorn).

Pair of heifers, under three years old, most adapted for the general use of a tenant farmer.—First prize, cup, value £5 5s., T. Cadle (Hereford); second, £2 10s., T. Williams (Shorthorn).

Pair of heifers, under two years old.—First prize, cup, value £5 5s., T. Cadle (Hereford); second, £2 10s., H. Higgins (Hereford).

Pair of steers, not exceeding two years old.—Prize, cup, value £4, T. Cadle (Hereford).

Bull, Shorthorn or Hereford, over two and not exceeding three years old.—First prize, cup, value £5 5s., I. Mullius (Shorthorn); second, £2 10s., R. Keene (Hereford).

Bull, under two years old.—First prize, cup, value £5 5s., F. Coucher (Shorthorn); second, £2 10s., T. Sainsbury (Shorthorn).

Bull, cow, and offspring.—First prize, cup, value £5, H. Higgins (Hereford); second, £2 10s., Rev. W. H. Bathurst (Shorthorn).

Best animal in the yard, for the breeding purposes, in the preceding classes.—Prize, £3 3s., H. Higgins (Hereford).

SHEEP.

Ram of any breed.—Prize, £2 2s., T. Williams (Cotswold).

Ten fat wethers, not exceeding 22 months old.—First prize, cup, value £5, T. P. Williams (long-wool); second, £2 10s., J. P. Rymer (Cotswold).

Five long-wool ewes, for breeding purposes.—First prize, £2 10s., J. Woodroffe; second, £1 10s., T. P. Williams.

Five long-wool ewe lambs.—First prize, £1 5s., J. Woodroffe; second, 15s., T. P. Williams.

Five Radnor ewes, for breeding purposes.—First prize, £2 10s., T. Williams; second, £1, T. P. Bailey.

Five fat Radnor ewes.—Prize, £2 10s., T. P. Bailey.

Five short-wool or cross-bred ewes, for breeding purposes.—First prize, £2 10s., J. Brettle (cross-bred); second, £1, J. B. Sainsbury (Oxford Down and Cotswold).

Five short-wool or cross-bred ewe lambs.—First prize, £1 5s., J. B. Sainsbury (Oxford Down and Cotswold); second, 15s., J. Brettle (cross-bred).

HORSES.

Brood mare and foal, for agricultural purposes.—First prize, cup, value £5 5s., T. P. Bailey, Leicester; second, £2 10s., T. Cadle.

Weight-carrying hunter, of not less value than £40, nor under four years old, the property of a *bona fide* farmer.—First prize, cup, value £5 5s., J. Griffiths; second, J. Hooper.

Gelding or filly, not thoroughbred, above two and under five years old.—First prize, cup, value £5, Col. Noel; second, new saddle, J. H. Greenham (half-bred). Highly commended: J. Brettle. Commended: Executors of J. F. Barnard.

PIGS.

Boar of any breed.—First prize, £2 10s., R. Keen (cross-bred); second, £1 10s., E. Lawrence (Berkshire and Yorkshire).

Sow and pigs, not less than six pigs, under twelve weeks old.—First prize, £2 10s., J. R. Sainsbury (Berkshire); second, £1 10s., Rev. W. H. Bathurst (Berkshire).

Fat pig, belonging to a servant in the employ of a member.—First prize, £1 1s., I. Parker, in the employment of Mr. J. Taylor; second, 10s. 6d., J. Davis, in the employment of Mr. J. Taylor.

CHEESE.

Best cwt. of cheese, 8 to the cwt.—First prize, £3 10s., Mrs. H. Hewlett; second, £2 10s., Mrs. H. Hewlett; third, £1 10s., J. Taylor. Commended: T. Sainsbury.

STOW-ON-THE-WOLD AND CHIPPING-NORTON AGRICULTURAL SOCIETY.

The meeting was held at Stow-on-the-Wold: The exhibition is held alternately at Stow and Chipping Norton, so that farmers and producers of stock in both Oxfordshire and Gloucestershire are alike interested. In consequence of the prevalence of the foot-and-mouth disease in the immediate neighbourhood, about three-fourths of the cattle, sheep, and pigs that were entered were not exhibited, and the show therefore was shorn of nearly all attraction. Mr. T. Gillett's executors exhibited four very fine long-wool rams, and for three of which they were awarded prizes. There were very few other sheep exhibited. Several agricultural horses and hunters of superior quality were shown, but many that were entered did not compete, for the reason stated. A very fine hunter, exhibited by Mr. R. G. Verney, gained Lord Redesdale's prize of £10. Messrs. D. Hollis, of Mangersbury, H. Clifford, and H. Teague, of Stow, showed several improved agricultural implements.

PRIZE LIST.

JUDGES.

HORSES.—Messrs. A. Rushout and P. Thursby.

STOCK.—Messrs. R. Stow and H. Pegler.

CATTLE.

Pair of heifers, above one and not two years old.—Prize, £3, T. Mace, Sherborne.

SHEEP.

Long-wool ram, exceeding two years old.—Prize, £4, Executors of the late T. Gillett, Kilkenny.

Long-wool shear-hogg ram.—First prize, £4, and second, £2, Executors of the late T. Gillett.

Oxfordshire Down ram, exceeding two years old.—Prize, £4, G. Wallis, Old Shifford.

Oxfordshire Down shear-hogg ram.—Prize, £4, G. Wallis.

Ten stock ewes, of any other short-wool breed, each having brought up a lamb this season.—Prize, £4, S. Waller, Farmington.

PIGS.

Boar of any breed.—Prize, £2, J. Wheeler, Long Compton. Breeding sow, of any age, with a litter of pigs not exceeding three months old.—Prize, £2, J. Wheeler.

HORSES.

Mare for agricultural purposes, and foal.—First prize, £4, W. Hurlston, Ditchford Friary; second, £2, R. Gillett, Man-gerbry.

Gelding or filly, two years old.—First prize, £4, W. V. Bemam, Chastleton; second, £2, W. Hurlston.

Yearling cart colt or filly.—First prize, £3, R. Gillett; second, £2, F. R. V. Witts, Upper Slaughter.

Hackney, not exceeding six years old or 15 hands.—First prize, £4, A. J. Clifford, Little Barrow; second, £2, C. Cook, sen., Taddington.

Horse or filly, four years old, bred within 12 miles of Stow-on-the-Wold or Chipping-Norton, possessing or promising to possess the qualities of a hunter.—Prize, £10, R. G. Verney, Blockley.

Weight-carrying hunter, not exceeding seven years old, the property of a tenant farmer or his son, ridden last season with the Heythrop, Cotswold, North Cotswold, or Warwickshire Hounds, and capable of carrying 14 stone.—First prize, £10, C. Cook (Misfortune); second, £5, T. Taylor, Turkdean. Highly commended: M. Meadows, Upton Wold Farm.

CHEESE.

Hundredweight of thick cheese, not more than three cheeses to the cwt., made from land in exhibitor's occupation.—Prize, £2, Mrs. S. Wilkies, Bourton-on-the-Water.

BENTHAM AGRICULTURAL SOCIETY.

The thirteenth annual meeting was held at High Bentham. The show of stock as a whole was superior in quality to previous years, and in point of numbers fully equal to any preceding show. The cattle, especially the dairy cows and heifers, were a very creditable lot of animals, and the judges had great difficulty in deciding between the relative merits of some of the animals. In the aged-bull class, the competition was very close between Mr. Thomas Kendall, of Park House, and Mr. Sedgwick, of Ingleton, and the judges had to call in a referee to decide between them; and the prize fell to Mr. Kendall, who exhibited a well-developed light-roan bull. The prize for two cows and heifers, in the Low District, was also very closely contested. There were eight entries, and the judges declared they never saw a lot of more useful animals together in a show-ring. Mr. John Bargh was first, and Mr. Samuel Bargh, second. In yearling bulls Mr. John Heaton, Branston Beck, Bentham, took the first prize for a fine white bull in the High District. Mr. Ray, of Guy Hill, Tatham, took the first prize for a two-year-old bull, and Mr. J. D. Morphet, of Bentham, the first prize for yearling heifers. Mr. Ray, of Guy Hill, took the prize for the best male animal in the Shorthorn class of the High District, and Mr. T. Kelsall, of Park House, for the best male in the Low District, the best female in the Low District being accorded to Mr. John Bargh, of Cantsfield. There was no prize awarded for the best female animal in the High District. Mr. Thomas Bownass, of Cantsfield, took the first prize for the best yearling bull in the Low District, and Mr. Thomas Kendall, of Park House, Leck, for the best aged bull. Mr. Robert Hinde's prize to tenant-farmers of a cup, value two guineas, was awarded to Mr. T. Kelsall, of Park House, for the best male animal on the field. Another cup given by Mr. Hinde for the best three cows or heifers was carried off by Mr. Samuel Bargh. The horses were well represented, and were of a superior class to any ever previously exhibited. The sheep were not very numerous.

THE JUDGES were: For Cattle, Sheep, Horses, and Pigs—Mr. Wm. Dodgson, Lytham; Mr. Wm. Midgeley, Salmsbury Old Hall, Preston; Mr. James Hargreaves, Clitheroe; and Mr. Rodger Willan, Lytham. Poultry—Mr. Thos. Kew, Dale House, Tewitfield. Dogs, Cheese, Roots, &c.—Mr. Thomas Gardner, Lancaster; and Mr. Kew, Tewitfield.

REPORT OF THE INSPECTORS OF TURNIPS, CORN, GENERAL STOCK, AND FARM CULTIVATION.

We are glad to give the following particulars relative to the duties we had to perform, and the awards we have given:

CORN.—The first prize we awarded to Mr. Robert Bradley, of the Hill Farm, Tatham, for a very heavy crop grown on moor-land newly broke-up. We could not have thought that land of this quality would have produced anything like this crop, as part of the field was in its original state, and covered with heather or ling, forming a wide contrast with the crops of corn. This crop was manured with guano, at the rate of four cwt. per acre. Much credit is due to Mr. Bradley for having rendered comparatively useless land to bear a crop which may vie with those on superior soil. The second prize we award to Mr. Samuel Bargh, for a very good and clean crop, grown on sharp loamy soil manured with guano. The third prize we award to Mr. William Sedgwick, Low Bottom, Mewith, for a good crop, grown on moderate land; manured with fertilizer purchased from Mr. William Howson, at the rate of three cwt. per acre. The fourth prize we award to Mr. Stephen Batty, of Mewith, Bentham, for a very fair crop, grown on thin land, and manured by Mr. Rumney's superphosphate and guano, at the rate of three-and-a-half cwt. per acre.

TURNIPS.—First prize, Mr. Arthur Batty, of Kirkbeck, Bentham, for a most excellent crop; manured with farm-yard manure, and fertilizer purchased from Mr. Robert Hinde, Bentham. Much praise is due to the management of this crop. Second prize, Mr. Thomas Leece, of Way, for a very fine crop, and well managed; but grown on superior land to Mr. Batty's. This crop is manured with Mr. Hinde's superphosphate, at 5½ cwt. per acre. Third prize, Mr. George Moss, Clintsfield, Tatham, for a good crop, and clean; manured with farm-yard manure and guano. Fourth prize, Mr. Anthony Orr, of the Priory, Hornby, for a very fair crop, manured partly with ground bones and a small quantity of guano. This is a very clean crop, and well managed, but not so heavy in the bulbs. We consider the turnip crop a good average in general. The weather being favourable, these crops are in a healthy and growing condition, and will no doubt prove good.

THE VALE OF TODMORDEN AGRICULTURAL SOCIETY.

The notion that Todmorden ought to have its agricultural society—conceived and experimented upon last year, has every appearance of proving a proper one, if we may judge from the success which attended this, the second annual show. The schedule which the committee issued in the early part of the year offered prizes amounting to nearly £300—almost double the amount offered last year. The number of classes had also been doubled, and premiums offered for an increased variety of stock and productions. The chief addition in this respect were dogs, pigeons, and implements. As a consequence, the number of entries was considerably above last year.

The first department of the show was the horned cattle open to general competition. Bulls above two years old were exhibited by Mr. T. Statter and Mr. Thos. Riley, that belonging to the latter gentleman carrying off the first prize. Mr. C. W. Brierley and Mr. Statter were exhibitors of bulls under two years, and Mr. T. Riley of a bull-calf. These three gentlemen were the chief exhibitors of cows and heifers. Two local exhibitors (Mr. J. Crabtree and Mr. T. Stansfield) were successful in obtaining the prizes offered for three dairy cows, in competition with two other exhibitors. A class for extra stock brought a varied collection of animals together, Mr. T. Riley carrying off the first prize with a Highland Scot, and Mr. Statter the second with a polled Angus. A silver cup was offered for three dairy cows belonging to gentlemen or tenant-farmers in the Society's district, for which there were two entries; and Mr. W. Sutcliffe, Lower Laithe, won the cup. The tenant-farmers in the district made a good display. Mr. Thomas Fletcher, Littleborough, won a silver cup with his bull; and Mr. R. Law had a good second. In some of the classes for cows and heifers the competition was keen; but there were no entries in the class for dairy cows belonging to farmers whose yearly rental does not exceed £40. The horses formed a numerous department of the show. The ponies under twelve hands were a smart class, and the prizes were won by two pretty little animals from Manchester. The pre-

sident got the first prize for a fifteen-hands cob, and the second prize went to Bacup. The animals in this class were very handsome. Four-year-old roadsters were a numerous class, and the judges were a considerable time in awarding the prizes: in fact, the opinion of a third was asked, to decide between Mr. Suther's and Mr. Shackleton's horses; and the result was that the first prize was awarded to Mr. Suthers. Mr. Brierley exhibited two magnificent greys for draught purposes; and, having no competitors, he was awarded the prizes, the first to the horse and the second to the mare. Only two draught stallions were shown, and no roadsters. Mr. Brierley, with a splendid pair of animals, had two prizes awarded him in the class for a pair. There was no competition; and it was the wish of the judges to give both prizes to Mr. Brierley. Four hunters were shown, and the trial of these and the jumpers was watched with considerable interest. The donkey-race, which came just before the close of the show, was very laughable. Sheep and pigs were a good

show; but poultry, as a whole, were not up to the mark. Pigeons were both largely shown, and embraced some very pretty varieties of these birds. The show of dogs was large. The prize vegetables embraced many excellent productions; and the bread, eggs, butter, and cheese were choice specimens of those commodities. The implements consisted of grass-mowers, horse-rakes, haymakers, chaffcutters, churns, wringing machines, and sewing machines, in full working order.

The judges were: For cattle, sheep, pigs, butter, cheese, bread, and saddlery.—T. H. Hutchinson, Manor House, Caterick; and T. Bracewell, The Parsonage, Ribchester. Horses.—R. Bond, Thornton, Skipton; and J. Midgley, Knowltop, Clitheroe. Poultry, pigeons, and eggs.—J. Dixon, North Park, Bradford; and R. Payne, Brierfield, Burnley. Dogs.—J. Douglass, The Avaries, Clumber, Worksop; and S. Handley, Pendleton, Manchester. Vegetables.—J. Smith, Lower, Crownest, Halifax. Implements.—L. Kaberry, jun., Rochdale.

ECHOES FROM THE AUTUMN MEETINGS.

BUCKINGHAMSHIRE.

At Aylesbury, Mr. TREADWELL said that although he was not always in accord with the proceedings of the Royal Society, yet he believed it was doing a vast amount of good by its publications and its shows, and all agricultural associations were destined to do a great deal of good if properly managed and well looked after. They gave persons the opportunity not only of comparing the merits of different breeds of animals, but the varieties and peculiarities also of animals of the same breed, and he must be a great "duffer" indeed who goes to these shows and fails to pick up something from them. Mr. Fowler wanted to see animals shown in store and breeding condition, but he (the speaker) wished to see them shown in the greatest perfection. They were all destined for the butcher, and when they are fat they could best see what the points are which they looked after. Another reason why he liked agricultural shows was because that was about the only occasion when they had the opportunity of meeting their landlords, many of whom were members of that abused body, the House of Lords, a body which, may God grant, would never be done away with. These occasions were the only opportunities they had to tell the members of the Houses of Lords and Commons their opinions and feelings. With all deference to Mr. Du Pré he must say that Mr. Sewell Read was in his place in the House of Commons at the appointed time to bring forward the motion of which he had given notice, and he wanted to know why their members were not there also? One of the gentlemen who had spoken said they had had capital crops, and a good year. If that was so, the agricultural press of this country had been very much misinformed. All he could say was that the wheat crop would be found very deficient, and even in favoured localities, and he was happy to say he was in one, the wheat crop would be a quarter to the acre deficient. There was one gentleman, farming in the neighbourhood, who was doing a great deal of good. He alluded to Lord Norreys, who had brought a capital lot of horses into the neighbourhood, to try to improve the breed, and he would in that way be doing more good than any other gentleman in the neighbourhood. Their worthy chairman had spoken of the Poor-law question, and he was satisfied that, before long, that would be the question of the day. When they saw the rate of wages increasing everywhere, and heard of the scarcity of labourers, and the strikes which were taking place day after day, was it right that the Poor-law expenditure should keep continually increasing? Men should be sent to Boards of Guardians who had the greatest interest at stake, and they would be most likely to see that relief was not given where it was not required. He did not say that the relief given was too much, but that it was given in too many cases, and where it was not wanted. Then medical relief was given too readily, and it tended more than anything to pauperise people. Once a pauper always a pauper, was, in many instances, a true saying; and relief, commenced through the medical man, often ended

in making a man and his family paupers for ever. There was a feeling abroad that the lord and the squire should not exhibit in the same class as the tenant farmer; and one of the best farmers in the Vale had said to-day, "You Royals ought not to exhibit in the same class as the rest of us tenant farmers." The man who made that remark occupied some of the best land in the rich Vale of Aylesbury, and the sooner he got such ideas out of his head the better it would be for society. Mr. Fowler had spoken about disc revolving ploughs, but let him go to Westcott and try one there, and see how it would answer. When he saw such stock as was exhibited to-day, it was a proof that there was no falling off in their association. Something had been said about the high price of meat, and some people thought farmers were making fortunes by the high prices. But that was not the fact, for for some years, through the shortness of keep, farmers had had to buy artificial food to keep them going, and when that was the case they all knew it was a dead loss, and the diseases, which had been so prevalent, had killed off a large portion of their stock, and the losses had been recently so great that if they were to continue they would ere long ruin many farmers. What with high rents, high taxes, high price of labour, and losses of crops, and disease among their flocks, he did not know what would be the result to many of them. The Society had lately been in the habit, thanks to Sir Anthony Rothschild, of giving a prize for roots, which was a very useful prize, and those who had grown them had reaped the benefit of them of late years. He was satisfied that the root prizes had given great impetus to the cultivation of roots in the neighbourhood, and poor land had been broken up for their production, and better crops had been grown on such land than could be obtained from better land. Much good had been effected by this.

Mr. E. TERRY, junr., had been referred to by Mr. Treadwell as the person who did not think it fair that Royal men should compete with graziers, and observed that the latter did not fear fair competition; it would be impossible for them, however, to rear such animals as Mr. Treadwell exhibited, even with the sixty tons of oil-cake he talked so much of, in consequence of their land being unfit to winter sheep on.

Mr. MUMFORD advocated the policy of holding the meetings and shows of the association in successive years at the chief towns in the county.

Mr. G. A. LEPPER dissented from the observations of Mr. Mumford, and contended that the animals at that day's meeting fully justified them in adhering to their present course.

CUMBERLAND.

At Ulverstone, Lord Frederick CAVENDISH, the chairman, said: I believe that our farmers as a class are doing pretty well. I do not say that everyone can realize on his farm stock results such as were realized the other day, but I don't think these prices would have been paid if the stock of the country was not considered to be generally doing well, and the farmer will be able

to continue his progress still further. The wheat this year is an indifferent crop. I was looking the other day at some agricultural statistics which some farmers have some little difficulty in filling in, and I see that of all cultivated land in the country it does not exceed one-seventh of the acreage of wheat, and the acreage of wheat is only two-thirds of the acreage of hay. I was struck the other day in looking over the figures of the last census, which are issued every 10 years. How many miles do you think, have been added to our farms during the last 10 years? Considerably over 2,600,000. The Registrar-General tells us that we have doubled our population in 50 or 60 years, and it will require uncommonly good farming to maintain the population; and though we do a great deal in the way of improvement, yet I think when we look at the price-lists of the markets you will see that all the efforts of the farmers are not sufficient to bring down meat within the reach of the mass of our population. Therefore, it is not simply in the interests of farmers that the efforts of agricultural societies ought to be directed, but the interests of consumers. If the figures which I have just touched upon are striking, what must we say when we look at this large anticipated increase of our numbers? Take this district. It has increased its population by exactly one-half in the last 10 years, and I don't know how soon it will be doubled. I am aware that there is another side to this picture, and this is not quite so small a matter. You may see that though we get a higher price for our produce, yet we have to pay a heavy price for our labour. How is this to be met? It is to be met in two ways—by the use of the best machinery, and perhaps still more by making our dear labour cheap labour and more efficient labour. I believe we shall be able to make North Lancashire labour, even at the wages now paid, as cheap as any in the country. These times can only be met by energy, by the employment of the best machinery, and the highest class of labour. If I may venture to say that there is something to take warning of it would be evidenced by the fact that a traveller in South Lancashire and Yorkshire will see that the whole energy of the counties seems to be drawn into the towns. There are no symptoms of this in our district, and I hope there never will be. Never was the system of farming in North Lonsdale better than at present, and I have no fear of it deteriorating.

DORSETSHIRE.

At Wimborne, Mr. GERARD STURT, M.P., said: If I understand it rightly, this association is intended by those who undertake its management to offer an encouragement to the labouring classes to keep clean and tidy cottages, to cultivate gardens and allotments to the best of their ability. You all know there is an old saying that next to godliness comes cleanliness. I myself have always maintained that a clean cottage, comfortably kept, tidily kept, goes far to the education of a poor man, raising him in his own estimation, and making him, as Providence intended him to be, an honest, useful member of society. And this is not all: if a man has a clean, comfortable cottage, he is pretty sure to have a tidy, clean, and good wife. And if a working man has a clean, comfortable cottage, with a nice wife in it, that goes far to keep him where he ought to be—at home, and away from those pests of places called beer-houses. Understand, please, that I am not one of those who begrudge the poor man a glass of beer. I believe it is a very necessary thing—that it is the natural beverage of the country. Certainly Providence intended that beer should be drunk; but I warn all of you cottagers not to go too far in that matter. Lord Shaftesbury, when addressing some of the working men of Glasgow, where—between you and me—they are rather fond of a drop, told them that of all the evils most overwhelming, pernicious, and destructive of the happiness of families was drink. I say, therefore, that if this society, merely on that account, makes the cottage of a labourer comfortable, inducing him to remain there, it deserves, for that reason alone, encouragement and support. I now desire to say one word to the wives of the labouring classes. I want them to give this association their hearty, sincere support. It really is wonderful what is the amount of female influence in this country. Lord Shaftesbury at Glasgow observed that in eight cases out of ten the grey mare was the best horse, which, being interpreted, means I suppose that in eight cases out of ten the "missus" rules the roast. Well, from the little experience I have had, I am

inclined to think he is quite right: I have not the slightest doubt that Lord Shaftesbury spoke from experience also. In a few moments it will be my pleasing duty to distribute the prizes to the successful competitors. Allow me, before doing so, to say a few words to you, the unsuccessful candidates. There is an old saying that "Faint heart never won fair lady." That is perfectly true; and faint heart not only never won fair lady, but never won anything else—never won prizes. Energy, perseverance, determination, so characteristic of Englishmen, the society desires to promote, and deserves every encouragement in this laudable object. What makes one Englishman as good as two Frenchmen, or two anybody-elses, but this spirit of energy, perseverance, determination? He never knows when he is beaten; it makes England's daughters and sons the beauty and admiration of the world.

GLOUCESTERSHIRE.

At Lydney, Mr. T. MORRIS (Maismore) responded for the judges. He could not congratulate the Society very much upon the wonderful excellence of their show. He must say he thought the committee who undertook to arrange the prize-list must have studied, almost, how they could best give the judges the most difficulty. The wording of the conditions under which some of the animals in the cattle classes were shown was ambiguous in the extreme, and such as to allow of a great diversity of opinion among the judges. One of the headings, for example, ran thus: "For the best pair of cows most suitable for a tenant farmer." Most suitable! That was just the difficulty, if the judges happened, as they happened that day, to be each in favour of a different breed. One preferred the Hereford breed; the other (himself) preferred the Shorthorn breed. Each, of course, held that the breed for which he had the preference was the best suited for the purposes of the tenant-farmer; and so the matter was extremely awkward to decide. If the conditions had been simply for "the best pair of cows," nothing being added as to their being the most suited to the purposes of the tenant-farmer, no difficulty would have arisen, because in the class in question the pair of Herefords were decidedly the better animals; the only difficulty was the difference of opinion as to their "suitability." Now he insisted that a Shorthorn cow was the best suited for the tenant-farmer, and for this reason—that she was a good milker, and that when done with in that respect she would produce a lot of beef. And that was just the sort of animal which the tenant-farmer wanted. He hoped they would excuse these remarks, and that, acting upon the hint he had given, they would either make the Herefords and Shorthorns separate classes, or else offer the prize for merely "the best pair of cows."

Mr. T. CADLE (Longcroft) said, with regard to the matter of the prize-list spoken of by Mr. Morris, he thought it would be better to make the Shorthorns and the Hereford separate classes, by which means all difficulty would be avoided.

Mr. HIGGINS said, Mr. Morris appeared to have forgotten that this was a very young society—a society so young indeed that it was only just struggling into life. He had forgotten, also, the season that the farmers of the neighbourhood, and all others, had had to pass through. And, in all probability, if the curtain could just be lifted at Maismore it might not exhibit things in a much better condition than was seen at Lydney this day. Mr. Morris was a very good judge, and he had got very good stock it was true, but he took very good care to keep it at home; though, if they were all to do that, they would get no exhibition at all.

At Stow-on-the-Wold, Sir MICHAEL BEACH, M.P., said the giving prizes for lengthened service he considered praiseworthy. In these days they too often saw a wish, on the part of some masters and servants, for a change more for the sake of a change than of any real good. In many cases they saw that when servants had been in places twelve months they wanted to go to the hiring fair and engage themselves to some other master, and if they were asked the reason of their doing so, they said they "wanted a little change." He did not think they always bettered themselves by this change. He had, during the present harvest, heard of complaints in various parts of the country of the scarcity of labourers. If the old labourers had remained with the farmers, they could not have complained in this way. He thought that a man who lived a great number of years on the same estate would spend a more useful life than if he kept moving about, and not better him-

self by the change, but probably get into habits which might lead to his ruin. That Society did great good in encouraging a mutual attachment between masters and servants.

LANCASHIRE.

At Lancaster Mr. T. G. EDMONDSON said there were some capital horses now in this part of the country, and no one who took an interest in agricultural stock could fail to observe that a great improvement had taken place in this class in recent years. The increased value of good horses, no doubt, acted as a stimulant to farmers. He believed that a good many horses went to London from this district, and were sold as Yorkshire horses, and the farmers here did not get the credit they deserved. It was very gratifying to see young farmers coming out, riding their own horses. There seemed to be no lack of spirit amongst them, and he certainly thought that some of their spirit had been infused by the establishment of the small pack of hounds they had in this neighbourhood. He knew they were not a large field, but they had often some good young horses among them, and it was no uncommon thing for them to hear soon after of the horses being sold to some Yorkshire dealer at good prices.

Mr. COTTELL, one of the judges, said he did not think Lancashire horses went to London so much as to Staffordshire. For himself, he had large dealings in horses, he could say that he did not care so much what was the price so long as the animal was good, and if Lancashire would continue to breed as good horses as he had seen that day he should never forget to attend the old Christmas fair and to come several times during the year and try to buy them up as he had ever done.

Mr. R. SMITH, Storr's Farm, another of the judges, thought that there was a valuable improvement in the quality of the stock shown. Never mind the foot and mouth disease: none of us care about it so much. There were animals in one or two of the classes that ought to have been in better company; and some of the animals were fit to go to the larger shows. Nothing gave judges more pleasure than to be "pinned" by eight or ten animals out of which they hardly knew which was the best; but when they had a bad lot it was most disagreeable, as they could then neither please themselves nor anybody else. He had lived long enough to remember beef being 4d. per lb., and now it had more than doubled in price, but with high farming he thought they could grow as much beef and mutton as the operatives wanted, if they would pay for it. The quality of the cattle bred in this country had changed very much in recent years. Take the district from Lancaster to Whitehaven, and look at the grand lot of shorthorns that were to be found in the hands of the farmers. Wherever the shorthorn made its way the stock was improved. The cattle from Ireland, too, exhibited the same improvement, and in fact shorthorns were increasing on every side, and would continue to do so, and tenant farmers would have them.

Mr. STARKIE referred to the remark of one of the judges in reference to shorthorns, "that the tenant farmers would have them," and said he considered that when tenant farmers were getting such animals the interests of landlords were involved also, for to feed superior animals, there must be a corresponding superiority in the land cultivated. He trusted the committee would endeavour to use their influence to induce gentlemen in the neighbourhood to give prizes for the best cultivated farms, it would not only be a great credit to the tenant who secured them, but an acquisition to their pockets, while at the same time it would enhance the value of the land, and benefit the landlord as well.

Mr. J. SMITH said the committee would be very glad to second any efforts made in that direction and would be glad if prizes were awarded for the best cultivated farm. A good green crop was the foundation of good farming. Nowadays if they did not produce large quantities of food they were nowhere in the race. They might talk about education being the great question of the day, and the ballot, and such matters as these, but the great question of the day was the supply of beef and mutton. They wanted more of it at less price, even a shilling per lb. did not prevent all being consumed that could be put into the market.

LINCOLNSHIRE.

At Aylesby, Mr. TORR said, as years rolled on friends whom he dearly respected were removed from their midst, and he should long remember the cheery face of Mr. Tom Brooks, who had so frequently helped him to welcome visitors at the

Aylesby ram lettings. They ought to testify to the worth of those whom they had lost, and try to love each other better. As for himself, he had made as many mistakes as most men, but he had always managed to get out of them. He had very great pleasure indeed in breeding the sheep he had submitted to them. He inherited the flock from one of the best judges that ever lived, Mr. Philip Skipworth, who laboured to improve it for ten years. He (Mr. Torr) had followed in his footsteps for twenty-three years, and if they had accomplished what was wanted he was abundantly satisfied. He had seen sheep come of Aylesby with less than 6lbs. of wool upon them; but that was not the case now. He would tell them what the sheep had lost, and what they had gained. They had lost that high symmetry and fine form which Bakewell imagined and carried out. When they talked of the Collings as breeders they talked of men who were mere farmers and butchers, whereas Mr. Bakewell was a philosopher: he looked to shape and form, and he produced the Leicesters. The latter, crossed with the great coarse sheep of Lincolnshire, produced the improved Lincolns, which, by careful breeding, had become so popular as to render the Leicesters less valuable. What was wanted to make the Leicester sheep more valuable was to sacrifice a little of the form and endeavour to gain in constitution, and he thought that in this respect the Aylesby sheep could not be beaten. He might not be quite the fashionable man of the day, but he did not care for that, as he had followed principles which he thought were correct. The fashion of the present day had changed from large sheep to small ones. He (Mr. Torr) had been making week after week over 11d. a pound for his mutton, and he knew nothing more fashionable or better paying than a large lot of moderate-sized, good-constituted sheep. The national taste, he thought, had gone from beef-steaks to mutton-chops; and he advised all young farmers to stick to sheep, which would never let them down. If a man told him that he was going to take a farm, and that it was neither a good wheat nor a good sheep farm, he should tell him it was not worth having. They might safely depend upon it that moderate-sized sheep were the best, and that farmers never made a greater mistake than in trying to breed large sheep on poor land. The Downs had their Southdown, which were best adapted to the soil; for if they took Leicesters there, they would soon deteriorate. On the other hand, Leicesters were best adapted for stronger land. A few years ago Down wool was worth 3s. 6d. a pound, whereas now it was worth only 1s. 6d., while Leicester wool had increased its value. It was worth 2s. a pound, and he (Mr. Torr) thought it would shortly realise 2s. 6d. It was all very well to talk about Shorthorns; but he (Mr. Torr) had never made much money of them, and he had been as successful as most breeders. They could never pay too much money for sires, so long as they were well descended. That was the true system of breeding. The Aylesby flock had a direct pedigree of about 80 years, and they might depend upon it, when they looked at the pedigree and the form, they were getting something good for their money. His practice had always been to put the best to the best, and to sell the worst. He would tell them a secret. He sold about 44 lambs in Hull market the previous day at a guinea apiece: he always hated them when at home, and he wished the fellow luck who had got them. He was sorry that he did not see more young farmers cultivating science; for it was easy to learn, and, in his judgment, farmers had a hard life before them destitute of that knowledge.

STAFFORDSHIRE.

At Perry Bar, Mr. T. B. WRIGHT had long been convinced of the usefulness of such organisations as the Perry Barr Cottagers' Society. In the management of these societies, however, the prize lists required great consideration and constant revision, and in the arrangements at the exhibitions great assistance could be given to the cottagers by members of the committee who might be induced to assist in the work. He would urge the advantages of improved cultivation, which would be found not only in the increase of the produce, but in the quality of whatever was grown. He was glad to see that the cottagers were desirous of obtaining new varieties of potatoes; for, by judicious selection, it was possible for them to have good potatoes on their table during the whole of the year. They must all regret the prevalence of the potato

disease; but, with careful cultivation, aided by the results of the experiments of practical men, it was to be hoped a mitigation of the calamity would be the result.

SCOTLAND.

At Laurencekirk, Mr. ALEXANDER BENT (Haulkerton), the chairman, said it was not out of place to refer to the great amount of good that had been done by the Steam Cultivation Company of their own county. As one of the managers of the Kincardineshire Steam Ploughing Company, he had been requested to state what were likely to be the results financially to the Company, and the benefits likely to accrue to agriculture by the use of steam in the cultivation of the soil. Financially, some of the shareholders might be apt to think the Company as in a bad state, inasmuch as they had never received any dividend on their shares; but, although this was true, *ye*: they would observe that their capital was not hopelessly lost, as he would show from the operations of the Company since the commencement; and he could not show them better than by reading the tabulated statement of the directors:

No. of persons employing.	Acreage.			Year.	Earnings.
	A.	r.	p.		
22	666	3	0	1866-67	£309 10 7
22	913	2	23	1867-68	469 7 8
32	966	1	32	1868-69	497 8 0
33	1263	1	36	1869-70	595 4 7
37	1208	0	35	1870-71	582 4 3

It will thus be seen that the employers of the tackle are appreciating the work done by it from the increased support they are giving it. No doubt there is a slight decrease both in the amount of work done and the earnings of last season compared with the former, but this is mainly owing to the protracted winter of last season. Now, to show that the Company is not financially bad, he would read the balance of last audit: *Liabilities*.—Capital, 1,540 shares fully paid up, £1,540; profit and loss balance, £477 8s. 6d.—total, £2017 3s. 6d. *Assets*.—Plant, £1,556 12s. 4d.; North of Scotland Bank, £460 11s. 2d.—total, £2,017 3s. 6d. They would thus see that the Company had well nigh £500 at their credit, with an increase of the value of plant—therefore proving that the Company had done well financially; and he was glad to say that the plant was, at this moment, of greater value, by several hundred pounds, than it was at the commencement of their operations in 1866, and this arose from replacing the metal casting with steel, and getting a turnplate cultivator in lieu of the old balance one, also a new plough-frame of double the strength of the old one. It was scarcely necessary for him, he thought, to tell them the advantages of steam cultivation over horse labour. Before he got steam to stir the poor, hard subsoil on his farm, he had every year considerable portions of turnips destroyed with finger-and-toe, and this he had clearly illustrated in 1867. In the autumn of the preceding year he had 78 acres dug to an average depth of 18 inches; and over all that portion scarcely a finger-and-toe turnip was to be seen; while on five or six acres that the length of the rope did not allow the digger to reach, and which was ploughed in the ordinary way 8 inches deep, the whole crop almost entirely disappeared with this fatal disease. He must say, however, that the grass on the deep-dug portion had not been quite so good as on the other; and this he attributed to tearing up too much of the poor subsoil at once; and he would advise all those who use the tackle for the first time not to go more than two or three inches deeper than the plough has been. It is said that this disease among turnips is caused by too frequent sowing, and, he thought, no doubt there was a deal of truth in the saying; yet he thought deep cultivation, with liberal manuring, would, in a great measure, rid the country of it. He had sixteen acres of turnips this year that were in turnips in 1868, and as yet he saw no appearance of finger-and-toe amongst them; and this, he thought, was from the fact that the ground was thoroughly broken up with the steam-tackle. In drawing his remarks to a close, he begged to tender his meed of praise to Mr. Greig, Harvieston, for being the first to suggest, and successfully to inaugurate, the first steam-ploughing company in Scotland.

Mr. CURROB, one of the directors of the Scottish Steam Cultivation Company, said he considered that man should do everything in his power to assist nature in the production of grain for the supply of man, and one of the most important prin-

ciples in this production was a proper cultivation of the soil. One of the hindrances was the retention of water in the soil; water allowed to remain in the soil became sour, and in a manner the soil was lost, while if this sour water was conveyed away, the rain which fell would percolate the soil, and the consequence was that the soil was sweetened and became productive, while if this water was allowed to stand the soil became sterile. This improved state of matters could only be arrived at by steam cultivation. If a piece of clay, with a tear in its eye, was taken and pulverised, it would absorb a great deal more moisture than it had before, so its productive powers would be increased. Owing to the great improvements made by Mr. Greig, they could now go to any depth—2½, 3, or 4 feet—and not turn up the soil but stir it so as to let the sour water away. In Fife he had wheat 7 feet in height, stalks double the thickness, and heads double the weight through this cultivation, and off what was once water-logged land, and of such a sort that no root could penetrate it. The more the ground was stirred the roots penetrated the deeper, and the sweetening process went on, and results realised from the coldest clay soils which were hardly creditable. He believed that, if the close pan which was made by the treading of cattle and other causes was broken by the stirring process, and the water carried to the sea, the results would be what he had stated. He mentioned the case of a gentleman in England who had taken a large farm at 10s. an acre; one of Mr. Greig's cultivators was got which stirred up the soil 3 to 3½ feet, and an engine with Scotch brains to manage it, and last year, the third year of the operations, 1,500 acres of beetroots were raised, every one as large and thick as a yeoman's leg. There were upon the farm 700 acres of wheat, and this was growing to a height of 7 feet and a corresponding heavy head, and between 700 and 800 acres of turnips which would compete with any turnips produced on the best land of England.

Mr. GREIG, of Messrs. John Fowler and Co., said: It is almost totally unnecessary for me at this time of day to say aught with a view to proving the extreme importance of steam as a power in agriculture. Were it possible for me to transport you all at one word from this room to the shop in Leeds, you would be able to gain a rather good idea of the great importance of that branch. In that shop you would find from 1,000 to 1,500 mechanics at work making steam ploughs. The firm of John Fowler and Company send ploughs to America, Africa, and India, and they sell large numbers of them at home. I cannot detail to you, nor indeed give you any idea, as to the various quarters of the world to which these ploughs are sent. I may say, however, that in Egypt the first introduction of anything in the shape of steam ploughs was a set of Fowler and Company's tackle. As a result of this, not long after, an order was received for three hundred steam ploughs, at a total cost of £300,000. Since then, another order has been received from the Pacha for supplies of the same article to the amount of £60,000. This, I think, was in the course of last year. Let me express a hope that this will not be the last order he will send to England. I may also say that, while in Spain, I had the honour of receiving King Amadeus and twenty-five of his ministers, all of whom seemed to take great interest in steam cultivation. I was informed that it was their intention to institute model farms for the improvement of agriculture in all parts of Spain. With regard to England, there are three hundred sets of tackle presently working at different places throughout the country, all of which were of Fowler and Co.'s make.

Mr. CAMERON spoke in favour of the metric system of weight and measure, and showed the advantage that would be derived by its adoption. He believed that this system would yet be introduced by the Legislature, and thereby lessen the number of years a pupil would have to attend school.

At Castle Douglas, Mr. CAIRD (Cassencarrie) proposed the toast, "The Agricultural Interest," and in doing so said he had heard to his astonishment that although this was an agricultural county, and although there were a great many agriculturists round the table, there were very few farmers present—scarcely any. This was a circumstance worthy of note. There were agriculturists who were landowners. In his own county of Wigtown there were very few landowners who were agriculturists, that was to say, there were men of very large property who depended for success in life not upon personal exertion, but upon property. In the

Stewarty it was different, but he was sorry that there were not more present of that class of agriculturists who had nothing to depend upon but the exercise of their own skill and the proper employment of their capital. In regard to the subject of his toast—the success of agriculture—it depended upon the success of the country in general. It was because the consumers were ever flourishing, increasing, and getting richer—it was for that reason that British agriculture flourished. So long as that continued they might hope for agricultural prosperity, and that would probably continue so long as coal and iron and the means by which our great manufactures were maintained continued to exist. A Royal Commission had lately reported that our coal supply is not so endless as at one time it was thought to be; it would probably prove sufficient, however, for two or three or even four generations longer, and they might hope that by that time the wit of man would have discovered something to supersede or come in the place of it. That was a very remarkable fact which the census had lately told them—a fact upon which the prosperity of agriculture in this country materially depended—that within the period from 1801 to 1871 the population had exactly doubled. In 1801 it was 16,000,000; in 1871 it was 32,000,000; and the remarkable fact was this, that the agriculture of the United Kingdom, combined with the operation of those measures of Free-trade which had become law, had made the pressure for subsistence on the part of these 32,000,000 considerably less than it was on the part of the 16,000,000—that was to say that the 32,000,000 now existing were much better fed than when there were only 16,000,000 of a population. They might hope that state of things would still go on. And let them remember this, it was not at the expense of the consumer that agriculture was prospering. The great staff of life—bread, wheat—that upon which beyond all others in Scotland now, in England entirely, and in Ireland to a great extent, the great mass of the people depended, had, within twenty years of Free-trade, actually diminished in price, as compared with the price before Free-trade was established. Therefore, if agriculture had prospered, it had not been at the expense of the consumer so far as the price of bread was concerned. As to the agriculture of the West of Scotland and their own district, there was this to be said, that it was because they could grow grass well, and grow turnips well, feed stock well, and produce those articles which could not be very well brought from abroad, that agriculture with them had flourished as it had done. Though he was not the oldest man in the room, he could remember about thirty-five years ago when he began farming; that nobody could say he was not an experienced farmer; he had probably had as much experience as most men in the room. He remembered a meeting which was held in Wigtown in honour of the late Hugh Hathon, of Castlewigg. Lord Galloway was in the chair, and very properly praised that particular breed of cattle which bears the name of the province from which he takes his title. He (Mr. Caird) also had a very great respect for these black cattle, but he ventured at that meeting to say, from his own short experience, that the Ayrshire cattle, with the shape of a wedge which they possess, when once introduced to the district, would drive their way among all other breeds, the native breed included. Lord Galloway remarked, in a very good-humoured way, that the Ayrshires must have their horns cut off before they could act as a wedge in the way he had mentioned. It was a fact, however, that with the industry, energy, and perseverance exhibited by the dairy farmers of Galloway, the Ayrshires had done great things—the quality of the cheese produced had been gradually raised from Dunlop to Lancashire, and finally to Cheddar, which had largely increased the returns to the farmers of the county without increasing their expense. In another matter, the cultivation of the land by steam, agriculture had made a great improvement. There were many physical impediments to its introduction into that county, and these would probably limit it to localities where there were large farms, and not many stones. Nevertheless, it had a great effect in improving the product of the land, by increasing the workable depth of the soil, and thus increasing the crops and enabling a man with less capital to conduct the operations of agriculture. He therefore looked forward with great confidence to the future prosperity of agriculture. He felt, after the experience of upwards of thirty years, and after an experi-

ence of twenty years of free trade—when they had seen all the gloomy forebodings by which that policy was accompanied; the fears that were held that British agriculture would be ruined by foreign competition—when they had seen these forebodings and fears completely falsified, he felt there was no reason to entertain any alarm for the prosperity of British agriculture. The imports of grain so much apprehended had proved to be for the benefit not only of the consumer, but of the British agriculturist himself, who now used a great deal of foreign grain for the purpose of feeding his cattle. And though there had been large imports of meat, cheese, and other food supplies from foreign countries, it was now becoming evident that the people of these countries themselves were becoming more prosperous than they were, and were beginning to find that they could use up more of these commodities than hitherto they had been able to do. Therefore the British farmer might feel assured that his products would always command a ready market.

Mr. BIGGAR (Chapelton) was sorry there were so few agriculturists present, but he begged to thank Mr. Caird for the very handsome manner in which he had proposed the toast. Agriculture was at once a healthy and retired branch of industry. Often after visiting on business some of the large and busy towns of England, where you can scarcely thread your way for smoke and fog, or hear the sound of your own voice for the constant roar and din of traffic, he had felt thankful to find himself again at home and find everything as quiet and peaceful as a Sabbath morn. It had been said that the great cities were supplied with their bone and sinew by the agricultural districts, and he believed that to be true, but they also found that Scotchmen who had made fortunes in these cities had a hankering for farming in their own country, and brought large amounts of capital, but without much practical experience, to compete in taking farms with men who had little but experience to help them. After alluding to the scheme of the International Association for taking possession of all the land in the country and farming it by joint commission—in which event he did not think the Government would be troubled with the collection of much income-tax from farms, and more steamships would be required, because he thought the greater part of our bread would have to come from abroad—he alluded to Mr. Caird's remark about the Ayrshire breed of cattle with their narrow shoulders driving out the Galloways. He had no doubt what Mr. Caird said was perfectly true, but not because the Ayrshires were wedge-shaped. He remembered a dairy farmer once telling him—“We can make more money at dairy farming than you Galloway farmers can do;” to which he replied—“I doubt that; you may pay higher rents, but I don't believe you live better; you dairy farmers can live on curds and whey, while we Galloway farmers like a piece of roast beef.” It was a long street that had no turning, and he thought a change was not very far distant. He found that cheese was not bringing the same price in the market that it used to bring; beef and mutton, on the other hand, were increasing in value, and he hoped the time was not far distant when the Galloway breed of cattle would resume its old position in public favour.

Mr. CAIRD requested the indulgence of the meeting for a moment, because he had had the great misfortune to be misunderstood. Mr. Biggar had in the most proper, and he really thought excellent manner, stood up for the Galloway cattle. Long might he have plenty of roast beef. He was sure he could not have too much of it. He (Mr. Caird) had not a word to say against the Galloway cattle, but simply told an anecdote about himself as a young man beginning farming many years ago. Before coming there their worthy chairman had put into his hands an excellent letter published by his grandfather in 1811, describing the state of agriculture in the Stewarty for the preceding ninety years. Now, with regard to Galloway cattle, he thought Mr. Biggar would confess that a change had taken place in the value of that breed of cattle as well as in the value of Ayrshire produce. In the letter referred to, Mr. Maxwell mentioned that a Mr. Anthony McKie of Netherlaw sold at the Bridgend of Dumfries, in 1736, five score of five-year-old Galloway cattle in good condition to an Englishman for £2 12s. 6d. a-piece. He wished to know if his friend Mr. Biggar would not like to get more than ten times the money for the same kind of stock. [Mr. BIGGAR—He never said

so.] Neither did he (Mr. Caird). So conscious was he of the great increase in the value of cattle, that in his argument he had gone on to show that in this west country, with the

abundance of grass and turnips, their great business was the growth of beef, cheese, and butter, rather than the cultivation of corn, which could be brought from abroad.

PEDIGREE STOCK.

They went too much for pedigree and too little for flesh. Such may be taken as the text-word of a paper read by Mr. William Sanday, on the Breeding and Feeding of Stock. And stock with Mr. Sanday would mainly imply Shorthorns, as his address referred almost altogether to the breeding of this kind of cattle; the feeding being but a very secondary consideration in the argument as here put. Mr. Sanday, moreover, is at this moment one of the very highest authorities we have in this way, as probably no other man is called on to act so frequently as a judge of Shorthorns at the leading or local shows; and the point of Mr. Sanday's paper is a protest against the high prices which Shorthorns are now making. The improved Shorthorn we are told is not by any means so good an animal as he was some thirty years since; he has been bred on wrong principles, and yet he commands more money than ever. Had Mr. Sanday's lecture been delivered a fortnight or so since, it is impossible to say how much weight such dicta would have had; as it is, his disquisition comes in curious commentary on the sensational sales which we had only last and have again this week to record.

There is no question but that the paper will live, and we accordingly hasten to give it in full. Beyond the mere matter of comparative value which cannot but raise some serviceable discussion, the essay, as it reads to us, abounds in wholesome ethics on the more modern system of breeding stock. Thus, when Mr. Sanday asserts that Shorthorns are inferior "both in size and quality" to those of twenty or thirty years since, he does not shrink from giving the reason for this deterioration—the fashion of breeding in-and-in, or too closely from the same families. Still, this branch of the subject might have been treated with advantage at more length. In-and-in-breeding can only be persevered with at a sacrifice, as Mr. Sanday says, of size, and, as we may add, of constitution and fruitfulness. Amongst the numerous instances of famous animals who figure without any progeny to their names in *The Herd Book*, as either altogether barren or as having lacked the power to throw healthy offspring, only too many will be found bred in-and-in. The "fancier" is possibly prepared for something of this, as, like hop-growing, one good year may recompense for two or three failures. But that the owner of a Tribe, which he jealously keeps as far as he can to himself, will not admit it that he tries these close crosses at any loss of quality. On the contrary, this very quality is precisely the element at which he is aiming. He may breed away from robust masculine character in his males, and from broad massive frames in his females, but it is his boast to preserve his quality at any cost. Hence it comes that delicate plain things often tell so well either in the show-ring or the sale-ring. Long pedigree and high quality are their great recommendations, and so we arrive once more at a problem which as yet has never been fairly solved. What is *quality*? You estimate the character of a Shorthorn mainly by his appearance: you judge of his quality by his touch; and gentlemen who give a thousand guineas or two for a heifer will tell you that the quality is admirable, whereas Mr. Sanday says this is not nearly so good as it was some twenty or thirty years since. There is now no such abused

phrase as this self-same quality, and it would have been well had Mr. Sanday given us his definition.

Again, as showing the means by which deterioration is arrived at, Mr. Sanday cites a rapidly extending abuse: "the practice of using bulls before they arrive at maturity;" while we should be inclined to add the co-practice of serving heifers at too early an age. Of course size and vigour are the penalties which sooner or later must be paid over so pernicious a system, and yet there is no more common boast amongst the breeders of all descriptions of stock than of how soon an animal may be brought into use. We have heard an exhibitor apologise for the want of condition in a bull entered in a yearling class from his having been worked so hard, and at the Wolverhampton meeting of the Royal Agricultural Society there were Shorthorn heifers which must have been brought into the herd at an almost incredible period in their infancy. It must be remembered, further, that such abuses are by no means discountenanced, but the rather encouraged by the owners of highly-bred animals, where produce not beef is looked to by way of return.

With such evils corrected, and they are the ills more of a system than a breed, Mr. Sanday himself is a strenuous advocate for the use of well-bred bulls—"a practice the importance of which cannot be over-rated"—"Never spare a few pounds in the purchase of a good animal"—"Select a bull from a herd superior to your own, and above all with a pedigree without a blot." So that it is clear if the crescendo argument is to be carried out, and that a man is ever to be looking out for something superior to his own, that the business of bull-breeding and ram-breeding must still be maintained. In the Vale of Aylesbury during only last week we saw an admirable selection of dairy cows, which for their purpose fairly beat the highly-bred Shorthorns; and the principle adopted here is the use of a good bull, but then somebody must make it his care to provide "a better bull than your own," or the thing would soon get to a standstill. But Mr. Sanday declares emphatically that he himself has no sympathy with "pedigree-breeders."

And here we come to something of a dead-lock. The good useful bull which farmers are to put on to their herds must have a pedigree without a spot, and yet there should be no sympathy with pedigree-breeders! As we suspect this seeming inconsistency may be explained away on the hypothesis that Mr. Sanday is speaking only against particular lines and strains of pedigree, just as he does of quality, when he says "I do not like the thin papery hide which so many admire; you may be sure there is not much flesh under it." Still this pays, and here we have a phase of the question which is not touched on in Mr. Sanday's paper. The taste for certain tribes of Shorthorns, Booth or Bates, may be a fashion, or a rage, or a luxury, which it would be better that the tenant-farmer should not be tempted into touching; but admitting this, such as have gone the deepest have been by no means losers by the business. Free buyers like the late Lord Ducie and Major Gunter can always in turn find ready customers; and even the Continental war of last year which interfered so seriously with the sale of almost every other description of stock, could not stop the price

of a Shorthorn. In fact, this fancy is not the mere fancy of English, Irish, or French; but, on the contrary, all the world is bidding; and it thus sounds somewhat impractical to say that we shall not continue to meet that demand, even if it run on a papery touch or a long pedigree. And yet further, as Mr. Sanday shows, although he does not quite admit so much, the farmer must reap some collateral advantage from these high prices being main-

tained. A more certain supply of "bulls without blots in their pedigrees" is ensured, and a nobleman can scarcely indulge his taste in this direction without the neighbourhood feeling some beneficial influence. Of this fact we have continual example, as it would be useful to ascertain how much the county of Gloucester profited by Lord Ducie giving up his foxhounds and taking to Shorthorns.

THE BREEDING AND FEEDING OF CATTLE.

At the quarterly meeting of the Notts Chamber of Agriculture, at Newark, the chair taken by Mr. George Storer, it was resolved "that the consideration of the Game Laws and Trespass Bill, and the proposition for a metric system of weights and measures be postponed, and that, in the absence of a report from the members of the association in the northern division of the county, the question of forming a branch chamber for North Notts be not considered."

At the general meeting which followed, Mr. W. Sanday, of Ratchliffe-on-Trent, formerly of Holme Pierrepont, read the following paper on the Breeding and Feeding of Cattle: The breeding and feeding of first-class stock having of late years attracted much attention, and being a pursuit on which I have been myself engaged for the greater part of my life, I felt that the result of my experience might be of use to others, and therefore, much as I dislike appearing in public, I acceded to your request to read a paper on the subject. I have endeavoured to make my remarks as practical as possible, as I have not come across any article on the subject which can be said to be of any practical use. Breeding, as the more important of the two subjects under consideration, should first claim our attention. Shorthorns, on account of their early maturity, having become more popular in this country than any other breed of cattle, I shall confine my remarks to them; the same observations will, of course, apply with equal force to any other variety. To give you some idea of the increase in the number of Shorthorn breeders within the last 20 years, I may mention that in the year 1850 there were 316 subscribers to Coates's Herd Book, and the pedigrees of 1,127 bulls were entered; to the last volume we find 655 subscribers, with the pedigrees of 2,366 bulls. I would ask, whether, in the opinion of this meeting, the number of really first-class animals has increased in proportion? My own opinion is, that the animals bred at the present day are inferior both in size and in quality to those bred 20 or 30 years ago. Now if this be the case, surely there must be something wrong in the present system of breeding. It is evident that but little common sense can have been brought to bear on the subject. I am convinced that the cause of this deterioration is the principle on which most herds are raised, viz., the fashion—or rather infatuation—of collecting from certain families without any regard to the qualifications necessary for producing and perpetuating good animals. To follow out this plan, in-breeding must, to a very great extent, be resorted to, and the number of families on which such an experiment can be tried with the smallest chance of success is so limited, that in the majority of cases, the consequences cannot fail to be ruinous. We all know the difficulty of raising and keeping up a good herd or flock; this can only be done by breeding from the very best males and females, but the present system seems to set this rule completely at defiance; if an animal be only of the fashionable strain, it is sure to make a fabulous price, whatever its quality. Only last year two heifers were sold by Captain Gunter to a Canadian gentleman for £2,500, and their produce, two heifer calves, has since been purchased by Lord Dunmore for the same sum (£2,500). Should these calves breed, what price do you think Lord Dunmore will set upon their progeny? Of course it will be a high one, totally irrespective of their quality; should a bull be reared, doubtless he will be used, no matter what he may turn out. I have of course, put this as an extreme case; but similar ones are constantly occurring, and this servile adoration of pedigree cannot fail to end in disappointment, and ultimately in the per-

manent deterioration of Shorthorns. We may have some idea of the extent of the evil if we take the number of bulls annually exhibited at our various shows, and consider how few of them are really fit to perpetuate their species, and yet the majority of them are so used, which would in some measure account for the great scarcity of good animals. With many, a long pedigree is all that is considered necessary; but unless this pedigree be composed of really good animals the produce will probably be unsatisfactory. A well-descended bull or ram may, although not itself first-rate, produce first-rate stock; numbers of such instances have come within my own knowledge. The case is far different when the sire comes of a line of light-fleshed, delicate animals (and these, I am sorry to say, are in the present day only too numerous). Surely any of us may foresee the end of such an irrational plan, and yet it is pursued, as I have already stated, by numbers of breeders. There are two other causes which, in my opinion, must hasten the deterioration of many of our best herds, viz., first, the artificial manner of rearing calves; and second, the practice of using bulls before they arrive at maturity. First, the artificial manner of rearing calves, especially bull calves: They are confined in small stalls or loose boxes, instead of being allowed to suck upon their mothers in the open pastures, where they could take any amount of the exercise so necessary to their muscular development. I am well aware of the difficulty of carrying out this plan to any great extent, but whenever practicable it should be adopted, if really first-class animals are to be produced. Second, the practice of using bulls long before they come to maturity: It will be sufficiently evident to every one that such a practice cannot fail to be injurious, and, though instances to the contrary may be adduced, they are only the exceptions which prove the rule. I am also quite of opinion that over-feeding is another cause of deterioration; but it is not likely to be discontinued at present, as, owing to the extreme difficulty of judging animals when out of condition, there are but few who will purchase them. I am well aware of the scarcity of first-rate sires, and never in the history of Shorthorns have they realised such enormous prices; but had the supply increased in proportion with the number of breeders, no such difficulty would have arisen. One advantage, however, has been gained. There is no lack of useful bulls, which may be purchased at moderate prices, and these, I think, we may fairly congratulate ourselves, have much improved the ordinary stock of the country, more especially in Ireland, as may be seen by the superior quality of the cattle brought to our fairs and markets. I am now especially addressing myself to farmers, many of whom keep well-bred bulls, a practice the importance of which cannot be over-rated. Here I may perhaps be allowed to make a few remarks on the selection of this description of stock. In the first place, it should always be remembered that the male has a greater influence on the quality of the stock than the female; consequently, every female put to a good male will probably produce a better animal than herself; this rule applies to all ordinary stock put to a well-bred sire. Therefore, never spare a few pounds in the purchase of a good animal, for you may reasonably expect a handsome return for the amount expended in the improved quality of the stock. Second, with regard to the selection, the importance of which I think you will admit, I would most strongly recommend you to fix upon a flock or herd known to be descended from a long line of heavy-fleshed and robust animals, and one whose owner has a character for careful selection of his breeding stock. I am glad to

say that breeders answering to this description are still to be found. By pursuing this course, the danger of getting inferior stock is reduced to a minimum. Anyone who has the smallest experience in breeding knows how often the offspring of two first-class animals is not what might fairly be expected. For this reason well-bred bulls are often to be obtained at a moderate price from our best breeders, many of which, if of strong constitution, might be depended upon to produce good stock, or, at any rate, good feeders. Carefully avoid, however, herds bred from the light-fleshed, narrow, and delicate animals so common at the present day. In purchasing a bull for ordinary use, above all things choose a fair-sized animal with good quality of flesh; if well descended do not be too particular about his form. The shoulders are better well open at the top, not narrow like the withers of a horse, no matter if a little coarse, if it is a sign of constitution; the ribs should be well sprung, a most important point, but difficult to get; the hips large, even though they should be coarse; the head and neck masculine, and the horns rather thick than otherwise—a thick horn is a sign of robustness and vigour. I do not like the thin, papery hide which so many admire; you may be sure there is not much flesh under it. I think I have now given you the essential points of a useful animal, and one obtainable without any very great outlay. As there may be some amongst my hearers who are breeders of first-class Shorthorns, a few words of advice to them may not be out of place, though it must be understood that they do not in any way extend to those whom we may term "pedigree breeders." With them I have no sympathy; and though I am bound to admit that large sums of money may be and are realized by this mode of breeding, that its effects are injurious must be apparent to every unprejudiced person. What I have said in my advice to farmers will apply here, only, if possible, with tenfold force, viz., avoid any tendency to light flesh or delicacy of constitution. A cross of this kind is often attended with most disastrous results; a case in point occurred some years ago in the herd of the late Mr. Richard Booth, whose name is doubtless well known to most of you. He had for many years been breeding entirely from his own stocks, and thinking that a cross was beneficial, he was induced to purchase at one of the sales of the late Earl Spencer a bull called Exquisite. Earl Spencer's herd, though neat in form, were wanting in flesh and robustness—the very characteristics possessed in such an eminent degree by Mr. Booth's, but the cross, contrary to Mr. Booth's expectation, proved a most unfortunate one, the stock from Lord Spencer's bull being decidedly inferior. Similar cases have more than once occurred in my own flock of Leicesters, and this has strengthened my conviction that, unless the male be superior, or at least equal to the female, in all essential points deterioration must take place. Let me here again impress upon you the importance of selecting a bull from a herd superior to your own; he should, of course, be as perfect in form as possible, but the following points should be made a *sine qua non*, viz., good and heavy flesh, good looks, well-sprung ribs, and, above all, a pedigree without blot. Bear in mind, however, that a long pedigree is not necessarily a good one. Success in breeding, I am quite convinced, requires a certain amount of intuitive knowledge; it is this which enables one to see at a glance when an animal is likely to be a good stock-getter, or whether a young animal is likely to improve or deteriorate. I cannot believe that this faculty is possessed by many of the breeders of the present day: if it were, the quality of the cattle brought under our notice at sales and shows would be very different. To quote an eminent authority (Mr. Darwin), "Not one man in a thousand has accuracy of eye and judgment sufficient to become an eminent breeder. If gifted with these qualities, and he studies his subject for years, and devotes his lifetime to it with indomitable perseverance, he will succeed, and may make great improvements; but if he wants any of these qualities, he will assuredly fail." Before concluding this part of my paper I must say a few words on the subject of in-breeding—a subject to me most interesting, but at the same time most complicated. I feel certain that, under some conditions, the experiment might be tried with every chance of success, but these conditions so seldom occur that it can be attempted in but few cases. The conditions to which I refer are these: If two animals be first-rate in form and quality, without the slightest appearance of delicacy, or if the male be very good in points where the female is deficient,

or if it be desirable to perpetuate any particular strain, then I think you might put father and daughter, mother and son, or indeed, any relations together, with the exception of brother and sister. Bear, in mind, however, that any defects in the parents would be exaggerated, and each generation would decrease in stamina. From personal experience I cannot speak with any authority, having only tried the experiment once, and then upon sheep—the result was not satisfactory. Feeding: I feel some diffidence in addressing you on the subject of feeding, being well aware that there are many present who are better qualified to do so than myself. I must, therefore, be excused making any lengthened remarks, hoping that some one may be induced to offer a few suggestions before the close of the meeting. I shall begin by saying a few words on the rearing of calves, and their after-treatment until fit for the butcher. I have always considered September, October, and November the three best months to begin rearing, that the calf may be strong enough to withstand the second winter, which is always the most trying time. Each calf should have, if possible, a loose box not less than 9 feet by 5 feet 6 in., especial care being taken that it be well drained, any accumulation of moisture being most injurious. Each box should be provided with water-trough, manger, and small rack for hay. New milk should be given for a fortnight at least; this should gradually be supplemented by skimmed milk, and mixed with linseed or oil-cake porridge, that as many as possible may be reared. A little good hay should be given as soon as the calf will eat it, and I believe that no better food can be substituted. A small quantity of linseed cake may also be given, with pulped roots and cut hay; if hay be scarce, a very little straw may be added. At the age of 14 or 16 weeks the milk may be gradually discontinued, and a little flour substituted, which may be mixed with the pulp and chop. This treatment should be continued throughout the winter, and up to the first week in May, when the calf may be turned out to grass, fetching it up at night for the first fortnight at least. One pound of cake per day should be given during the summer, and by the autumn this treatment should have produced an animal in good condition, and well able to get through the ensuing winter. The cake should now be increased to 1½ lbs. to 2 lbs. per day, and equal portions of hay and straw may be given chopped and mixed with pulped roots. If the stock are to be sold at an early age, which I strongly advise, a small quantity of flour should be given with the chop. I would here impress upon you the importance of keeping every young animal in a thriving state; should it once lose its calf's flesh, it will take some time to restore it, and it should be remembered that time is money. At the end of the second winter the yearling ought to be in good condition, and during the next summer he may be grazed in the store pastures with ewes and lambs. At two years old those not sufficiently forward to be fed may be put into the straw folds; they should have an unlimited supply of cut straw mixed with pulped roots. If a sufficient quantity of roots can be allowed they are in my opinion preferable for store cattle to any kind of cake. The heifers intended for stock may be put to the bull; a few of the rest, with some of the steers, may possibly be sufficiently forward to be fed in the winter. Feeding may commence with from 4 lbs. to 5 lbs. of cake per day with as many roots as can be spared, and if possible a little hay; the quantity of cake may be regulated to suit the time when the animals are to be disposed of. It is a much debated question with feeders whether the preference should be given to boxes, stalls, or yards. I should place them in the following order: 1st, yards; 2nd, boxes; 3rd, stalls. It depends, however, in some measure on the kind of cattle to be fed. Steers will improve faster in yards or boxes, but cows, from their quarrelsome disposition, do better in stalls. Farmers, however, have not often sufficient accommodation to admit of choice in the matter. In the foregoing remarks I have pre-supposed that the stock have been fairly bred, for it is only by this means that early maturity can be secured; at the same time I would have it understood that I am speaking of ordinary stock, and not of animals intended for exhibition. Not having any definite knowledge of the system adopted by the large dairy farmers in rearing, I cannot give any information on the subject, but beg to refer you to the forthcoming volume of the *Royal Agricultural Society's Journal*, where you will find some valuable hints in the account of the first prize dairy farm. I may remark that the calves on this farm were econ-

omically fed and in very good condition. With regard to the rearing and management of first-class breeding stock, I most strongly recommend that all the bull calves should, whenever practical, be reared upon cows in the open pastures; they should suck from six to eight months, and a few weeks before weaning should become accustomed to artificial food, as a calf so soon loses condition after leaving the dam. Exercise should be given regularly, this being such an essential point. The bull calves will, of course, receive the most liberal treatment possible until sold; the heifers only require to be kept in good growing condition, which can be done by giving a very small quantity of artificial food and good hay. They should be put to the bull at one-and-three-quarters or two years old, as, if this be longer deferred, they are likely to prove non-breeders. Stock for exhibition require the most liberal and careful feeding. Only so much should be given as can be consumed at once; if any be left it should be removed. This I believe to be the most important point in feeding. Change of food is also very essential. Linsed-cake should be given with judgment: if too much be given the animal is soon cloyed. But all these directions will be useless unless the intending exhibitor have an intelligent, persevering, and trustworthy servant, as it must depend upon his exertions to bring out the animal in show-condition at the right time, which is no easy matter. Economical feeding, *i. e.*, obtaining the best results from the smallest amount of food, is of the greatest importance; but it is difficult to lay down any special rule on the subject. I shall not attempt to give any opinion on the different feeding stuffs and condiments now before the public, my experience of them being very limited, malt, however, excepted. I am convinced that it is one of the most valuable foods known, not only as a condiment, but as a fat producer. Animals for exhibition are kept in better health on malt than upon any other food, milk excepted. It is a food of which they never tire. I only hope I may live to see the day when it will be within the reach of every farmer. For further information on the subject I must again refer you to the forthcoming number of the *Royal Agricultural Society's Journal*, where you will find a description of the different modes of feeding, as adopted on the prize farms, the details of which may be useful and interesting.

Mr. SAMPEY expressed the opinion that nothing would more conduce to reduce the price of meat than the use of malt in the feeding of cattle. It was invaluable as feed for young stock, and he very much agreed with what Mr. Sanday had said upon the subject. He hoped he might live to see when farmers would have the free use of malt. He scarcely thought 1 lb. of oil-cake was sufficient; what they wanted was to turn out the calves strong, and they then came up all the stronger and better beasts the next winter. He again expressed his satisfaction that Mr. Sanday had made such an allusion to the importance of malt as a feeding ingredient.

Mr. COLTON said the deterioration of Shorthorns must be owing to breeding in-and-in too much. He was of opinion that the Shorthorns now bred and exhibited had nothing like the flesh they had twenty years ago. Still, they made more money than they did twenty years ago. It was to be hoped that more attention would be paid to substance, as light-fleshed animals were more liable to disease.

The CHAIRMAN said they had heard a very instructive paper. He might observe that some thirty years ago he thought of setting up as a Shorthorn breeder, and after hearing Mr. Sanday's paper he could fully realize why his anticipations were not fulfilled. He purchased some stock at the sale of a neighbour, Mr. Rose, but they had been bred in-and-in too much, and the consequence was that three or four of the heifers would not breed at all, which rather daunted him. He had a brother, however, a great breeder, but he had told him he went in too much for pedigree and too little for flesh. He recollected the remark of an excellent farmer in his locality, Mr. Bean, saying, in reference to this subject, "It's all very well, but keep beasts kind." He supposed that was an old saying, but he thought that keep would not do it unless there was kind to start with. With regard to the paper they had heard, they had been sitting at the feet of Gamaliel; for no man could be more qualified to advise them than Mr. Sanday, and he was sure their thanks were due to him. He could not propose it from the chair, but it must be the general feeling of the meeting.

A discussion ensued as to the time of breeding, Mr. Sampey

being of opinion that proceeding early conduced to regular breeding, and fewer barren beasts.

Mr. HEMSLEY said he should like to know what amount of beef might be produced by farmers generally beyond what was now grown. He believed the two great points which now affected farmers most were the labour and meat questions. He should be very glad to know how they could produce more meat, as by that they would be better able to pay for their labour. As far as he could see, something might be done in the way of artificial grasses. In that way they would increase the supply of beef and mutton. It is quite certain that their attention must be turned to the growing of beef and mutton more than it had been.

Mr. SAMPEY said unless they did so they would have to give way to the foreigner.

Mr. SANDAY remarked that in the matter of breeding much depended on the way a calf had been reared. If well kept it would be ready at a year and three-quarters; if badly kept at two years old it would only be three-fourths the size of one well kept. In answer to a remark of Mr. Hemsley's he mentioned one-and-a-half years as the very earliest time, but if later it would be far better. They were anxious to get produce as soon as possible; the principle was too much carried on throughout the country, and was decidedly injurious. If the animal began to breed at too early an age the stock must deteriorate to some extent. It was this gradual deterioration which had taken place that caused the Shorthorns to be different to what they were twenty years ago. Of that deterioration he was quite convinced. He had the opportunity as much as most people of going from one show to another, and thus could judge of this. Some thirty years ago he saw some Shorthorns at Mr. Booths, and he was quite convinced that there were no such cows like them now. The fashion of breeding for pedigree alone had been one great cause of deterioration. There was recently a sale of the Duke of Devonshire's Shorthorns, and look what fabulous prices those cattle made. He did not see them, and therefore could not speak as to their real worth. There were no doubt some fine animals among them, but they could not all have been good ones, and must have been bought at such prices from other causes than their intrinsic value. The very dissemination of them, therefore, must have caused an amount of harm. One cow made 1,005 guineas; it might be a good one, but he doubted whether it would have been worth half the money 25 years ago. As to Lord Dunmore's sale two heifers were there sold for £2,500. They were bought as calves, a practice which he thought was ridiculous. Even if they were good ones, they were very dear; but what would the end be? They would breed from them as long as they could, and fancy they were good ones. He could get as useful Shorthorns in the markets for a tithe of the price given by Lord Dunmore and others; but they would have blood, let the consequences be what they might. There was a sale some months ago, at which a cow sold for £100; he put that down in his catalogue as the dearest cow ever sold; but a neighbour having given £300 for one, he entered that as ten times dearer than the other. He advised them, notwithstanding, to improve the breed of their cattle as much as they could, as a well-bred animal was always in a condition to sell. He thought Mr. Hemsley's suggestion as to growing artificial grass might be adopted with the greatest benefit; but how it was to be carried out they must decide, as he was not now a farmer.

A MEMBER suggested that they would want irrigation.

Mr. SAMPEY said that Italian rye-grass could be grown with irrigation manure.

Mr. SANDAY said it might answer to keep their cattle up.

Mr. SAMPEY said this was done at Mr. Webb's farm, where he had seen as many as a hundred kept up.

Mr. GILBERT could not help thinking that there was a great scarcity of stock in this country, which he believed could be accounted for by two sufficient reasons. Last year there was a great scarcity of all sorts of provender, stock being sacrificed through a want of keep; and another reason was that the cattle plague was now being felt. He thought they were greatly indebted to Mr. Sanday for the able paper he had read, and all members of the Chamber would look it over carefully when it was in print. As to the remark of Mr. Sanday on the use of malt in feeding, he did hope that that question, which was a very large one, would be taken up by the Chamber of Agriculture, in order to see whether they could

not get that enormous duty either mitigated or done away with, so that they could use their produce in their own way. There were many national questions which he trusted the Chamber would discuss, and we must look to the press of the country to get their opinions placed before the people. They wanted to show that it was their desire to feed the people with the best and cheapest food they could produce. With the prospect now before them, meat, and even bread, must be at a high price. He could not help observing that many farmers reaped but little benefit from high prices of stock, because they had none. He had heard it remarked by butchers, &c., that there was a great deal of grass land in the country quite unstocked. He begged to move a hearty vote of thanks to Mr. Sanday for his kindness in coming before them and reading so able a paper.

Mr. COLTON seconded the motion, and hoped they would all profit by the paper. He hoped they would continue in their endeavours to impress upon the Legislature that food was getting scarcer, and that therefore the malt duty ought to be repealed. He did not agree that the tax should be mitigated; he thought it should be taken off altogether. Let every farmer make his own malt house, and use his barley in the best way he could for the country at large. Making it into malt, he contended, was for the benefit of the country at large, inasmuch as if they were allowed to do so more beef and mutton would be produced. He hoped chambers of agriculture would not relax their efforts on this question; and they were indebted to Mr. Sanday, with his great experience, for referring to the subject in so pointed a manner.

The motion was carried unanimously.

Mr. SANDAY, in reply, said he was only too glad to give the Chamber any information he could on subjects of this character, and he only regretted that his remarks on feeding had been so meagre, though he fully expected some one would take the matter up and continue it. As to the use of malt, they might depend upon it that anything they could say in its favour would fall short of the advantage which would be derived from the use of it. He had tried it with animals going to Royal shows, and if animals getting up for exhibition would eat malt when they would not eat anything else, and would take it when cloyed by everything besides, they might be satisfied that the advantages of malt were greater than anything else. There was nothing but milk which would give anything like the same fatness as malt. Whether it was stronger than oilcake he would not pronounce an opinion, but that malt was most beneficial to animals, whether store or fat, he was thoroughly convinced; and if he had the opportunity of saying so before a committee of the House of Commons he should be only too thankful and too glad. Mr. Barrow had written a letter to him, and he gave him his opinion, but he thought the committee was quashed, as nothing more was said about it. He begged to thank them for their kind expressions towards him, and assured them that it had given him the greatest pleasure to place his opinions before them.

A vote of thanks to the chairman concluded the proceedings.

SHEEP FARMING.

At a meeting of the Staindrop Farmers' Club, the following paper was read by Mr. JOHN HAYDON, of Wackerfield: The first question that presents itself is, what kind of sheep must we have? This is a question entirely dependent upon local circumstances, and as I mean to treat particularly on our own immediate country, I will come to the point. Our object ought to be, now that the price of wool and mutton are of such a consideration, to combine both together, and I think that in this our northern climate we cannot have a better class of sheep than the large-framed strong-woolled Leicesters. Although in crossing them with the Southdowns or Shropshires you get a quality of mutton which perhaps the butchers may prefer, still they cannot stand our climate, and until you get two or three crosses back again to the Leicesters, you will sustain losses in your flocks by climate and also in weight of wool. On higher lying districts, Scotch sheep twice or three crossed with Leicesters answer well. Having considered the kind of sheep, the next question to be considered is our breeding flock. Some farms are much more adapted to breeding than others, and I think a farm that has mixed grass, I mean some good grazing land and some lower priced, is the most adapted for breeding. On a farm of this description you can always run your ewes on the inferior land, while the other is kept for feeding off their produce. The greatest care should be taken in choosing and keeping up your flock. In choosing your tup, select animals that exhibit quality and symmetry, and with good deceres on their backs, and never buy a ram that has been over-fed, or you will have great losses in your crops of lambs. Any faulty ewes should be discarded. They should be closely culled, so as to be always in good breeding condition, and never kept to be more than six years old, for if ewes be held longer than that period they cannot be made to keep their condition so as to bring their lambs up well, and beyond that age they generally get broken mouthed, so that they are very bad to get fit for the butcher; and where you must necessarily have a good many young ewes every year to keep up your flock, this in an item to be considered. Never let your ewes get old, and then they will go out at a good price, to be equal to the young ones that take their place. Once let an old ewe get low in condition it is hard work to get her right again, and at last she either dies or goes off at a low figure. The ewes, when put to the ram (which ought to be about the middle of October) must be in good mending condition, as you will thereby ensure a better crop, and stronger lambs. I think that the condition of the ewes at this period ought greatly to be

considered, as a little extra care at this particular season will be more than compensated by the extra quality of lambs which you will have. As winter comes on, the ewes must by no means be neglected. Never let them lose condition, for be assured that if you do once let them down in the winter you will have great difficulty in bringing them and their produce up in the spring of the year; and having let them low, to begin just before they lamb to cram them with hard food is, I think, one cause of such great losses. Keep them well, which you can do on a little dry food, such as hay, or chopped straw mixed with oats, turnip tops, and a few turnips if you can spare them. The next and most critical time that we have is the lambing season. The flockmaster must make every exertion to provide food and shelter for the ewes and lambs. It is very necessary in wet and stormy weather that the new dropped lambs should be housed, although in fine weather they are better outside, as they sooner get hardened. For the first few weeks after lambing the ewe ought to be kept well. A little linseed cake and a small supply of swedes is very good for making them milk; and as the lamb for the first few weeks is entirely dependent upon the mother for support, great attention should be paid her. If you intend the lambs for holding, the pastures after this period ought to carry them without any hand food; but, if you want them to go off as fat, it is necessary. Spring tares would now be very useful, but you can't, nine times out of ten, get them ready in time to stand much eating, for they must be eaten off by the end of April or the beginning of May, as you will want the land for turnips; and I think that the good sheep do on them will hardly pay for the seed and extra labour; and I am sure that you will not get such good turnips after them as you would have done had the land been lying in fallow. It is a question of pounds, shillings, and pence which is the best plan—to sell your lambs as fat, or to keep them over year, and sell them off the shears. I would prefer the latter, as I think the price you make of your wool, and the price the sheep go off at, will leave you a better return than by selling the lambs fat. Some people try to fatten the ewes along with the lambs, and so changing their flock every year, one lot going out fat just before another lot comes in to be put to the ram. A ewe that has a single lamb, which goes off early in the spring, may be made fit for the butcher; but I think you will have some difficulty in getting those off that have double lambs, and if you do get them all off, you won't, nine times out of ten, get so much per head for them as fat, as you gave for them as breeding ewes the year before. If

you cannot do this, I think the system will not answer. Lambs ought to be weaned about the latter end of July, and immediately after should be put on good fresh meat—a clover fog if you have one. This is very necessary, as they will find the want of the milk, and would rapidly lose condition if kept on a bad pasture. You ought to have a few early red or white turnips ready by the beginning of October, to be followed by yellows, which will keep as sound as swedes till the beginning of February, and I think the sheep are fonder of them than swedes, as I have seen them, having the chance of both cut swedes and also of yellow turnips whole, prefer the latter. After this period the yellow turnips get dry and lose their nature, so that you must now fall back on swedes, which ought to be cut and fed out of troughs, with a portion also in the break to go to. Mangolds, where grown, are no doubt most valuable in the spring of the year, but our climate is not adapted to them. Through winter the sheep, along with turnips, ought to have hand food. I should prefer linseed cake and oats mixed, say a quarter of a pound of cake and half a pint of oats per sheep per day; this is a good allowance. Indian corn, when less per stone than oats, is a good substitute. It takes a good average crop of turnips, say 16 tons per acre, along with the hand food I have said, to carry 12 sheep twenty weeks. When your turnips are finished, which many years they are before grass comes, you must increase the amount of hand food. No doubt the cost of keep at this time will be heavy; but the sheep must be kept going on at whatever cost, for if not they lose condition, and the meat they have had before is wasted. If kept in the way I have pointed out during winter you ought to commence selling them off the shears in the last week of May. Care should be taken in getting the wool well up, as a great difference in price will ensue between the wool being clean or dirty. Train oil used in autumn by laying it on the sheep, is very good for killing vermin and keeping the wool in a good state. I have endeavoured to give you a sketch, as nearly as I am able, of the management of sheep during the year, and hope it will lead to a good discussion on the subject.

Mr. G. SMURTHWAITE said that there was not much to object to in the paper, as it was a description, generally speaking, of the plan adopted by the sheep-breeders in this country. As

to the statement, however, that it was not well to make flying stock of the ewes by selling them when fat, since they would not then realise as much as what they were bought in for, his experience had taught him the contrary. Perhaps this might be owing to the exceptional season, for whilst they had been selling, things had been getting dearer; but he knew that many farmers liked to keep a flying stock of ewes, because they brought more per head when they were fat than they could be sold for when they were lean in autumn.

Mr. MIDDLETON thought that Southdowns were quite hardy enough for this climate, and would increase in fleece the first time they were brought into the north. On some farms they were also more able to keep more lambs by changing the flocks and having flying stock. He thought taxes were very desirable, but they were not necessary till the latter end of May or June, when they were not so liable to be affected with the mildew.

Dr. Brunhill, Mr. Mulvey, Mr. Brown, Mr. F. Hodgson, and Mr. George Hodgson, advocated the careful tending of ewes before lambing.

Mr. NESHAM remarked that he had found it very advantageous, especially on cold, wet land, to house ewes in winter.

Mr. BELL thought that common turnips liberally supplied were better than swedes in winter, being more milk-producing, and he would add a few oats to them. He was also of opinion that housing sheep was necessary in cold weather, but stone walls and hedges were the healthiest protection.

Mr. HAWDON, sen., took great objection to feeding sheep in folds, as it made them subject to the foot rot.

Mr. GRAHAM said that they were much indebted to their flocks during the past few years, and it was, therefore, of especial interest. He believed it was highly essential that they should keep off high-fed turnips, and attend well to the ewes in winter, giving them such dry food as hay. He preferred giving sheep, both before and after lambing, a softer turnip than the swede. A clover fog was a good place for lambs, but they should be taken off at night till the flush of the clover was gone. He considered that housing sheep often led to inflammation of the feet. Sheep derived from a Scotch flock could be kept ranker on the land than Leicesters.

THE SHEEP OF NEW SOUTH WALES.

By DR. CARRAN.

(From the Official Report of the Exhibition in Sydney).

A stranger visiting the Exhibition, and ignorant of the affairs of this colony, would never have judged that the production of wool was the foundation of our commercial prosperity, and was still our most valuable export. The animals exhibited were few in number, and none of them represented the excellence to which wool-bearing sheep have attained in this colony. The reason of this great shortcoming is to be found in the stringent operations of the Scab Act. When, a few years ago, the scab reappeared in this colony rigorous measures were adopted to stamp it out. They succeeded, but the utmost vigilance is still required to prevent the re-introduction of the disease, as, owing to lamentable neglect in Victoria, the disease continues there almost unahated. It is necessary to maintain boundary-riders incessantly to watch the Murray frontier, and prevent the incursion of diseased sheep; and strict quarantine regulations are enforced at the seaports to prevent the disease being surreptitiously introduced by the agency of imported stock. No sheep are allowed to pass from the coast-district into the interior until they have been detained a certain length of time, and dipped and dressed repeatedly. Stock brought down from the interior, and entering the coast-district, would have to submit to this ordeal, and the owners of fine-woolled sheep did not care to run the risk of sending their best animals to be so detained and treated, or to run the risk of possible infection. Even apart from this reason, the frightful state of the roads would have militated against a good sheep-show in Sydney. The long-continued rains had made the country roads almost impassable. Sheep driven down would have brought with them more mud than

wool, and to have brought them in carts would have been very expensive and nearly impracticable. It was to be regretted that at a Metropolitan Agricultural and General Exhibition so little could be done to display the great staple of colonial industry, for notwithstanding the great and growing variety of articles the colony is now producing, there is nothing as yet that approaches in importance the production of sheep and wool. The first sheep imported came from the Cape. Twenty-nine were landed in 1788, and in 1792 the Government flock numbered 105. A few, too, came in vessels from India—the "Bampton" brought 100 in 1793; but for a long time sheep were few in number and of great value. Mrs. Macarthur's letters mention as something wonderful, that in the year 1795 her husband had a flock of not less than a thousand sheep, and the books kept in their establishment show that in the year 1805 a fat wether was worth £5. It was from observing the improvement in the character of wool, effected by a little careful breeding in the mongrel flock he had accumulated, that Mr. Macarthur was led to speculate on the advantages that would accrue from the importation of superior rams; and when he afterwards developed that idea into practice, the beginning was made of the fine wool-trade of Australia. It took some time to work out the inferior strain of the ewes, but the care bestowed on the breeding of the Camden stud flock soon established a reputation that was never again lost.

The first introduction of fine-wooled sheep to the Colony was due to an accidental circumstance. Some very fine sheep of the Escorial breed (which was considered the best of the

three principal descriptions of Spanish Sheep) were presented by the King of Spain to the Dutch Government. Some of these passed from the Dutch Government into the possession of Colonel Gordon at the Cape of Good Hope, who was then an officer in the Dutch East India Service. Colonel Gordon shot himself, and his sheep were sold by his widow. It fortunately happened that just at that time two English ships-of-war—the "Reliance" and the "Supply"—had arrived at the Cape from New South Wales for supplies. Twenty-nine were put on board the two vessels bound for Sydney. Some died on the passage. On their arrival, which was in 1797, Captain Macarthur offered £15 a-head for the whole; but Captain Waterhouse refused to sell them all to one person, and distributed them, keeping a small flock for himself, which, on his subsequently leaving the colony, he sold mostly to Mr. Cox. Colonel Gordon's flock, or part of it, was in this way secured to New South Wales. But though some half-dozen persons had thus equal opportunities of forming stud flocks, Captain Macarthur, whose share consisted of three rams and five ewes, was the only one with the foresight and sagacity to appreciate the importance of maintaining a pure breed. The ewes then in the colony, especially those from India, though producing only a coarse hairy wool, were very hardy and prolific, and fat wethers ruled at a very high price. The presumption is, that the other owners of Colonel Gordon's sheep thought only of quantity and of immediate gains, for ten years afterwards, when Governor King made inquiries on the subject, the fine strain had vanished, except in the case of the one flock. In 1802 Captain Macarthur went to England. The woollen manufacture at that time was a close corporation; workmen were jealous at the introduction of new hands, and only those who had served their apprenticeship could be employed. The master manufacturers rebelled against the restrictions thus placed on their trade, and in memorials to Parliament pointed out how the commerce of the country was limited thereby. The workmen, who considered the interests of their order imperilled by free trade, replied that the allegation of the masters was false; that there was only one country in the world, namely, Spain, from where the fine wool came, and as the quantity was limited, the manufacturers could not possibly expand the trade. Just at this juncture Captain Macarthur produced specimens of the Australian wool, thus demonstrating that there was another country, and that one of indefinite capabilities, where fine wool could be grown. The exhibition of these samples greatly facilitated his efforts for pushing the wool trade in Australia. Before returning to the colony in 1805, he purchased at Kew, at the annual sale of George the Third's stock, eight or ten rams and ewes. These also were of the Spanish breed, and had been a present from the King of Spain. But they were not quite identical in quality with the sheep from Colonel Gordon's flock, and were considered a shade inferior. It is a curious fact that an effort was made to prevent the transmission of these sheep to Sydney. The day after the sale a paragraph appeared in the *Times*, expressing regret that the colonist who had so invested his capital had not previously made himself acquainted with the laws of the country, as their exportation was illegal. But when it was found that the penalty was cutting off the right hand and branding the forehead, and that the prohibition was to be found in an old unrevoked statute of Edward the First—one of the many measures intended to protect the trade of the country—the difficulty ceased to be formidable. The Camden stud thus founded by Captain Macarthur was kept for more than fifty years, and was not finally dispersed till 1858. The flock at its maximum numbered about 400 ewes of the first class, and 500 of the second class. A large part of the flock went over to Victoria, where, under careful management, the weight of the fleece has been considerably increased. In 1823 there were several private importations of fine-wooled Saxon sheep, and in 1825 the Australian Agricultural Company imported sheep from France and Saxony. Both breeds, however, had been derived originally from the Spanish. It is worthy of remark that catarrh was not known in the colony till after the arrival of the Saxon sheep. Mr. Riley was one of the first to follow the lead of Captain Macarthur in bestowing attention on the breed, and at his estate in Raby began the formation of a flock gathered from various quarters. This flock passed into the hands of his neighbour, Mr. Cox, of Mulgoa, who was also devoting his attention to the matter, who had secured some imported French ewes from the Empress's flock, and who ulti-

mately moved his stock to Mudgee. This removal may be considered the second epoch in the fine-wool trade of the colony, for it placed the sheep in the climate best adapted for the production of wool. In the coast country it is impossible to grow the finest wool. Neither at Camden, Raby, or Mulgoa, could stud flocks ever attain the excellence they have at Mudgee. It is now fully thirty-five years since Mr. Cox's flock was removed to the high lands, and during that time careful persistent breeding has developed the best type yet obtained of the New South Wales merino. The process of acclimatisation has modified the original type of the Spanish merino. There has been a very decided gain in the softness of the wool, and an improvement in its elasticity; but there has been a diminution of the felting quality, which can scarcely be considered a loss. The wool has also increased in length but diminished in density, so that the weight of the fleece remains about the same. The best Mudgee sheep yield about three pounds of clean spout-washed wool, which is equal to six pounds of greasy wool. How far a longer process of acclimatisation will still further vary these results, remains to be proved, but it is already sufficiently demonstrated that the merino is by Australian acclimatisation improved in some important particulars. Nor is there any trace of degeneracy of constitutional vigour, except so far as injury is received by deficiency of food in seasons of drought. We have no available information as to the exact annual growth of the clip of the colony, or of its value. But for the year 1821, the second year in which the colonial wool was sold by auction, a broker's catalogue has been accidentally preserved, with the prices attached in MSS., and from this we find that 320 bales were sent home in the "Shipley" and sold at Garraway's. The Camden wool realised from 2s. 5d. per lb. up to 3s. 10d. Two bales fetched 5s. 6d., and some even went as high as 10s. 4d. Jones, Riley, and Walker's wool ranged from 1s. 1d. to 1s. 9d.; Hannibal Macarthur's, from 2s. 2d. to 2s. 10d.; John Oxley's, from 1s. 8d. to 2s. 2d.; John Wood's, from 1s. 9d. to 2s. 2d.; William How's, from 2s. to 2s. 6d.; Berry and Woolstoncraft's, from 1s. 1d. to 1s. 8½d. The wool trade once established was so natural to the soil and climate, that it expanded with great rapidity, and until the last two or three years colonists have been incessantly exploring fresh country, taking up new runs, and multiplying flocks, in the full belief that it was impossible to glut the markets of Europe, or bring wool down to an unremunerative price. Against this expansive tendency a reaction has now set in. The great and rapid decline of wool has stopped for the present all extension of this industry. In the northern parts of Queensland hundreds of runs have been abandoned, and in this colony some of the remotest country, eagerly taken up during the speculative era, has not yet been stocked. Instead of the production of quantity the attention of squatters is now directed to quality. They have been forced by a painful experience to see that in the hurried attempt to overspread the whole available portion of the continent with sheep, the flocks have not been sufficiently culled, and a deterioration has taken place in the general average of the stock, which it will require some years to retrieve.

Capabilities of different parts of the Colony for Wool-growing.—The different degree of success attending sheep-farming in different parts of the country has also compelled attention to the fact that the whole of Australia is not equally fitted for the production of fine wools, and we have now commenced a careful and discriminating inquiry into the special characteristics of the different parts of the colony, and are slowly ascertaining what districts are best suited for the different purposes. Roughly speaking, the colony of New South Wales may be climatically divided into four zones or belts. First, the coast-country, extending from the sea-board to the main range, and the breadth of which belt varies at intervals from 20 to 100 miles; secondly, the table-land or upland districts on the flat or undulating summit of the range; thirdly, the upper part of the western slopes; and fourthly, the level arid interior, or as it is called, from the chief characteristic of its vegetation, the salt-bush country. Along the eastern seaboard, and for some distance inland, the climate is too moist, and the country generally too poor and unsound for merinos. How far the coarse-wooled sheep could thrive in these parts is still an unsettled question, and even were it determined in the affirmative would still remain to ascertain whether the country could not be put to better account in other ways. Where the soil is good, as on the Hunter and other northern Rivers, and as in

the coast districts to the south, it is devoted to dairying purposes and arable culture; and it is probable that the country is thus more profitably used than in producing large-framed, coarse-woolled sheep. On the higher country, towards the top of the coast range, some sheep are kept, but generally speaking the pasture is too rank and sour, as well as too exposed, for sheep to thrive there. The land around the sources of the Hawkesbury, Hunter, Macleay, and Clarence Rivers, however, must not be thus disparaged, as these rivers rise far inland, where the soil is of a different quality, and where the climate is less influenced by the sea. In the upper watersheds of these rivers there are about 1,360,000 sheep. After surmounting the coast-range the grazing and woolgrowing capabilities of the country improve, although the more upland and mountainous portions are still inferior; and, owing to the comparative wetness of the soil, the sheep depastured there are liable to fluke and foot-rot. Further westward, as the altitude of the country diminishes, the climate and pasturage for woolgrowing purposes improve, and the intermediate country between the table-land and salt-bush plains is first-class. Even here, however, there are better and worse, for those portions, which like the districts of Mudgee and Queanbeyan, overlie limestone strata, are found to be the best for woolgrowing. Next in value to these are the southern portions of what is popularly termed *Riverina*, or the plains watered by the westward-flowing rivers, and those portions of the salt-bush country which are nearest to the intermediate. Here the fibre gets coarser, but as the pasturage is plentiful and nutritious, the fleeces are heavy and the staple generally sound. As we go further into the salt-bush country the fleeces become lighter and the wool harsher; but by way of compensation for this defect, the runs there are far more fattening, as well as more healthy and sound than in the intermediate district. The extreme south-western, western, and north-western portions of the colony are, from the heat and dryness of the climate, less favourable to the production of fine wool and heavy fleeces, but that even there, with careful management and a periodical introduction of fresh blood, a good wool and fair fleeces can be produced, was demonstrated at the Exhibition in 1869. Some of the disparagement under which wool from this district has suffered, is to be ascribed less to the climate than to the inferiority of the stock. Many of the runs there were taken up at a time when there was a great rage for this country, and when, in order to fulfil the Government conditions of the lease, it was necessary that the country should be stocked to a certain point. Anything was sent that would count as sheep, and many so sent were not worth breeding from. This inferior stock has the more readily succumbed to the deteriorating influences of the climate, but this early defect may be retrieved in course of time by patient care in culling and breeding.

Number of Sheep in the Colony.—New South Wales is at present only the fragment of its former self—the three prosperous colonies of Victoria, South Australia, and Queensland, having been carved out of its once ample domain. The last of these subdivisions was in 1861, when its northern territory constituted into the separate colony of Queensland. Taking that year as a starting point, the official returns give the following as the number of sheep in the several years, though there is good reason for believing that during the earlier years the number was underrated:

1861	...	...	...	6,119,163
1862	...	...	...	6,550,896
1863	...	...	...	7,169,926
1864	...	...	...	9,089,463
1865	...	...	...	9,650,106
1866	...	...	...	11,644,593
1867	...	...	...	15,066,377
1868	...	...	...	16,000,000
1869	...	...	...	16,848,217
1870	...	...	...	16,218,825

An observable increase is specially noticeable in the years 1866 and 1867. During these two years the seasons were good, and the cotton-famine helped to make the price of wool high. Fencing was carried on to a great extent, especially on the large runs of Riverina, and the sheep being turned out unsheltered on these enclosed runs, the country was able to carry more to the acre. Many squatters from Victoria, crowded out by the growth of population and the extension of agriculture, migrated with their flocks into the

south-western part of this colony; and many owners of cattle sold them to make way for sheep. In the two following years the seasons were unfavourable. During the last year the numbers show an actual decrease of 629,392, and this is to be explained partly by the losses sustained during the severe drought which took place during the latter part of 1868 and the beginning of 1869, and partly by the very large consumption of sheep by the meat-preserving companies. The low price of wool having greatly diminished the profits of sheep-farming, the culling of flocks has proceeded much more vigorously than before. There is no disposition to increase numbers, to take up new runs, or to overstock old runs. The tendency is all the other way, and the inferior stock has been sent remorselessly to the pots. The operation is a wholesome one, and though the diminished number of sheep appears at first sight to indicate a retrograde movement, it is not so in reality. The inspectors of sheep estimated that the losses from drought were a million; but this must be an under-estimate, considering that we have to account for the annual increase on a total of 15,000,000 sheep.

Stud Sheep.—Sheep from the best German, French, and American flocks have from time to time been introduced into the colony and interbred with the Australian merino, and some remarkably fine sheep have been thereby produced; but the conviction is now growing that Australia has little or nothing to gain by encouraging further importations of this kind, for not only is there natural deterioration due to the climate, which requires to be made good by the perpetual infusion of fresh blood, but, on the contrary, there is an improvement. Nothing that is imported surpasses or even equals in its specialities the best specimens of the Australian merino. By this last term is understood the produce of the imported merino, carefully bred in the most favourable districts of Australia, and guarded from any injurious intermixture with imported blood. The full and special effect of the climate has been thereby obtained at its maximum, so far as the time that has elapsed has allowed. To intermix this special Australian strain with importations is only to undo the good effect of the Australian climate, *i. e.*, better result is to be obtained by careful culling, and by close adherence to the best Australian breed. Under this conviction, the importations from Europe have of late considerably fallen-off. New South Wales, however, has drawn very largely on the stud-flocks of Victoria, and would have done so still more but for the unfortunate prevalence of scab in that colony. The quarantine regulations prohibit sheep from crossing the Murray to the northwards; so that, instead of a short journey from Victoria to the runs of Riverina, sheep have to be sent down to Melbourne, round by sea to Sydney, to perform quarantine and undergo ablutions in our coast districts, and then make a land journey up the country. Previous to 1864 no record was kept of the importations of stud sheep. Since that time about 3,500 have been introduced from Victoria, about one-half of which were ewes, and 500 from Tasmania, New Zealand, America, England, France, and Germany. Now, that the importance of developing the Australian merino is distinctly recognized, the formation of stud-flocks is becoming more a matter of concern, and for those who have the requisite qualifications, the employment is likely to be one of considerable profit, as for many years there must be a large demand for stud sheep before Australian flocks generally are brought up to their proper standard, and full justice is done to the virtues of the climate. The finest stud-sheep in this colony are to be obtained at Mudgee—a district where art and nature have combined to produce a favourable result, and where the Messrs. Cox and Mr. N. P. Bayley have especially distinguished themselves. The climate is temperate, the soil moderately fertile, the grasses nutritious without being too rich, and some of the settlers there have had the good sense and the good fortune to pay unremitting attention to quality, and to follow out perseveringly sound rules of breeding. Over how large a portion of the colony what may be called "Mudgee results" are obtainable is at present undetermined; but there seems good reason to believe that equal skill and attention might produce equal results in the greater part of the belt on the west of the table-land. Breeders favourably situated are now being stirred up to emulate the fame of Mudgee, and from this generous competition the best results may be anticipated. Repeated attempts have been made of late years to try and combine the two requisites of

large carcase and fine wool in the same animal, and for this purpose merino ewes have been crossed with Leicester and Southdown rams; but the result has been uniformly a failure. The stock of the second generation has been comparatively worthless, and the effect of the cross has simply been to spoil the merino breed without any adequately compensating advantages. The practice is now nearly abandoned, and breeding for wool and breeding for carcase are regarded as separate undertakings. If in this colony the demand for the meat-preserving establishments should make it pay to produce large-framed sheep, then it would be better exclusively to cultivate the large breeds in those parts of the colony where the climate and pasture are suitable for them. But at present it seems very doubtful whether (except perhaps for the supply of lambs) there will be any need to bestow special attention on large sheep, as the merinos will probably make up in number what they lack in size. There is still a very large proportion of the colony unstocked or only half-stocked, and the annual increase from the full number of sheep which the colony can maintain will yield an immense annual cast for slaughter.

Improvement in Flocks.—Nothing has done so much to stimulate improvement as the apparently disastrous fall in the price of wool. With a high and rising market, wool-growers were greedy of quantity. The effect of the glut has been to show that coarse and inferior wool can be produced in quantity in other parts of the world, and at least as cheaply as in Australia; and that low-class wool is the first to feel the falling price, and feels it the heaviest. A very general effort therefore is now being made at the production of superior wool, and though no amount of energy can undo in one season the errors of faulty breeding, or the neglect of a series of years, still such earnest attention is now being given to the careful selection of stud-rams, to the classification of ewes, and to the culling of flocks, that every year may be expected to show perceptible improvement. The fencing of runs is also indirectly tending to the improvement of the stock; and abundant experience has shown that when sheep are turned loose to graze in paddocks of moderate size, they not only get fatter, but throw finer fleeces than when they are driven by shepherds, and constantly rounded-up by dogs. Now, that the country is pretty well freed from the native dog, it is no longer necessary to shepherd the flocks by day, or yard them at night.

Getting up the clip.—During the prevalence of the gold-mania, when rural labour was scarce and dear, and when very few stations had been much improved, most of the wool was shorn in the grease; but repeated intimations from the London brokers that the get-up of the wool was all-important as regarded price, gradually led the more enterprising settlers to fit-up apparatus for washing the wool on the sheep's back; and the use of hot-water has also become pretty general. During the past few years very considerable sums have been expended in tanks, spouts, pumps, and other machinery and appliances. In some instances the hot-water process has been carried to an extreme—and money has been spent which has not only not been returned, but which has even injured the sale of the wool. Dry seasons have sometimes left stations short of water, and so neutralized all mechanical appliances; and on some thinly grassed and dusty runs it has been found difficult to keep the wool clean, though the washing process may have been satisfactory. Experience will show what are the profitable limits to the attempt to clean the wool on the sheep; but the satisfactory point is, that wool-growers generally are keenly alive to the importance of the question, and that as a rule there is now no want of enterprise to carry out what may seem to be the wisest policy.

Combing or clothing.—There has been much discussion as to whether the wool-growers of this colony should aim at a combing or a clothing wool, and the former has undoubtedly been the ideal towards which the squatters have striven. But the conviction seems now growing, that it is impossible for this colony to compete successfully with Victoria and Tasmania for the production of a superior combing wool. At the same time, although unable to take the highest prize, New South Wales has a fair proportion of territory within which a good combing wool is producible; but there is always a large proportion of country, and especially that known as the salt bush plains, within which it is certainly difficult to produce this description. It is fighting against nature; and the opinion, though by no means received, is gaining ground that it

would be more profitable to strive after a good clothing than to achieve only an inferior combing wool; on this point further investigations are needed. The climate of each district requires to be separately studied in order to determine what description of wool is best adapted to it, and hitherto sufficient attention has not been given to the matter. Squatters have been too content to get good rams and to grow wool, and on no very definite plan, and the consequence has been a good deal of produce of a rather mongrel type, and not exactly either one thing or the other. Increasing attention, however, is now being bestowed to these points, and we are progressing towards a state in which our producers will seek to co-operate more intelligently with the forces of nature, and in which the produce will be of a more definite character and of superior quality.

Coarse-wooled Sheep.—Of these there are not very many in the colony, and they are principally confined to the coast districts, where they are kept for breeding lambs for the Sydney market. They consist chiefly of Leicesters and Southdowns, with a few Cotswolds and Cheviots; the latter, however, being principally in the New England district. The Leicester appears to be the favourite breed for fattening lambs, the ewes being excellent mothers; but a good many lambs are bred from Southdowns. For lamb-breeding purposes the coarse-wooled sheep would pay better than the merinos in the coast districts, more especially if they are allowed to run at large in paddocks, but they do not thrive if knocked about by shepherds and by dogs. A flock of full-grown, pure-bred, Leicesters will shear from 5 lbs. to 7 lbs. of washed wool per head, which will sell at from 10d. to 1s. a lb., and lambs from three to four months old will cut from 3 lbs. to 4 lbs. of washed wool. The wethers of this breed, when three years old, have been found to kill at from 160 lbs. to 200 lbs. each. The principal breeders of Leicesters are Messrs. Reynolds, Doyle, Christian, and Green, in the Northern Districts; and Messrs. Massy and Gibson in the Southern. Of Southdowns the principal owners are His Excellency the Governor, and Messrs. Dangar, Loder, and Dight, in the Northern Districts. It is estimated that there are not more than 60,000 coarse-wooled sheep in the Colony, the number being made up as follows:—

Pure Leicesters and Cotswolds	... ..	5,000
Well-bred do.	... ..	10,000
Middling and inferior do.	... ..	25,000
Pure Southdowns	... ..	2,500
Well-bred do.	... ..	5,000
Middling and inferior do.	... ..	12,500
Total	... ..	60,000

The supply of fat lambs in Sydney is not superabundant, and there is plenty of room for better provision. For manuring land easily and cheaply by keepidg sheep to eat off green crops, the coarse-wooled stock is better adapted than the merino, and among the small farmers in the coast districts there will probably be a small but steady increase in the number of large-bodied sheep.

Value of Annual Produce from Sheep.—According to the customs returns in the Statistical Register the value of our wool export in 1869 was £3,164,442. But these figures are not to be depended on for minute accuracy. No completely separate account is kept of the relative amount of washed and greasy wool exported, although the returns of the border traffic show that about one-half of the wool from Riverina that crossed the Murray for shipment at Melbourne was greasy. The weights of the wool, as stated in the customs entries, are often loosely calculated, nor is there any check upon the valuations. Three different custom-houses, too, were concerned in the export of our wool, as a portion goes down the Murray to South Australia, and nearly two-fifths finds its way through Victoria, for shipment at Melbourne. A small portion, too, from the runs on the northern frontier passes through Queensland to Brisbane. On the other hand a very large quantity of Queensland wool is brought down coastwise for shipment at Sydney. The customs valuation, however, may be roughly checked by another process. According to the sworn returns of owners, the number of sheep in 1869 was about 16,000,000. The weight of the fleece all round may be considered as averaging about 2½ lbs. per sheep, and the average price of the wool in Sydney may be reckoned at 1s. 2d. per lb. The gross weight of the year's clip would, on this calculation, be about 40,000,000 lbs.

THE FOOT-AND-MOUTH DISEASE.

By J. MORR, V. S., Armagh.

As the above-named disease has become prevalent in many parts of Ireland, I trust it may be considered opportune to present your readers with a brief sketch of its history, nature, causes, and symptoms. There are in gone-by days a few records which speak in language so cloudy of pustulous or eruptive diseases in cattle, &c., as to be quite indefinite and unintelligible; yet it is most clear and certain that some Greek zootrics describe its existence among the herds and flocks of their country in the early part of the sixteenth century; but since that period, and specially coincident with the growth or cultivation of veterinary science in different countries—our own, for instance—do we frequently hear of its general attacks in the intervening period and present age; and for all, I believe, that can be said to the contrary, it is probable it may in the past, as now in the present age, have occasionally visited our flocks and herds. But though calling it a visitor, for the sake of convenience, we cannot, nevertheless, attribute to it a foreign origin, as we would to rinderpest, which constantly smoulders or bursts out on the Russian steppes; sometimes, as of late, overstretching its native boundary, carrying its ravages to the western parts of Europe. It may truthfully be said of aphtha to be as often an occasional visitor of Great Britain as that of any other country, leaving us in most cases quite unable to say with any credible amount of certainty whence it came, how it goes or spreads; notwithstanding, though we have been favoured with much showing of its contagious properties, its conditions of existence and propagation in the majority of instances can only be attributed to spontaneous generation, epizootic, and to unknown causes. Doubtless, there still exists a great diversity of opinion as to its contagious or non-contagious properties, even among many eminent veterinarians; not only those employed by governments to report on its contagious or non-contagious nature, but also by others who have had ample opportunities afforded them in their ordinary professional capacities of studying its character. One thing (remarkable enough), that though it is a disease peculiarly of an eruptive nature, all attempts to communicate it by direct inoculation to another sound animal of the same species have failed. Yet we occasionally hear of people and other animals contracting the disease by the use of the milk of infected cows. Inoculation in these cases can only take place per the mucous membrane of the mouth or digestive canal. But a circumstance I may here mention, that may go some length in explaining the already mentioned division of opinion with this and some other epizootics, is that these morbid forces or agents are induced at birth with complete vigour, at which period we may be able, seemingly, to note many striking instances of infection and contagion; but as their attacks multiply they gradually get benign, which is attributed to the expenditure of their forces, and with foot-and-mouth disease, in proportion to its decline of vigour, leaves us to discover but few or no traces of its contagiousness. Again, in looking at the placards of contagious diseases we cannot but infer from them that the disease is a most infectious one; and to preserve cattle in the shade of immunity it is necessary to bury the carcases of those dying from the disease far under ground, and to have their bones and flesh well calcined; otherwise the plague, like the phenix, will rise from its ashes, take wings, fly to and fro, discharging its darts right and left, and lastly, being only brought to bay by an armed cordon of police, be quietly consigned with its victims to its last resting-place, being chained down by a heavy load of clay till again called into being by some evil influence or medium. It is the duty of every loyal subject to aid in supporting sanitary measures that are productive of good to the country; but it is equally the privilege of the writer to explode ignorant notions or conclusions drawn from incorrect premises. It has never yet been shown satisfactorily that the disease is infectious, or that by experiment it could readily, in the form of gas, be conveyed to another animal; finally, it resolves itself into this, that at most it can only do so by an

immediate connection with the spring of infection. Let any one consult some of the most enlightened veterinarians in the world (the French); they will inform you that it is not a disease, like rinderpest, that can by a sanitary police be stamped out, but one calling for their non-interference, and bidding defiance to their efforts of control. Certainly, if a district or country were to be proclaimed as an infected one, and put, as it were, under martial law, all cattle trading and exporting of them stopped, such rigorous measures would not only be disastrous, but quite uncalled for, as they could not have the desired effect of arresting the disease; for, just as it acts independently of typographical and the known atmospherical causes which exercise an influence on epidemics, so will it act in opposition to the present repressive measure in force. It is beyond all contradiction that the causes which give birth, feed and multiply its existence, must be closely investigated, brought forth from obscurity, before any mode of action could with reason and intelligence be brought to bear on its extirpation. In proceeding to describe the symptoms of this eruptive or exanthematous disease, we usually may note four well-marked periods or stages. First period: Symptoms of general disturbance or febrile excitement; the animal is dull, hangs his head, off his feed, or if he eats, it is just as if he had parted with his teeth and taste; extends his neck, pokes the muzzle out, rests the head on the manger or trough; the mouth is hot, dry, and injected; grinds the teeth, twitches the lips, the skin is hot, slight tremours with muscular contractions. In a milk cow the udder hot, with suppression of milk, the breath in some cases eas a fetid odour, back arched, feet hot and tender, with lameness; keeps lying, and feels disinclined to walk; but an allowance must be made, as we do not observe these symptoms with an equal intensity in all animals. The intensity of the malady, and the place it selects to make its grand attack, has a leading influence which can only be one of the three following: the mouth, feet, and mammae. If one of these organs is severely attacked, the other two, in the inverse ratio, are but slightly implicated. The duration of this period is from one to two days. The same train of symptoms may be observed in sheep; in the pig slightly different: he lies and gives out a pained, dull grunt. Second period is ushered in by an abatement or complete moderation of the previous phenomena, with the appearance of vesicular eruptions on the muzzle, inside of lips, gums, side of mouth, on the surface of the tongue, rarely on the roof of the mouth. When the vesicle is solitary it is about the size of a small pea, and where the outer skin is fine it has a regular circular outline; but on the muzzle, and where the epidermis is thick, their size and outline vary; they contain a serous fluid which gradually turns opaque; when let out it is of a stringy and sticky nature. When these are thickly studded on any surface they coalesce, and are said to be confluent, in which case we have large bladders or blotches formed. In all cases the surface beneath the outer pellicle is red and raw-looking. The surface of the tongue, owing to its thick outer coat, presents a bosselated aspect. When the disease has been partially severe in the mouth the vesicles are very plentiful, and about to burst, a happy change of health and rapid recovery take place, but not so with the feet or udder, if severely affected; the symptoms are aggravated, and restoration to their functions more tedious; the feet are swollen, with an eruption between the digits in the space in front, and sometimes around the top of the nails, also behind, extending upwards to the fetlock. The tissue between the hoofs bulges out, is of a bleached colour, and very painful when touched. In some cases the teats are swollen, and if much diseased will not admit of the milk being drawn. In the third period the vesicles rupture and exhibit raw surfaces, which secrete a sanious-like fluid, the cuticular covering peels off in a large slough, as if steeped in boiling water. The patient constantly munches. When the nose has been affected,

she keeps touching it with the tip of her tongue. A rusty, frothy saliva flows from the mouth, and commissure of the lips. In bad cases, when the ulcers are large, deep with ragged edges, they cicatrize tardily and unwillingly; but in ordinary cases they readily heal. The feet, generally speaking, are the organs that suffer most, and are longest in recovering; the dermic covering between the hoofs sloughs out, exposing an irritable raw, and cracked-like surface; lameness increases. Frequently the sole and a portion of the horn is detached; in some instances the whole hoof is cast; but in benign cases the parts remain intact, gradually heal, and lameness disappears. There are exceptional cases, where not only the hoofs, but the soft tissue and bones, have sloughed off. The last stage is the healing of the ulcerated surfaces, which is effected by the sores getting covered over with a scale, which dries and falls off in scales. Foot-and-mouth disease is rarely fatal, from the fact

that none of the internal organs are implicated by the eruption; except in some rare cases, when the constitutional disturbance is very intense, causing a great amount of functional derangement in them, which, if not promptly attended to, may result fatally. In ordinary or benign cases without any complication, little treatment is required: give light food easy to be masticated, drinks acidulated with a little nitric or acetic acid; when the mouth gets raw, dress it with a lotion composed of one pint of vinegar and two ounces of acetic acid, or in place of the acid dissolve in it one and a half ounces of alum; keep the feet dry and clear of dirt; if the slough is tardy in coming away, apply Venice turpentine to loosen it; when accomplished, dress with a weak solution of chloride of lime or carbolic acid, remove detached horn, and cover with Archangel tar; in very complicated cases have recourse to professional advice.—*Irish Farmers' Gazette.*

THE FOOT-AND-MOUTH DISEASE IN AMERICA.

The following report on the disease as it now prevails in the State of New York, was recently presented to the United States Board of Health by the Sanitary Inspector, Mr. Morris: I have the honour to present the following information concerning the disease now prevalent among cattle and dairy herds in this state, called foot-and-mouth disease—technically Epizootic Aphtha. In tracing the source of this disease—new to this country—it has been satisfactorily demonstrated that it was recently imported from Europe by way of Canada. So contagious is its character, that but a short time is required to communicate it to our herds and markets by means of railway transportation; and the fact is now well established, that the cars themselves, as well as the yards in which diseased cattle have been but a short time, are means of propagating the infection to healthy stock. The disease is by no means fatal in its character, but rapidly depreciates the value of such stock both for market and dairy purposes. The animal loses flesh rapidly, and the milk reduces in quantity. In the last Annual Report for 1869 of the Medical officer of the Privy Council in England, containing report dated Nov. 30, 1869, by Dr. Thome, on the "Effects produced in the human subject by consumption of milk from cows having foot-and-mouth disease," there appear the following conclusions: "A disease appears to have been produced in the human subject when the milk of cows suffering from foot-and-mouth disease has been freely used without being boiled. There is no evidence to show whether this affection is of a specific nature or not, but it seems to consist of derangement of the alimentary canal, accompanied by febrile disturbance, the presence of vesicles on the mucous membrane of the mouth and tongue, which having ruptured, leave superficial ulcerations, and at times an herpetic eruption about the exterior of the lips." In pursuing his inquiries as to what unhealthy effects are produced in the human subject by eating the flesh of animals which have been suffering from this disease, he says: "The disease is so early fatal that in country districts farmers and dairymen are not in the habit of killing the animals when they are attacked; but, if a few days after a butcher has bought one or more he finds them ailing, he invariably kills them at once and exposes the flesh for sale, the immediate slaughter of the animal being the invariable rule, on account of the rapid emaciation with which the epizootic is accompanied." He was also informed by Professor Simonds, that in the London cattle market, which is held twice a-week, there have been diseased animals off and on for the last six months, and during the last two months the number affected has reached an average of 10 to 15 per cent. These are all killed and eaten. Foreign cattle also which are imported, and which are found to be suffering from the disease, must be slaughtered within ten days of their landing; but the butchers, as a rule, have them killed immediately at the wharves, in order to avoid suffering any loss from the emaciation which would otherwise ensue. Hence, a considerable number of animals are killed at the height of the disease, and their flesh is often sold as first-class meat. In no instance have I heard that any disease in the human subject has been attributed to the use of such flesh. The State Cattle Commission, in view of these facts, have been untiring in their efforts to arrest the further spread

of this disease throughout the State; and adjoining States, through their Boards of Agriculture, have been and are taking every precaution to the same end, and so far as their powers extend. In this State the instructions to the Assistant-Commissioners have been explicit, from the first knowledge of the presence of this disease, both as to placing in quarantine whatever animals may be found sick, and at the same time to prevent the sending of milk to the city from the dairies where the cows are so affected, and as to liberal use of disinfectants in cars and yards. These precautions it was thought might prevent the further spread of this disease among cattle, and at the same time protect the public health in the use of unwholesome milk. This has been done rigidly in every instance, as I am informed, by the Assistant-Commissioners, by Dr. Gurnsey in Dutchess County, and by Mr. Dayton in Queen's County. In Dutchess County the Doctor informs me he has already quarantined over 10,000 head of cattle, a large proportion of which were dairy cows. At Albany, being a central point for the distribution of stock eastward, the Assistant-Commissioner, Dr. Stimson, has endeavoured to prevent its further spread by great care in watching and quarantining whatever could be discovered passing through it. In our own cattle-yards this disease has been discovered among beef cattle and cows on sale for dairy purposes. The rule has been to allow animals to be killed unless they were badly diseased, as there is as yet no evidence which proves that their flesh is unhealthy as human food; but cows or other cattle are not allowed to leave quarantine to communicate the disease to other herds until they have entirely recovered. Advices received this day inform me that the disease is subsiding in Dutchess County. No milk is allowed to be sent from dairy cows suffering with the disease for thirty days, affording ample time for complete recovery. The symptoms of this disease, as given by Professor Low of Cornell University, are so obvious, that any person may be able to recognise it at once. An infected animal appears dull and listless for a day or two, with loss of appetite, and in cows, a falling-off in the quantity of milk; hot, dry mouth; grinding of teeth and drooling; tenderness of the udder, teats, and feet, producing a lameness in the walk; frequent shaking of the feet as if to get rid of some irritating matter; on the second or third day abundant frothing at the mouth, smacking of lips and tongue-lameness, and the formation of blisters of various sizes up to an inch or more across on the mouth, udder, and teats, and between the hoofs. In one or two days more these blisters burst, leaving raw sores and shreds of loose skin inside the upper lip, on the roof of the mouth, the tongue, on the teats, and between the hoofs. These discharge an irritating fluid for some time, then seal over and heal up, in favourable cases, in from ten to fifteen days. The sick beasts should be well nourished with soft mashes and gruels. Cooling, but not purgative medicines should be given, and the sores washed with some mild carbolic acid preparation, or with a weak solution of sulphate of zinc (white vitriol). The discharges from the mouth, sores and scabs from the udder, teats, and feet, are the sources of infection, therefore the stable, yards, and fences, where sick cattle are kept, should be constantly cleansed and disinfected with heavy oil of coal tar and lime-washing. MOREAU MORRIS, City Sanitary Insp. and State Cattle Com.

POOR-LAW CONFERENCES.

A detailed report of the recent Conference on the Poor-Law at Reading has been published. The discussion is prefaced with the following remarks: The office of Chairman of a Board of Guardians is, and has ever since the passing of the present poor-law been one of much responsibility and importance. The chairmen are usually persons of considerable position in the world—not infrequently of high rank, generally of much thought and valuable experience. Yet, strange to say, they have never till lately been in the habit of meeting together to exchange ideas and experiences, or to consult as to what measures would be valuable, not only as saving the rates of one or other individual union, but as promoting the national good. Farmers, ironmasters—all other trades have their meetings, where they exchange ideas and information with advantage to all, and discuss with each other the probable effects of any alteration of the law which may affect their interests; and by offering to the Legislature the collective opinions of large bodies, they carry an important and just weight. Even the medical officers, the clerks, and the relieving officers of unions have their associations, and unite to promote their common welfare and exchange ideas. Only the chairmen and the guardians have been content to manage each their own unions in their own way, without consultation or united action for the common good of the nation. If a new poor-law should, as is probable, be introduced, although, doubtless, many individual chairmen of experience would be consulted, yet the opinions of the great body of chairmen would have no weight, as it would be impracticable to collect and analyse the opinions of 655 men who have not consulted together. This want, we are happy to say, seems likely to be soon supplied. In the year 1866-7 Mr. Baker, of Gloucester, invited the chairmen of several Boards of Guardians in Gloucestershire, Worcestershire, and Herefordshire, to spend a day or two at his house, in order that they might make each other's acquaintance, and talk over matters of interest both to themselves and the general body of ratepayers connected with the administration of the poor-laws. In May, 1868, at the invitation of Mr. Baker, a meeting of a large number of the chairmen of the counties of Gloucester, Hereford, and Worcester took place at Malvern. In May, 1869, it was repeated, under the presidency of Sir H. Lambert, and they determined to invite the chairmen of Oxon, Salop, Stafford, and Warwick to join them next year. In May, 1870, a number of the chairmen of those seven counties met at Malvern, under the presidency of Sir Baldwin Leighton, Bart., and this year under that of Sir H. Lambert. A small meeting took place in June, 1870, in London between a few of the Malvern Conference, some chairmen of London unions, and some members of Lord Lichfield's valuable Committee for the Organization of Charity. On July 23rd, 1870, a conference took place at Basingstoke of the chairmen of the unions of Hants and Berks, and they agreed to meet again this year, and to invite those of Surrey, Kent, and Sussex to join them. That meeting was held on Tuesday in the Town-hall, Reading, and was numerously attended, above 120 guardians being present.

Mr. G. SCLATER-BOTH, M.P., who formerly held the post of Under Secretary to the Poor-law Board, was unanimously voted to the chair, and in the course of an introductory address said that he had had some conversation with the President of the Poor-law Board in the House of Commons, who expressed a great desire to see these conferences established and continued throughout the country. So far from feeling any jealousy of the scheme of those meetings, it seemed to be his view that those conferences could have no other than a beneficial effect in strengthening and supporting the act of the central authority. The fact of gentlemen meeting in conference together showed in itself that uniformity of regulation is a thing desired by the administrators of the Poor Law. And what is the object of the central authority but to secure that uniformity? There is a difference between the regulations which the Poor-law Board may carry into force, and a central authority which interfered with the mission of the guardians themselves. He might mention what he thought of very great importance, that the Poor-law Board as such will be merged in a larger and greater establishment, which will be entitled a local government board. It will be an advantage to the Boards of Guardians to have a central authority which shall

have these duties, and will prevent that niggling interference which has been complained of in some parts of the country.

Mr. BAKER drew the attention of the meeting to the fact that, large and influential as that meeting was, it was only one of two, and he hoped would soon be only one of four or five, conferences meeting in different parts of England, and that it would be desirable to have a central conference, where a few guardians from each district might meet and bring together their opinions. This central conference, if the Reading meeting approved, would be held in London under the auspices of the Social Science Association.

Mr. EDWIN PEARLS, secretary to the Social Science Association, proposed the 15th of Nov. as the day of meeting at the rooms of the association, and this was agreed to.

This meeting of a few of the Malvern and a few of the Reading conferences, with the chairmen and vice-chairmen of the London Unions, will bring together the opinions of rather more than one third of the unions of England and Wales.

THE LAND IN CROP.

ABSTRACT OF AGRICULTURAL RETURNS OF GREAT BRITAIN FOR 1871.

	EXTENT OF LAND IN GREAT BRITAIN UNDER				
	Wheat.	Barley.	Oats.	Potatoes.	Hops.
	Acres.	Acres.	Acres.	Acres.	Acres.
1869	3,688,357	2,251,180	2,782,720	553,211	61,792
1870	3,500,543	2,371,739	2,763,300	587,661	60,594
1871	3,575,961	2,387,719	2,719,308	628,287	60,028
	Increase, +.		Decrease, -.		
1871 over 1870	+75,418 or 2.2 per cent.	+15,980 or 0.7 per cent.	-43,992 or 1.6 per cent.	+40,626 or 6.9 per cent.	-566 or 0.9 per cent.
1871 over 1869	-112,361 or 3.0 per cent.	+136,239 or 6.1 per cent.	-63,412 or 2.3 per cent.	+43,076 or 7.4 per cent.	-1,764 or 2.9 per cent.

LIVE STOCK IN GREAT BRITAIN ON JUNE 25.

	Cattle.	Sheep.	Pigs.
	1869	5,313,473	29,538,141
1870	5,403,317	28,397,589	2,171,138
1871	5,339,332	27,132,898	2,499,889
	Increase, +.		Decrease, -.
1871 over 1870	-63,985 or 1.2 per cent.	-1,264,691 or 4.5 per cent.	+328,751 or 15.1 per cent.
1871 over 1869	+25,859 or 0.5 per cent.	-2,405,213 or 8.1 per cent.	+569,437 or 29.5 per cent.

Statistical Department, Board of Trade, Sept. 15, 1871.

FRENCH AGRICULTURE.—In the last number of the *Journal d'Agriculture Pratique*, M. RONNÉ, the well-known engineer, proposes the institution of a Company for purchasing stock, implements, seed, and manure for the French peasants, the Company to receive payment over a long term of years. The proposed organisation devised for the Company is not to be dependent upon the solvency of the farmer in a distant province, of whose position and respectability it can know nothing, but is to have the guarantee of the entire landed property and power of taxation of both the commune and the department in which the farmer resides. The farmer will make his application to the commune, and if approved by that body they will forward it to the department, who, before giving it a second guarantee, will of course scrutinize the solvency both of the farmer and of the commune. The organisation of the Company, both in Paris, in this country, and elsewhere, would, it is said, enable them to purchase and distribute foreign stock and implements in the cheapest possible manner. The working of the institution will be very similar to that of the companies in this country which advance money for the improvement of farming property. M. DROUYN DE L'HUYS, president of the Society which answers to the Royal Agricultural Society in this country, has promised his assistance.

STOCK SALES.

THE MOOR BARNS SALE.—Harvest operations told much against Mr. Baker's ram sale, not more than fifty or sixty gentlemen being present. The rams, consequently, sold at low figures, considering their size and quality, and six or eight were passed. Three shearlings were let at £9 9s. and 13 guineas respectively, to Messrs. Wykes, T. Lowe, and Vergette. The Hero, thrice highly commended at the R.A.S., and winner of nine prizes, went to Mr. Jowitt, at 20 guineas; two shearlings made 18 guineas each to Messrs. Spencer and Lucas; two were bought for Lord Polworth at 10 guineas each; two by Mr. Watson, of Gilson, at 17 guineas and 9 guineas each; and four by Mr. Jermin, of South Wales. The thirty sold and let averaged £11 11s. 9d. During the sale of the rams, there were a few more arrivals of customers, and quite a different trade sprung up for the ewes; the average, we believe, being quite unprecedented for a draft lot, viz., £5 15s. 6d. for the sixty-four. Mr. Walker took the first pen of old ones at 137s. 6d.; the second went to Miss Rose, at 95s.; lot 3, to Lord Polworth, at 100s.; lots 4 and 8, to Mr. S. Ashton, at 115s. and 97s. 6d.; lots 5, 7, 10, and 12 to Mr. Jowitt, at 140s., 105s., 125s., and 125s.; lots 6, 9, and 13 to Mr. Woodcock, at 100s., 112s. 6d., and 140s. This extraordinary competition was no doubt due to the high position taken by Mr. Baker's ewes at the Royal, the Bath and West of England, the Leicester, and other important shows, and to the acknowledged general excellence of his ewe flock, which we believe, as a whole, is unsurpassed. A splendid two shear ram, winner at Rugby and Malvern, was sold privately to Mr. Davidson, at 50 guineas, to be delivered at the end of the season. Mr. Clarke, of the firm of Lythall and Clarke, Birmingham, conducted the sale.

THE SHREWSBURY SALE.—Messrs. Lythall and Clarke, of Birmingham, held their third sale in the Smithfield, Shrewsbury. There was only a small attendance of buyers, owing to the harvest, but anything of really good quality sold remarkably well. The first lot of rams (Mr. T. S. Meire's four grass-fed shearlings) made £8 2s. 9d. each, which, as they were only in store condition, must be considered a fair average. Mr. Matthews's twenty ranged from 4½ guineas to 9 guineas, the latter price being given by Mr. Lythall, of Radford, for the four-shear ram, rejected. Many of the breeders present thought him too fat to be of use, or he would certainly have made considerably more. There being no demand for Messrs. Morris's rams, they were withdrawn. Mr. Yates's made from 6½ guineas to 7 guineas; Lord Willoughby de Broke's shearlings from 5 to 7 guineas; one good two-shear making 14½ guineas. Mr. H. J. Sheldon's, which came next, were sheep of remarkably good quality, with good heads, but rather small. The nine made an average of nearly £8 8s., one fetching £11 11s., and another £12 12s. Mr. W.O. Foster sent ten shearlings as good as any one could wish to turn out. Mr. Peake bought the first at 2½ guineas; Mr. Rogers the next, at 15 guineas; the third was let to Mr. Jarvis, of Upton Magna, at 12 guineas; Mr. Trevor gave 18 guineas for No. 4; Mr. Bright 20 guineas for No. 8. The rest made from 11 guineas to 7 guineas; the average for the ten being £15 4s. 6d. Mr. Tauner's fetched from 6 guineas to 7 guineas, Mr. Picken's 5 guineas to 5½ guineas, and Mr. Ashton's 4½ guineas to 7 guineas. The ewes sold much more freely, making from 55s. to 110s. each.

GREAT LAMB SALE AT HAWICK AUCTION MART.—A. Oliver and Son have held their second great lamb sale of this season last month. There was a numerous attendance on both days of parties from all parts of the country. There were presented the first day 3,200 three-parts bred, 12,800 half bred, 660 greyfaced lambs, and about 300 young sheep; on second day 8,100 Cheviot wedder lambs, 6,700 Cheviot ewe, and 940 greyfaced—in all above 32,500, being the largest auction of sheep ever held in this or any other country, and by far the greatest number sold by a single person on one occasion. The biddings on both days were most spirited, and the prices realised exceeded the most sanguine expectations. Top three-parts bred lambs sold from 31s. to 36s. 6d., second 23s. 6d. to 34s., half bred ewe lambs 30s. to 36s. 6d., the latter price being got for the Westhouses lot. The Gilston lot brought 36s., Stobs 36s., Dalgleish 36s. Half bred wedder lambs ran from 26s. 6d. to 35s. 9d., seconds of these 23s. to 28s., Top Cheviot wedder lambs

of the better class sold from 18s. to 21s., those of harder land from 13s. 6d. to 16s. 6d., seconds 11s. to 13s., Cheviot mid ewe lambs 15s. to 23s. 6d., the latter price being obtained for Hartwoodmyres lot. Myredykes brought 22s. 6d., Linhope 20s., Arkleton 19s. 3d., England 21s., Fainash 18s. 6d., Thorlieshope 23s., Glenkerry 20s. 6d., Blackhouse 23s. Two lots of top ewe lambs were sold: the lot from Overkirkhope brought 29s., the other (from Fainash) 26s. The greyfaced lambs sold from 21s. to 24s. 9d. One lot of three-parts bred widders and gimmers brought 52s. 9d., and several lots of Cheviot Dinmonts sold from 35s. to 38s. 9d. The rise on the prices of last year will be from 7s. to 11s. on three-parts bred, 6s. to 16s. on half bred, and 4s. to 6s. 6d. on Cheviots.

THE HALTON RAMS.—The annual show and letting of these celebrated rams took place in front of the Manorhouse, Halton Ilgate. It was feared that the company this year, in consequence of harvest operations, would have been smaller than usual, but the number of persons present was nearly, if not quite, equal to former years, there being a large attendance of gentlemen from distant parts, many of whom are known in their own localities as sheep breeders and graziers of no small repute. There were about 200 sheep penned, and from the opinions of gentlemen well qualified to judge, the Halton rams never appeared to better advantage than this year. An excellent dinner, supplied from the White Hart Hotel, Spilsby, was provided for the numerous company. Mr. John Henry Vessey presided, in the absence of his father, who was unable to be present owing to impaired health; and Mr. Robert Martin occupied the vice-chair.

SALE OF RAMS AT FORRES.—The Forres and Northern Fat Cattle Club held their third annual sale of Leicester and other rams in the Agricultural Hall at Forres. As a whole, the sale was more successful than was expected. It commenced at half-past two, and was finished in less than an hour, Mr. Ross, Forres, having acted as auctioneer with his accustomed activity. The following are the purchasers and priced: Pen No. 1, Mr. Harris, Earnhill.—Mr. Walker, Altyre, £9 5s.; Mr. Geddes, Orbliston, £8; Dr. Creyk, Dalvey, £8; Mr. Smith, Mill of Boyndie, £6; The Earl of Seafield, £8; Mr. Leitch, Inschellie, £8 5s.; Dr. Creyk, Dalvey, £7; Mr. Falconer, Mareassie, £7; Mr. Falconer, Mareassie, £7 10s.; Mr. Leitch, Inschellie, £9 10s.; Dr. Creyk, Dalvey, £7; Mr. M'Pherson, Kerow, £6 5s.; Mr. Collie, Elgin, £8; Mr. M'Pherson, £6; Dr. Creyk, £7; Mr. Falconer, £5 15s.; Mr. Cattell, Balnagath, £6; Mr. Munroe, Covesea, £7 10s.; Mr. Colvin, Earlsmill, £6 10s.; Mr. Brown, Linkwood, £9; two shear, Dr. Creyk, £5 10s. Pen No. II., Mr. Hunter, Dipple.—Mr. Munro, £9 5s.; Mr. Munro, £7; Mr. Collie, £6; Mr. Martine, Keam, £6 5s.; Mr. Walker, £10 15s.; Mr. Martine, £6 15s.; Mr. Brown, £8 5s.; Dr. Creyk, £6 15s.; Mr. Scott, Tearie, £5 15s.; ditto, £6 15s.; ditto, £7 5s.; Mr. Falconer, £7; Mr. M'Pherson, £6 15s.; Mr. Innes, Tomcork, £6; Mr. M'Pherson, £6 5s. Pen No. III., Mr. Bruce, Newton.—Mr. Cant, Forres, £4 10s. Pen No. IV., Mr. M'Pherson, Muirton.—Mr. George Munro, fletcher, Forres, £5 10s.; Mr. Riddell, Kildrummie, £9 5s.

THE PANTON RAMS.—The annual letting and sale of Messrs. Dudding's rams took place at Panton last month. As might be expected, the reputation of the Panton rams drew together a large gathering of ram breeders and agriculturists from various parts of the country, but we have seen a larger number present than on Tuesday. Seventy-five sheep, 69 of which were shearlings, were penned for inspection and public competition. Of this number the first eight shearlings and the six two-shear sheep were let; the remainder were sold. The sale on the whole may be considered to have been a successful one, the average being about £1 10s. more than last year: this year it was £14 6s. 6d. within a fraction. The average for the eight shearlings that were let was £17 4s., and of the six two-shears £23 18s. The highest-priced shearling sold was bought by Mr. Garfit, Seothern, for 40 guineas. This ram took the third prize at York. One was bought by Mr. Collingwood, Sixhills, for 24 guineas; another by Mr. Bramley, Fiskerton, 21 guineas; another by Mr. M'Vicar, 20 guineas; and another by Mr. Ealand, 20 guineas. Mr. Garfit also secured the premier two-shear for 35 guineas; Mr. Needham, Huttoft, bought one for 31 guineas; and Mr. Parish, Toynton, took a very fine shearling for 30 guineas. After the luncheon Mr. Calthrop, the

auctioneer, proceeded to the ring, and the business of the day was promptly proceeded with. The following are the details: Shearings.—Messrs. Paddison (Angleby) 20 guineas, Taylor Sharpe (Baumber) 11 guineas, S. P. Robinson (Huttoft) 20 guineas, Stevenson (Yorkshire) 10 guineas, Parish (Toytnton) 30 guineas, Taylor Sharpe 15 guineas, Kemp (Baumber) 15 guineas, Parkinson (Wilton) 10 guineas, H. Coates 16 guineas, T. Dudding 16 guineas, Wilson (Scawby) 14 guineas, Sowerby (Withcall) 14 guineas, Needham (Huttoft) 15 guineas, Wilson 19 guineas, Bramley (Fiskerton) 20 guineas, Coatsworth (Riby) 17 guineas, Scholey (Sotby) 15 guineas, Scorer (Barwell) 10 guineas, J. Borman (Swallow) 12 guineas, M'Vicar 10 and 20 guineas, Johnson 21 guineas, Garfit (Sothern) 40 guineas, Borman 10 guineas, Collingwood (Six-hills) 24 guineas, Ellis (Coates Grange) 15 guineas, Coatsworth 11 guineas, H. Coates 10½ guineas, Sowerby 14 guineas, Coatsworth 13½ guineas, H. Coates 14 guineas, Scarby 8½ guineas, Welch (Leake) 12 guineas, Nicholson (Grimblethorpe) 8 guineas, Welch 9½ guineas, Sowerby 12 guineas, H. Coates 8½ guineas, Sowerby 10½ guineas, Coatsworth 10 guineas, Sharpley (Calcethorpe) 10½ guineas, H. Coates 7½ guineas, W. Nicholson 10½ guineas, Kemp 17 guineas, Ealand 20 guineas, Sowerby 10½ and 9½ guineas, Borman 9½ guineas, Sowerby 7½ guineas, Collingwood 19 guineas, Cartwright 8½ guineas, Parker 12 guineas, Swallow 8½ guineas, Borman 15½ guineas, Sowerby 8½ guineas, Green 4½ guineas, Fieldsend 12 guineas, Taylor 6½ guineas, Reed 9½ guineas, W. Robson 7½ guineas, Frankish 10 guineas, Neave 6½ guineas, Hinch 6, 6, and 6 guineas, Lamb 6 guineas, Livesey 11½ guineas. Two-shear.—Messrs. Robinson 9 guineas, Davy 18 guineas, Needham 31 guineas, Robinson 23 guineas, Garfit 38 guineas, Davy 18 guineas.

THE ANNUAL SHEEP SALE AT CORK. — This popular sale came off at the Repository of Messrs. Marsh, the agricultural auctioneers. The junior member of the firm officiated, doing his part in a manner highly satisfactory, both to buyer and seller. Such gatherings, when successful, are extremely apt to call forth a lengthened introductory preamble on the part of the auctioneer—tiring those who are compelled to listen, losing valuable time and often seriously marring the success to which in every respect the sale is justly entitled. In this instance, the introductory remarks were few and to the point, Mr. Marsh, sen. giving a short speech, in the course of which he called attention to the great facility afforded by public sales of this kind to breeders in disposing of their stock when of really good quality, the inducements to breed from animals only of good blood, in the great demand for both wool and mutton, and consequent high prices of both. He did not fail to call attention to the opportunity there and then afforded for procuring specimens of all the leading breeds, Leicester, Border do., Shropshire, and Cotswold. The breed that found most favour was, beyond question, the Border Leicester, the large frame, strong bone, and heavy fleece, giving these sheep such an appearance of superiority as to completely dwarf the occupants of all the other pens. The biddings were never more spirited, and the prices realised greater for this than any other breed, indisputably showing the high position this breed of Scotch descent has taken amongst the breeders of the south of Ireland. The high prices that are now given for lambs of large size and heavy fleece have in a great measure helped to make the Border Leicester breed a general favourite; but its hardness of constitution and well-known aptitude for resisting the wet winter so peculiarly a feature of the south has been the main cause of raising it to the very high place which it has attained in the estimation of Irish breeders. A very noticeable feature amongst the stock exhibited was a pen of 15 pure Border Leicester rams bred by the Duke of Buccleuch, and imported direct for this sale by Mr. Hugh Irvine, a Scotch farmer residing near Cork, who has for over twenty-five years done more probably than any other man of his day in importing good blood from his native country to that of his adoption. In Ayrshire cattle, Clydesdale horses, and Border Leicester sheep his transactions have been most extensive, and his efforts to diffuse the blood of useful and paying stock have been highly appreciated by the farmers of this country. In this instance, however, the home-bred realised much higher prices than the direct importation, the immense size of the former being more suited to the present taste of the

Irish farmer than the neat, compact, and active Borderer, although from one of the most celebrated stocks in Scotland. In Shropshire Downs the display was unusually good, two at least of the lots being turned out in style and condition quite equal to anything to be seen at Shrewsbury, being second only to those sold by Mr. Preece in size, bone, and massiveness of frame. For this breed the demand was unusually dull, as indicated by the prices realized—indeed it may safely be asserted that in the leading lots the animals were worth double what they made, and two years ago the prices got for this breed were more than double. The recent rise in the price of wool may have something to do with this change, causing breeders to turn their attention more to the long-wools than they have been doing for some time past. The good qualities of the Border Leicesters and suitability for this climate have become better and more generally known of late years, and in consideration of the heavier clip afforded by this breed it is quite possible that on many pastures they are superseding the Shropshire Down, notwithstanding the great capability of the Shropshire for laying on flesh, and weighing well up to his apparent bulk. The following will show the range of prices: Home-bred Border Leicester ram shearlings from £8 to £13, imported Borderers from 5 guineas to 12 guineas, Shropshire Down shearing rams from £5 to £11.

MR. SINGLETON'S LEICESTERS. — Mr. Robert Boulton held the annual ram letting at Great Givendale. The day was a very favourable one, and a goodly company, for the most part ram breeders and farmers, assembled. As usual the company, as they arrived, were received by Mr. and Mr. Rd. Singleton, and were at once conducted to luncheon. This over, the interval was passed in rambling among the Shorthorns in the pastures, or in the inspection of the more famous animals in the stalls. Of these the notables were The Bobby, a magnificent bull, recently exchanged with Earl Zetland; the younger bull Gay Lad, which retains the Waterloo strain, and the prize heifer Gay Lass, the Yorkshire winner. Animals like these sufficiently attest the careful selection which is keeping the Givendale herd as famous as the Givendale flock. In the way described the time was passed till Mr. Boulton mounted his rostrum, when the company withdrew from the pens and from the Shorthorns, and surrounded the ring where shearing No. 1 had taken up position. The opening remarks of Mr. Boulton as to the splendour of the flock, which was admitted on all hands to be still nearer perfection than ever, were applauded. Then began the fights among the breeders, many having evidently fixed upon taking the same sheep. Among the ram breeders round the ring were Mr. Jefferson, of Whitehaven; Mr. Thompson, of Anlaby; Capt. Crowe, of Speeton; Mr. Stamper, of Hightfield House; Mr. Walmsey, of Rudstone; Mr. J. Key, of Musley Bank; Mr. Browne, of Holme-on-Spalding Moor; Mr. Riley, of Kipling Coates; Mr. Jordan, of Elmswell; Mr. Staveley, of Ayton; Mr. Kendall, Mr. F. C. Matthews, Mr. S. Staveley, Mr. J. H. Phillips, Mr. J. Bielby, Mr. H. Jewison, Mr. J. Buttle, Mr. W. Buttle, Mr. J. E. Dixon, and many of the leading farmers of the district. It is almost needless to remark that the sheep were offered in their natural condition as driven up from the fields. Mr. Knapton, of Kelk, led off by taking the three first sheep offered, after which the first race among the ram breeders began, Mr. Stamper and Mr. Thompson competing for No. 4, which was at last knocked down for the Anlaby flock at £15. No. 6 had especial favour from the breeders, five of whom were in the field, but at last the sheep also went to the Anlaby flock for £30 5s. Mr. S. Staveley, of Ayton, Pocklington, took No. 7 for £18 5s., and Mr. Jordan, of Eastburn, No. 8 for £15 5s. No. 12 went to the Kiplingcoates flock at £16 10s., and Mr. Staveley took No. 17 for £11, and Mr. Beal No. 18 for £12 5s. The average price of the shearings was over £9 11s. Among the takers were Mr. Knapton, Kelk; Mr. Thompson, Anlaby; Mr. Walker, Goldsborough; Mr. Staveley, Ayton; Mr. Staveley, Tibthorpe; Mr. Jordan, Elmswell; Mr. Stickney, Nuthill; Mr. Goffton, Wharram Percy; Mr. Dale, Garrowly; Mr. E. Riley, Kiplingcoates; Mr. Pickering, Bolton; Mr. Asquith, Mr. Kirk, Skirpenbeck; Mr. Beale, Sutton-on-Forest; Mr. A. Darley, Burton Field; Mr. Stilborn, Hutton; Mr. Slater, Buckthorpe; Mr. Ascongh, Grenwick; Mr. Severs, Fimber, &c. Although the shearings were admitted to have been the best lot ever shown at Givendale, the two-shear sheep were almost as successful, in some

cases going to the same flocks as they did as shearlings. The notable sheep were No. 10, to Mr. Megginson, of Towthorpe, for £10; No. 35 to Mr. Brown, for £13, No. 39 to Mr. Walmesley for £20, and No. 40 to Mr. Jewison, of Raisethorpe, for £10. The average was about 9 guineas. The takers included Mr. Kirk, Mr. Megginson, Mr. Brown, Mr. J. H. Phillips, Mr. Barker, Millington; Mr. Darley, Burton Wold; Mr. Walmesley, Mr. Jewison, &c. There was a remarkable competition for the three-shear sheep, of which No. 44 went to the Holme flock at £15 5s., No. 47 to the Raisthorpe flock at £15 15s., No. 50 to the Highfield flock at £20, No. 53 to the Ness flock at £10 5s., and No. 55 to the Holme flock at £11 10s. No. 45, however, had the honours of the day, jumps of £5 occurring in the bidding, "all among the breeders." Eventually a settler came from Mr. Skelton Jefferson, of Whitehaven, and for the Cumbrian flock the sheep was knocked down at £35. The average of the three-shears reached £11 15s. The takers included Mr. Midgley, of Buckthorpe; Mr. Matthews, of Millington Grange; Mr. Brown, Mr. Jefferson, Mr. Stickney, Mr. Jewison, Mr. Hotham, Buckthorpe; Mr. Stamper, Mr. Clarkson, Smiles IIall; Mr. W. Kendall, East Ness; Mr. Harrison, Newton, &c. Among the aged sheep Mr. Jewison took No. 53 for £12. The average was about £3, and the takers were Mr. Jewison, Mr. Hotham, and Mr. Horsley.

SALE OF TUPS AT MUIR OF ORD.—An extensive sale of Cheviot, Leicester, and blackfaced tups, in connection with the Northern Counties Pastoral Club show, took place on the market stance at Muir of Ord. The principal exposers of Cheviots were well-known breeders, such as Hartfield, Langwell, Inverbroom, and Crackaig. In Leicesters the exposers are famous in the North for bringing this class to the greatest perfection. Among others were Mr. Harris, Earnhill, Sir Kenneth McKenzie, of Conon, and Captain Warrant, Ryefield. Blackfaced were largely represented, and the character of the stock was never equalled at any previous sale. This class came principally from Mr. Smith, Strathconan; Mr. Howieson, Dornel, Ayrshire; and Novar. All classes sold well, prices being much in advance of last year's. A complete clearance was effected in the several classes exposed. Cheviots sold at from £3 to £10 a-head, average £7 to £7 5s., and blackfaced brought prices ranging from £2 to £3 10s. each.

BISCATHORPE RAM SALE.—The annual letting of the Biscathorpe rams took place on the 31st Aug., when Messrs. Briggs submitted for competition the flock of Mr. Kirkham. The company was large and influential. Forty shearlings, thirty-four two-shears, and twenty-six aged sheep were all let, averaging as follows: Shearlings £15 14s. 3d., two-shears £16 3s. 9d., aged sheep £13 15s. Amongst the highest prices given were—for No. 7, £47, by Mr. Wodehouse, Welbourne; No. 48, £50, and No. 53, £53, by Mr. Clarke, Scopwick; No. 65, £31, by Mr. Sharpley, Boswell; No. 81, £50, by Mr. J. J. Clarke, Welton-le-Wold.

THE HUTTOFT RAMS.—Mr. W. L. Mason (Mason and Son, Louth) conducted the letting for the year of this flock, the property of Mr. Robinson. A numerous and spirited bidding party was present. Shearlings: Lot 1 made £9, and lot 2, £10, J. Heanley, Buekland; lot 3, £7 10s., J. Higgins, jun., Claxby; lot 4, £19 10s., and lot 5, £15 10s., Mr. Williams, Hatcliffe; lot 6, £40, T. Heanley, Croft; lot 7, £11 10s., W. D. Bradley, Alford; lot 8, £15 10s., J. Young, Aby; lot 9, £12 10s., J. Nelson, Wyham; lot 10, £15, G. Budibert, Well; lot 11, £18, G. Parker; lot 12, £17 10s., J. Nelson; lot 29, £21, G. M. Merrikin; lot 30, £15, S. Grant. Two-shears: Lot 31, £16, Mr. Wagstaff, Peterborough; lot 32, £17 10s., Mr. Williams, Ashby; lot 33, £12, T. Mackinder, Greenfield; lot 34, £11 10s., Thos. Bond, North Thoresby; lot 35, £20, Mr. Alenby, South Thoresby; lot 36, £12, Thos. Bond; lot 37, £11, S. Grant; lot 38, £11 10s., S. J. Wellitt; lot 39, £10, Mr. Oliver, Halington. Three-shear and aged: Lot 40, £12, G. Holden; lot 41, £15, W. Wells, Withern; lot 42, £12, Mr. Parker, Ludborough; lot 43, £12, Mr. Dring, Mawthorpe; lot 44, £13, J. Bourne, Louth; lot 45, £11, R. Holden; lot 46, £21, J. Nelson; lot 47, £8, and lot 48, £12, S. J. Wellitt; lot 49, £13 10s., R. Holden; lot 50, John Wright, Haugh; lot 51, £7, W. Mason, Huttoft. The average price was £13 8s.

SALE OF SHROPSHIRE SHEEP.—Mr. Henry Smith's sale of Shropshire rams and ewes was held last month at

Sutton Maddock, near Shifnal, when Messrs. Lythall and Clarke sold and let 55 rams at an average of £8 18s. 2d., and 80 ewes at £4 16s. 6d. each. The highest priced ram made 25 guineas, and the best pen of ewes £9 10s. per head. The ewes were a remarkably good lot. Sir John Morris presided at the luncheon, and the principal purchasers were Lord Boyne, T. Jowitt, Esq., of Hereford; J. W. Gardom, Esq., of Butterton Park; Messrs. Wadlow, Stanley, Landor, Nock, Davis, E. Lythall, Adney, Siddons (from the Isle of Man), Roden, Blewitt, Yates, Fletcher, and Moss.

THE OWERSBY RAMS.—Year after year the gathering at Owersby has increased from its commencement, when perhaps less than a dozen rams were on offer, till the year of the lamented death of Mr. John Davy seemed to create a void, which it undoubtedly did in the social circle not only of the neighbourhood but of the whole of the Northern division of Lincolnshire. The representatives of Mr. Davy have, as far as possible, kept up to the standard of excellence with the Owersby flock which the late Mr. John Davy had achieved; and on Monday last 88 Lincoln long-wool shearlings were placed under the hammer of Mr. Calthrop. The attendance was smaller than usual, but the sheep reached to an average of about £12.

COTSWOLDS.—Mr. Lane, of The Cottage, Northleach, has disposed of his flock, Messrs. Acock and Hawk acting as auctioneers. The flock consisted of 115 ewes, 51 theaves, 85 ram lambs, 87 ewe lambs, and two shearling rams. The average of the whole 338 sheep was £5 12s. each; the ewes and theaves averaged £5 2s.; the ram lambs, including two shearlings, made 48 8s. each; and the ewe lambs £3 3s. each. The feature of the sale was the competition for the theaves. Very high prices were given, which culminated in Mr. Swauwick purchasing a pen of five for 17 gs. per head. Mr. Brown, of Marham, and Mr. Swanwick bid against each other, until they were secured for the College Farm.

Mr. May, of Elford Park, near Tamworth, held his annual sale of Shropshire rams and ewes early in September, when owing to harvest operations but few residents of the immediate neighbourhood attended, the company principally consisting of Leicester, Nottingham, and Derbyshire farmers, the number of whom taking to blackfaced sheep seems considerably on the increase. There were rather more rams than usual in the catalogue, and some few were passed; there being no offer for these beyond the upset price of £5 5s. Of those sold, Nos. 14 and 15 made the highest figures, viz., 18½ and 18 guineas, to Mr. Ridgway, and Mr. James, of Sudbury. Mr. Beardall secured a good two-shear, by Sailor, at 14½ guineas; the others ranging from 14 down to 5½ guineas, and the average being just under £10 10s. The principal purchasers were Messrs. Park, of Newark, Madan, Ward, of Aston, Oldacre, Cunningham, Plant, Hatchett, Riley, Roberts, Buxton, of Matlock, Rowley, Mills, and H. Lowe. The 100 ewes made from 62s. to 67s. per head, averaging nearly 65s. Messrs. Beardall, Broadas, Minors, Roberts, Shaws, Briggs, and Riley were the purchasers. Messrs. Lythall and Clarke, of Birmingham, were the auctioneers.

At the third annual sale of Leicester cross and half-bred lambs belonging to Mr. John Lind, Carnwath, the number of lambs submitted to competition was 3,500, of which 3,000 were crosses, the remainder being half-breds. Most of the buyers were from the neighbouring counties and the Lothians, and there were also several from England. The stock was generally in good condition, the crosses being exceptionally fine. For all classes the biddings were exceedingly spirited, and in sympathy with the brisk competition which occurred, prices were sent up considerably above those obtained at the sale last year. Crosses were up from 3s. to 4s. a head, and half-breds from 4s. to 5s. The principal reasons contributing to the increase of value may be noted. First of all there is an abundance of pasture this autumn, and aftermath has not been so good as it is now for some years. With the fine weather, the turnips are swelling out apace, and give promise of a good crop, despite the unfavourable start which they had; and mutton is bringing exorbitant prices. Moreover, trade is good, and there is every prospect of fat stock going up further in value, and purchasers were evidently confident of this. There is another reason contributing to the success of the sale which might be mentioned. The stock was drawn from the best hirsels in the counties of Ayr, Dumfriess, and Wigton, and was fresh and free from disease.

SALE OF THE LATE MR. W. BOTTING'S SUSSEX HERD AND SOUTHDOWN FLOCK.—This sale has just taken place at Westmeston, in the Lewes district of Sussex, under the conduct of Mr. Drawbridge. There was a good attendance, including nearly all the leading agriculturists of the county, and the result was altogether satisfactory, as more especially encouraging to the breeders of Sussex stock. Amongst the cows Young Betsy made £84, Victory £60, Damsel £74, Primrose £52, Young Strawberry £48, and others good prices. Of the heifers in calf Young Daisy was the pick at £89 18s., while Young Broad made £54; and of the yearling heifers the well-named Beauty went as high as £57 15s., Myrtle and Bolney to £42 each, and others at fair figures. A two-year-old bull, Sir William, was sold for £84, and some very handsome steers at £60, £61, and £64 the pair. The Southdowns were not quite so much fancied, but as the following tabulated statement will show the Westmeston was altogether a good sale, and full of promise for the breeders of Sussex cattle:

	£	s.	d.	average	£	s.	d.
Sheep, 725	1,928	17	0	2	13	6	
Cows, 14	620	19	6	"	44	7	0
Heifers, 17	496	13	0	"	29	5	0
Yearlings, 15	458	17	0	"	30	12	0
Two-year-old steers, 9	269	8	0	"	29	18	0
Yearlings, 10	365	14	6	"	30	10	0
Bulls, 4	170	2	0	"	42	10	0
Bull calves, 6	177	9	0	"	29	10	0
Heifer calves, 17	255	5	6	"	15	0	0
Cow calves, 3	30	0	0	"	10	0	0
Total	£4,773	5	6				

LEICESTERS AND BORDER LEICESTERS.—In connection with the Border Union Agricultural Society the annual sale of Leicesters and half-bred rams took place at Kelso. This resulted in unusually high prices being obtained for the rams. The first Leicester ram sold realised the high price of £115. It was one of the Mertoun lot, the property of Lord Polwarth, and this ram was purchased on behalf Mr. Sanderson, for Australia. Other rams of the Mertoun flock sold at £95, £65, £55, £50, £45, £36, £33, £28, £27, £26, £25, and smaller sums. The average price of Lord Polwarth's sheep (30) was £30 10s. At last year's sale Lord Polwarth also got the highest price for his rams. The rams which brought the next highest prices belonged to the Mellendean flock, the property of Miss Stark. The highest price obtained by these rams on Friday was £100, which was paid by Sir George Dunbar. The prices of other rams in this lot were £91, £60, £50, £43, £40, &c. The average price obtained for 36 Leicester rams of the Mellendean flock was £28 15s. 3½d. Several of the other lots of rams brought very high prices. Among them were the Rev. R. W. Bosanquet's Rock, highest, £50; average for 66 rams, £14 3s. 3d. Mr. John Lee's, Marvingston, highest, £40; average for 20 rams, £12 10s. Mr. Forster, Ellingham, highest, £32; average for 82 rams, £10 7s. 6d.; and many others. The highest prices paid for half-bred rams were £20, £19, £17, £15 10s., &c.

THE EAST KEAL RAMS.—The annual show and letting of these sheep, the property of Mr. Jas. Skinn, took place last month. Mr. Moore, of Little Steeping, secured a ram for £12 17s. 6d.; Mr. Weatherhogg, of Tumbly, one for £8; Mr. Simpson Baker, Little Steeping, another for £7 17s. 6d.; Mr. Thompson one for £7 5s.; and Mr. Kent, Donington, one for £7. The remainder were let for less money; but the average was an advance upon last year's terms.

MR. T. W. D. HARRIS' LEICESTERS.—Mr. T. W. D. Harris, of Wootton, held his first sale of rams, under the conduct of Mr. Peirce, with the following result:—Shearing rams: Mr. J. Sargeant 10 gs., Mr. R. Rolfe 11 gs., Mr. J. Blunt 10½ gs., Mr. W. Daniels 25 gs., Mr. J. Grimsdick 9½ gs., Mr. Roddis 8 gs., Sir W. de Capel Brooke 22 gs., Mr. F. Underwood 10 gs., Mr. W. Varnham 14½ gs., Mr. J. Clode 11 gs., Mr. J. R. Wartnaby 17 gs., Mr. J. Phillips 12 gs., Mr. J. T. Smith 15 gs., Mr. T. Underwood 11 gs., Mr. Grimsdick 9½ gs., Mr. E. Varnham 11½ gs., Mr. G. Savage 9 gs. and 8½ gs., Mr. S. Blunt 13½ gs., Mr. W. Smyth 13 gs., Mr. P. Phipps 29 gs., Mr. W. Hensman 14 gs., Mr. W. James 5½ gs., Mr. G. N. Wetton 20 gs., Mr. T. York 15 gs., Mr. J. C. Robinson 10½ gs., Mr. R. Wood 10 gs., Mr. R. Wil-

liams 10 gs., Mr. W. Varnham 9½ gs., Mr. J. Rice 19½ gs., Mr. W. Wykes 16 gs., Mr. J. Ashton 10 gs., Mr. R. York 15 and 12 gs. Six theaves sold at 10 gs. each, six also bought by Mr. W. Rice at 11½ gs. each.

SHEEP SALE IN IRELAND [FROM OUR CORRESPONDENT].—Ten years ago the Messrs Ganly, Sons, and Parker, auctioneers, Dublin, acting upon the advice of the leading flockmasters in Ireland, instituted an annual national sale of sheep of various breeds. Each recurring sale has been marked by a degree of success which has contributed to enhance sheep breeding in Ireland. On this occasion amongst the exhibitors in Leicesters were Thomas Mitchell, Yorkshire; Wm. Owen, Blessington; W. H. Massy, Macroom; R. W. Meade, Co. Cork. Border Leicesters: L. H. Bland, Q.C., Queen's County; William Scott, Mountrath; James Wylie, Poyntzpass; Messrs. MacLoughlin and McUllagh, Ballybrittas; John Murray, Athy. Lincolns: B. E. Ward, Drayton; J. J. Evers, Mullingar; John Rooney, Oldtown. Roscommon Sheep: Richard Flynn, Tusk; Thomas Roberts, Strokestown; Robert Clancy, Creggs; Luke Christie, Croome; Patrick Balfe, Castlereagh; John North, Killucan. Shropshires: R. C. Brown, Carlow; L. H. Bland, Abbeyleix; John Peake, Monaghan; J. Richardson, Lisburn; Thomas Gill, Longford. Cotswolds: T. B. Browne, Gloucestershire. Oxford Downs: Charles Gillet, Bampton, England. Cheviots: Lord Claremount, Newry. Amongst the purchasers were Lord Cloncurry, Lord Annesley, Earl of Carrick, Sir Allan Walsh, Bart., Hon. Mr. Massey, Sir Arthur Guinness, Bart., Colonel Latouche, R. C. Brown, Mr. Mangan, Mr. Duffy, Messrs. Long, Captain Johnstone, General Irwin, Robert Johnstone, Gavin Low, Edward Purdon, R. W. Hall-Dare, Mr. Brangan, Mr. Malcolmson, H. H. Woods, F. F. Synge, Luke Christie, Rev. Mr. Sullivan, Henry Nolan, I. T. Hamilton, M.P., William Johnstone, E. J. Armstrong, T. C. Nagle, Captain Beytagh, Mr. Booth, Mr. Marr, Mr. Barratt, Mr. Rooney, and others. The sale of rams took precedence, commencing on Friday, the 1st instant, at noon, when upwards of 5,000 rams were introduced into the ring, and speedily disposed of. The Border Leicesters sent in by Mr. Bland, who is one of the most advanced sheep breeders in Ireland, realised the highest quotations. The condition of the sheep was unexceptionable. The prices ranged from 8 to 25 guineas each, and the whole of the stock was disposed of. Other Border Leicesters sold from 7 to 15 guineas; Lincolns from 7 to 10 guineas; Roscommon rams averaged 15 guineas; Shropshire Downs brought from 7 to 12 guineas; Oxford Downs, 12½ guineas; Cotswolds, 10 guineas. The ewe sale, which was continued on Saturday, was also respectably attended. Upwards of 3,000 head of various breeds were submitted for sale. They were chiefly from the flocks of such eminent breeders as Messrs. Clancy, Gregg, Raymond, Flynn, Purdon, Hanley, Balfe, Evans, Ewers, Faby, French, Gough, Murray, Bland, Peake, Butler, Rooney, T. B. Browne, Owen, and others. Amongst purchasers were Mr. W. B. Hudson, Rev. Mr. Sullivan, Mr. Armstrong, Mr. Raymond, Mr. Blakey, Mr. Reynolds, Mr. Mangan, Mr. Lane, Mr. Purdon, Mr. Barrington, Mr. Kerns, Sir A. Guinness, Mr. Murphy, Mr. Dunn, Mr. MacUllagh, Mr. Garnatt, and Mr. Butler. The prices realised may be averaged thus: Longwool Roscommon ewes, 62s. to 75s. each; purely-bred imported Lincoln ewes, 98s.; half-bred Border Leicesters, 51s.; purely-bred Border Leicesters, 60s.; Lincoln ewes, 40s.; and lambs 25s. each.

THE WOOTTON DALE RAMS.—At the annual sale of this flock of Lincolns, a large company assembled. The auctioneer was Mr. Calthrop. One sheep let 18 gs. Sixty long-wool shearlings were then disposed of, and two two-shear rams, making the total sum, including the one sheep let, £751 15s., or an average of £12 10s. 7d. each.

THE ULCEBY GRANGE RAMS.—This flock of Lincolns was offered for sale by Mr. C. J. Calthrop. There were sixty animals put up. Fifty-seven sheep sold made £611 5s., or an average of £10 14s. 6d.

LEICESTER RAMS.—Mr. John Rosewarne, of Nanpusker Barton, Hayle, held his annual sale of 30 Leicester Rams, under the direction of Mr. H. V. Newton, auctioneer. The prices ranged from five to seventeen guineas. Several boars and sows of the small black breed were disposed of at the same time.

THE WILCOTE DOWN STOCK.—This flock, the property of the late Mr. J. C. Adkin, of Wilcote, Stratford-on-

Avon, was disposed of, by auction, by Mr. Hutchings, and realized good prices. The sale was largely attended by influential sheep-breeders from various parts of England. Twenty-two old and shearing rams averaged £12 15s. Two fine ram lambs fetched 11½ guineas each; ewe and weather lambs from 59s. 418 ewes and heaves were sold t an average of £3 12s. Other prices were satisfactory.

COTSWOLDS.—At the Cirencester fair Messrs. Moore and Hill sold 10 Cotswold rams, the property of Mr. T. Clarke, of Frampton Mansell, at an average of £7 17s. 6d.; and seven rams belonging to Mr. H. Howell, of Coates, at an average of £7 14s. 6d.—Messrs. Acock and Hanks sold 15 rams for Mr. Russell Swanwick, at an average of about £9; and 12 rams, the property of Mr. Joseph Walker, of Compton Abdale, at an average price of £11 3s.—Mr. J. Villar sold 15 rams for Mr. H. Cole, of Ashbrook, at an average of £12, the highest price being 31 guineas. Mr. Villar also sold 12 rams for Mr. Tucker, of Soundborough, at an average of £8; 10 rams for Mr. W. Smith, of Bibury, at an average of £9 15s.; 10 for Mr. T. Beale Browne, of Salperton Park, at an average of £9 2s. 6d.; and 7 Cotswold rams for Mr. Vaisey, of Stratton, at an average of £9 12s. These were all the Cotswold rams offered by auction; but Mr. Villar likewise sold 22 ram lambs, by Oxfordshire Down rams and Hampshire Down ewes, for Mr. C. Hobbs, of Maisyhampton, at an average of £4 12s. each.

MR. C. BYRD'S SHROPSHIRE SHEEP.—Mr. W. G. Preece submitted to auction the flock of Mr. C. Byrd, of Littywood. The shearing Hampton Hero, was let to Mr. Foster for 156 guineas, No. 2 was sold to Mr. Jos. Crane, at 21 guineas; No. 3 to Mr. Shaw, for 23 guineas; No. 6 to Mr. Dales, at 30 guineas; No. 5 was let to Mr. Coxon, at 16 guineas; No. 10 was sold to Mr. Jackson, at 14 guineas; and No. 14 to Mr. Pilgrim, at 10 guineas; No. 20 was let to Mr. Firmstone, at 16 guineas; No. 29 was sold to Mr. Ashley, at 10 guineas; and No. 33 to Mr. Warner, at 10 guineas. The rest of the shearing rams averaged about 8 guineas. No. 1 of the two-shear rams, Young Napier, was knocked down to Mr. Wright, at 43 guineas; No. 2, Black Duke, to Mr. Plant, at 5½ guineas. Mr. Byrd only put up a small portion of his ewes, but they sold at an average of rather over 62s. each.

LINCOLN SHEEP SALES.—The following are the averages of ten leading Ram Sales held in Lincolnshire during this season:

	£	s.	d.
Mr. Clarke, Scopwick	23	15	1
Mr. Vessey, Holton Holgate	16	0	0
Mr. Dudding, Panton	14	6	6
Mr. Kirkham, Biscathorpe	15	1	0
Mr. Davy, Owersby	11	9	3
Mr. Torr, Aylesby	16	0	0
Mr. Hanericroft, Wootton Dale	12	10	7
Mr. Robinson, Huttoft	13	8	0
Mr. Turner, Uceby Grange	10	14	6
Mr. Kirkham, Cadelby Hall... ..	13	10	0

Giving a general average of £14 13s. 6d. One ram was sold at Scopwick to Biscathorpe, Kirkham, for £150, and several fetched from £40 to £60, Mr. H. Caswell, of Langhton, paying as much as £89 5s. for a three-shear-sheep.

SALE AT OVERSTONE GRANGE.—Mr. Owen Wallis has held a sale of all his fat and store stock having purchased an estate in the north of England, where he is going to reside. Mr. J. Shaw was auctioneer. The sheep, which were a prime flock of 225 longwooled ewes, 135 longwooled and half-bred thicaves, 287 longwooled and half-bred lambs, and 4 rams, were descended from the leading breeders. The prices at which they were disposed of were good. 32 fat Shorthorns, 20 fat Herefords, 6 Highland Scots, 6 Shorthorn cows, and 4 heifers were also sold, and fetched high figures. A lot of Berkshire pigs were also sold. About 200 sat down to luncheon.

SALE OF SHROPSHIRE IN BIRMINGHAM.—On Thursday, Sept. 14, Messrs. Lythall and Clarke had the best sale ever held in Bingley Hall. Mr. Wood's (Pucknall) rams went from 6 gs. to 11 gs.; Mr. Lythall's (Radford) averaged over £12; Mr. Yates average £5 7s.; Mr. Nock's sheep went from 7½ gs. to 12 gs.; Lord Willoughby de Broke's made from 6 gs. to 14 gs.; one of Mrs. Beach's rams sold for 34 gs., and her average was 15 gs.; Mr. Pilgrim's average £11 17s.; Lord Wenlock's £10 8s. 8d.; Lord Sudeley's 8½ gs., one ram selling for 26 gs.; Mr. C. Stubbs' average was 14 gs.; and a few other small lots went at lower figures. The ewes also sold well.

SALE AT GORDON CASTLE.—The annual sale of Shorthorns and Leicesters bred by the Duke of Richmond, took place at the home farm of Gordon Castle, Fochabers. There was a large attendance of buyers. The following is the list of prices: Bulls—Red, calved 1870, Mr. Smith, Leichoston, 25 gs. Red, calved 1870, Mr. Grant, Drumdelgie, Huntly, 46 gs. Red, calved 1871, Mr. Walker, Altyre, 48 gs. Red, calved 1870, Mr. Longmore, Keith, 33 gs. Red, calved 1871, Mr. Falconer, Kinnermony, Aberlour, 50 gs. Red, calved 1871, Mr. Bennett, Deskie, Glenlivet, 33 gs. Red, calved 1871, Mr. Annand, Newton, Spymouth, 35 gs. Roan, calved 1871, Mr. Pirie, Little Daugh, Huntly, 40 gs. Roan, calved 1871, Mr. Hay, Trochilhill, 33 guineas. Red, calved 1871, Mr. Adam, West Bank, Duffus, 25 gs. Red, calved 1871, Mr. Hunter, Dipple, 25 gs. Roan, calved 1870, Mr. Robertson, Cattlebrae, 31 gs. Cows and Heifers: Duchess III., roan, calved June 1863, Mr. Scott, Manveen, Elgin, 31 gs. Songstress II., red, January 1866, Mr. Beattie, Dunningdeer, Insch, 31 gs. Nelly, roan, calved 1869, Mr. Bruce, Burnside, 30 gs. Countess, roan, calved 1864, Mr. Mackenzie, Elgin, for Dr. Ross, Linkfield, 39 gs. Mysie IX., red, calved 1867, Mr. Bruce, Newton of Struthers, Forres, 48 gs. Rose, roan, calved 1869, Mr. Bruce, Newton, for Australia, 42 gs. Lark, roan, calved 1869, Dr. Ross, 25 gs. Countess III., roan, calved 1869, Mr. Lipp, Haddo, 20 gs. Lustre, red, calved 1870, Mr. Findlater, Cranna, 33 gs. Queen, red, calved 1870, Mr. Scott, Orton, 30 gs. Music, red, calved 1870, Mr. Reid, Mains of Orton, 29 gs. A hundred Leicester ewes averaged about 53s. each; fifty Leicester tups brought from £4 to 10 gs. each, averaging about £6 10s. each.

MR. TUPPEN'S SALE AT PRIESTHAWES.—Messrs. Southerden and Morris, auctioneers, of Lewes and Hailsham, offered at Priesthaves, Westham, the Southdowns and other stock of Mr. Tuppen, who has disposed of his farm to Mr. W. Taylor, of Glyalye. The following is a summary of the prices realised: The full-mouthed ewes ranged from 49s. to 75s. Mr. C. Waters bought a pen of five at 75s. For the four-tooths Mr. Taylor gave 75s. each for a pen of five, and 70s. each for lots 26 and 31. The shearing ewes—lots 38 and 39—were bought at 77s. 6d. for Mr. H. L. Huth. Mr. Fielder, of Willingdon, also gave 77s. 6d. each for a pen. The ewe lambs fetched from 38s. to 60s. each. The rams ranged from 4 guineas to 14 guineas. The Sussex and other beasts also realised good prices. A prize bred Sussex cow (Bridge), five years old, was bought by Mr. G. Carew Gibson, of Storrington, for 30 guineas; Beauty, Mr. Taylor, for 35 guineas; Fanny, Mr. Smith, 39 guineas; Venus, Mr. Huth, 35 guineas—all five-year-olds. Testy, four years old, went to Mr. C. Childs, of Shinfold, for 37 guineas. Mr. Blake Duke, of Arundel, bought Cop for 35 guineas, Beauty (three years old) for 32½ guineas, and a two-year-old heifer 30 guineas. Mr. Tompkins, of Angmering, bought Amber and Amberstone, three-year-olds, at 34 and 30 guineas respectively. Mr. Carew Gibson gave 38 guineas for a two-year-old Sussex heifer, and also bought lots 24, 25, 26, and 30, yearling heifers, at prices ranging from 16½ to 22 guineas. Mr. E. Cane, of Berwick, bought lot 31, a pair of two-year-old Sussex steers, for 54 guineas. Mr. Stanford took lots 32 and 33, pairs of two-year-old Sussex steers, at 46 guineas; and Mr. Freeland, for Mr. Adamson, gave 71 guineas for lot 34. The cart-horses also fetched good prices. An eight-year-old cart-gelding (Turpin) was bought by Mr. R. Woodman. The sale was considered one of the best that had ever taken place in this part of Sussex, the sheep averaging 59s. a head.

SALE OF MR. C. R. KEELING'S RAMS AND EWES.—The annual sale of Mr. Keeling's Shropshire sheep took place at the Yew Tree Farm. About 200 agriculturists and breeders sat down to luncheon, Mr. R. H. Masfen in the chair. The principal buyers and the prices they gave are as follows: Two-shear ram, 22 guineas, Mr. Peake; shearing ram, 25 guineas, Mr. Landor; ditto, 28 guineas, Mr. Bradburne; ditto, let for 20 guineas to Mr. Sanday; ditto, 28 guineas, Mr. Bathel; ditto, 28 guineas, Lord Wenlock; ditto, 19 guineas, Lord Bradford. The principal prices for ewes were as follows: Five ewes at 120s., Mr. H. J. Sheldon; five ewes at 120s., Mr. J. Evans; five ewes at 135s., Mr. H. J. Sheldon; ten yearling ewes at 100s. and 125s., Mr. Franks, Cork; five ditto at 140s., Mr. J. H. Branburne. The 39 rams averaged £13 10s. each, and the 80 ewes £5 2s. 8d. each. Mr. Preece conducted the sale.

THE HOLLY BANK SHROPSHIRE SHEEP AND DAIRY STOCK SALE.—The announcement that Mr. Wuloughby Wood intended to dispose of his flock and herd, having let his Home Farm, brought together a large attendance of agriculturists, many of whom had, on previous occasions, been purchasers at Mr. Wood's annual sales. The rams were large and well woolled, and all sold quickly at an average of £10 5s. 9d. each for the twenty-eight. No. 7 made 29 guineas, to Mr. Allen; No. 8, 18 guineas, to Mr. Inge; 17, 13½, 12½, down to 6½ guineas being paid for the others. The ram lambs were in ordinary store condition, and made from 40s. to 125s. each; averaging close on 60s. The principal buyers were Messrs. Knight, Archer, Croft, Riddell, Masfen, and Trye. The ewes included some purchased at Moor Baras, and Leese Farm, which realised 95s. and 80s. per head respectively. The remainder, being all bred on the farm, ranged from 65s. to 120s. per head; the entire lot averaging 81s. The purchasers were Captain Webb, and Messrs. J. Hardy, M.P., Allen, Hall, Brown, Trye, Ilaslam, Rose, Warren, E. H. Horseley, &c. The sale of sheep closed with the ewe lambs, which realised from 40s. to 60s., Sir Tomman Mosley taking twenty, Mr. Hardy, M.P., ten, and Mr. R. H. Masten ten, others going to Herefordshire, Yorkshire, and Lincolnshire. Having last year sold his pedigree Shorthorns, Mr. Wood had only a few recently-purchased pure-bred cattle to offer on the second day; but, as the dairy stock had, for the most part, two or three crosses of Bates blood, there was a brisk competition for them. The three pure-bred cows made 66 guineas, and their three calves only half a guinea less. The dairy cows made from 17 to 25 guineas; the two years old heifers averaged 26 guineas; the yearling heifers very nearly 20 guineas; and the calves 11 guineas. Bonny Duke, a well-bred two years old bull, went cheaply at 26½ guineas. Amongst the purchasers were the Earl of Lichfield, Hon. Mr. Coke, Messrs. Haslem and Knowles, Lancashire; Allen, Hereford; Aldon, Doncaster; Caroll, King, R. Ratcliff (Walton Hall), E. H. Horseley, W. H. Clare, &c. The horses and pigs realised fair prices. The sale was conducted by Messrs. Lythall and Clarke, of Birmingham.

THE LICHFIELD SHROPSHIRE SALE was largely attended. The stock shown consisted of seventy rams of various ages, which sold from 5½ guineas to 16 guineas, the average being a trifle under 9½ guineas. The 900 ewes and heaves were a good lot, in store condition, and met with ready buyers at from 47s. to 84s. per head, making an average for the whole of a little under 60s. per head. The sale, although late in the season, did not fail to produce a class of sheep which met with favour from purchasers requiring sheep for profit; and a proof of their value may be noted in buyers coming from Bedfordshire, Nottingham, Northampton, Leamington, Warwick, and the adjoining neighbourhood.

MR. E. CANE'S SOUTHDOWN FLOCK.—Messrs. Southerden and Morris offered for sale last month between 600 and 700 sheep from Mr. E. Cane's flock, at Berwick Court. The full-mouthed ewes were put up in lots of ten each, and there were eighteen lots. The first lot fetched the highest price (63s. per head), and was bought by Mr. C. Waters. The remaining lots were bought at prices ranging from 60s. to 44s. a head, the principal buyers being Mr. Paxton, Mr. T. Arkoll, and Mr. Joseph Gorringe. For ten lots of six-tooth ewes, in lots of ten each, the highest price realised was £4 per head, and the lowest 45s. The four-tooth ewes were offered in twenty-seven lots, four of them being lots of five, and the rest lots of ten. From £4 10s. to 45s. per head was paid by the different purchasers. Five lots of ewe lambs, of ten each, were sold at from 31s. to 39s. per head. Five six-tooth rams, bred from Mr. Cane's flock and one of Mr. Thomas Ellman's rams, realised prices from £4 to £6 16s. 6d.

SALE OF CHEVIOTS AT BEATOCK.—The eleven biennial sale of Cheviot rams bred by Mr. James Bryden, Kinnelhead, late of Moodlad, took place at Beatock last month. Only one five-year-old sheep was offered: it was sold at £12 to Mr. Turnbull, Falkirk. Sixteen four-year-old rams were sold at prices from £2 10s. to £37, the highest being bought by Mr. Elliot, Hyndhope. Mr. Grieve, Skelfhite, bought one at £22; Mr. Graham, of Shaw, one at £18 and another at £23; and Mr. Common, Crossdykes, bought one at £30. The average of 16 rams was £12 4s., and the proceeds £203 6s. Fifty-nine three-year-olds were sold. The highest-

priced ram of the day was No. 21, "Lugum," which sold at £80 to Mr. Elliot, Hyndhope. Mr. Paterson, Birthwood, bought one at £30, and he purchased "Prince Charlie," winner of four prizes, at £50. Mr. Moffat, Craik, one at £30. The "Duke of Edinburgh," first at Edinburgh show as a yearling, and first at Dumfries show, sold at £42 to Mr. Johnstone, Archbane. Prices ranged down to £2 15s. The average of 59 was £12 4s., and the proceeds £720 5s. The four-year-olds numbered 55; the highest priced was £37, bought by Mr. Welsh, of Grickstane; Mr. Johnstone, Coppleggill, bought one at £30; Mr. Jardine, of Dryfeholm, bought one at £36; Mr. Turnbull one at £30; Mr. Paterson, Birthwood, one at £31; Mr. Smith, Chanlockfoot, one at £27—the average was £10 15s. 6d., and the amount £592 10s. The yearlings in many cases did not bring more than butchers' prices, it not being customary to dispose of the best of these when the sale comes round. Prices ranged from £2 15s. to £12, the highest priced animal bought by Mr. Gillespie, of Parkhill—the average being £4 16s. 10d., and the proceeds £135 10s. The average of 159 sheep was £10 9s. 2d.; the total proceeds £1,563. At the sale in 1869 the average of 138 rams was £11 2s. 2d., and the proceeds £1,533 7s. 6d., the highest priced ram in 1869 being £145.

THE LINCOLN RAM SALES.—**THE COLEBY RAMS:** Mr. Lister's sold by Messrs. Tateson and Richardson, averaged £9 2s. 10½d. Messrs. Tateson and Richardson also offered 60 tupping ewes for Mr. Ealand, of Aisthorpe, 50 of which were bought by Mr. Yeomans, of Derbyshire, for £164 1s. 10d., and 10 by Mr. Croshaw at an average of £3 5s. each. Also 30 gimmers belonging to Mr. Lamb, of Aubourn, which were bought by Mr. Morley and Mr. Evison, at an average of £2 17s. each. Fifty ewes, Mr. Gilbert's, of Blankney, made an average of £2 18s. each.—**THE BRANSTON RAMS,** comprising 29 shearlings and 4 aged sheep, bred by Mr. W. F. Marshall, were sold by Mr. Briggs. Five of the former were let at an average of £16 12s., and the remaining 23 sheep made £388 10s., being an average of £13 17s. 6d. per head. Mr. Walter offered 12 long-wooled shearling rams the property of Mr. Wm. Harrison, of Branton, which realised an average of £10 15s.—**THE INGLEBY RAMS,** 20 in number, belonging to Mr. Paddison, of Ingleby, were submitted to competition by Mr. Briggs, and met with a spirited sale, the average reaching £13 12s.—**THE NOCTON HEATH RAMS:** 18 shearlings, bred by Mr. Robt. Wright of Nocton Heath, were offered by Mr. Law. The sheep found purchasers at the average of £10 10s.—**THE DOGDYKE RAMS:** On the 14th inst. Mr. David Briggs sold by auction 50 shearling long-wool rams, the property of the executors of the late Mr. James Mayfield, the average being £12 12s. a head: 4 of them realized £20 each. Two three-year rams were also sold, one of which made £15 and the other £18 10s. The average of the 52 sheep was nearly £13 each.—**THE BEAUMONT COTE RAMS:** This flock of Lincoln rams, the property of Mr. Wm. Hesseltine, was sold by auction in Barton market on Monday. All the rams were sold, the average price being 9 guineas.—**THE WELTON RAMS:** Messrs. Mason and Son offered these rams, bred by and the property of Mr. J. J. Clark. The average of the shearlings was £17 8s. 6d., the highest priced one being secured by Mr. Greetham, for £26. The average of the two shear sheep was £12 16s. 3d. On Saturday the same auctioneers made an average of £12 15s. 6d. of another lot of shearlings of Mr. Clark's at Caistor fair.—**PARTNEY FAIR RAM SALES:** Mason and Son commenced by offering 32 shearlings, the property of Mr. Needham, of Huttoft Grange. One was secured by Mr. Betts, of Benniworth, for £25; another by Mr. Davey, of Thoresway, for £24, and another for £22; one by Mr. Chapman, of Great Humby, for £23. The average, including commission, was £14 6s. 10d. Mr. Harwood Mackinder's 30 shearlings were sold by Messrs. Briggs. One of these sheep fell to Mr. Frank Riggall, of Hackthorne, for £20; one to Mr. Ireland for £20; another for £20 10s.; Mr. Seels, of Wainfleet, one for £18; Mr. T. A. Bellamy, one for £15 10s.; Capt. Preston, £15 10s. Several of these sheep fell to Major Cracroft Wilson, of New Zealand. The average of the sale was £13 7s. 6d. Ten shearlings, the property of Mr. T. Heanley, sold by Crow and Son, realised an average, including commission, of £5 10s. 6d. The Toynton rams, 20 shearlings, the property Mr. J. B. Parish, sold by Parish and Son, obtained an average of £7 2s. 3d.; the highest price was given by Mr. Bond, £13 6s. 6d. Mr. Kemp, of Thurlby Grange, sent 37 shearlings, sold by

Mason and Son, and these reached the highest average in the fair; the top figure was £31, and the average with commission, £15 2s. 6d. Messrs. Walter and Pavill sold Mr. Jos. Needham's 14 shearlings, at an average of £12 16s., and Mr. Jos. Daulton's (West Keal Manor) 5 shearlings at an average of £7 11s.; highest £10 5s. Mr. Walesby's sheep, sold by Messrs. Briggs, made an average of £8 10s. Some other lots were offered.

MESSRS. NOCK AND WILSON'S SHROPSHIRE SALE.—Messrs. Nock, Son, and Wilson, held their annual sale last month from flocks of Mr. Wadlow, of Hanghton, Morville; Mr. Pitt, of Posenhall, Broseley; Mr. Instone, Callaughton, Wenlock; Mr. Thursfield, Barrow; Lord Boyne, Burwarton; Mr. Massie, Bradley, Corvedale; Mr. Dawes, and several others. There was a very large attendance; the lambs sold at from 27s. to 37s. 6d. each; fat wethers 48s. to 52s. each; fat ewes 47s. to 60s. each; fat heifers £15 15s., and fat cows £16 16s. to £21; some lambs belonging to Lord Boyne, fetched 34s. to 45s. each; some ewes belonging to Mr. Instone, made 70s. each; Mr. Thursfield's 55s.; Mr. Massie's 56s. 6d. each; Lord Boyne's, 61s., and Mr. Dawes's 60s. each. Mr. Wadlow's 12 rams fetched from £6 to £16 16s. each; Mr. Pitt's 12 rams, averaged from 6 guineas to 8½ guineas; Mr. Instone's 13 rams averaged from 8½ guineas to 17½ guineas; Mr. Thursfield's 7 rams, from 5 guineas to 10½ guineas; Lord Boyne's 4 rams averaged 8 guineas. The whole of the rams were disposed of. The sale realised about 2,000 guineas.

MR. W. G. PREECE'S AUTUMN SHROPSHIRE SALE was held in Shrewsbury, when a large number of rams, from the flocks of many of the most noted breeders of Shropshires, were disposed of at good figures. The first lot was a two-shear ram belonging to Mr. Edwards, Oxon, and it fetched ten guineas; and three shearings, averaged within a few shillings of the same price. The Rev. C. P. Peters had only one in the catalogue, and it was knocked down at 5 guineas. Mr. George Allen, of Knightley Hall, disposed of four at an average of nearly £10 each, the highest being £13 13s., for a shearing. Mr. John Evans, of Uffington, obtained 15 guineas for a shearing by Cardinal, his eleven lots averaging over £12 each. Mr. Thornton, of Pitchford, sold four at an average of nearly 9 guineas; and Mr. Crane, of Shrewardine, realised for twenty-eight shearing rams an average of £11. The highest price was 18 guineas for a shearing by Caracatus, let. Mr. Mansell, of Adcott Hall, sent five shearings, and one by Marquis ran up to £43, and another by Conservative, to £31 10s., the five making £115 10s. or over £23 a piece. Mr. Thomas Horton, of Harnage Grange, sold a shearing, by Salopian, for 13 guineas, and his fourteen averaged nearly £9 each. Messrs. Bowen, and Jones, of Ensdon House, disposed of four shearings; and Messrs. Fenn, of Stonebrook House, Ludlow, and Harding of Bieton House, Shrewsbury, of sixteen, at fair figures. Mr. A. Mansell, of Little Ness, got £27 6s. for a three-shear by Conservative; and Mr. W. G. Preece, Frodesley Park, obtained £31 9s. for a two-shear and two shearings. One of the latter by Commander-in-chief 2nd, fetched £26 5s. The Earl of Powis sold a two-shear for 12 guineas, and a shearing, by Kenyon, for 19 guineas; Lord Chesham obtained an average of 12 guineas for nine rams, the highest figure being £22 1s. for a shearing by Byrd's ram. Colonel Dyott, of Freeford Manor, Staffordshire, got an average of nearly £9 for nine, a shearing by Mansell's son of Conservative heading the list at £21. Mr. E. Bostock, of the Hough, Stafford, let a shearing by Conservative for £23 2s., three others, by 4th Duke of Kent, selling at £17 17s., £9 9s., and £10 10s. respectively. Mr. Matthew Williams, of Dryton, got an average of over £8 for eleven shearings; and Mr. Andrews, of Nobold, let one for £9 9s. Mr. J. Bradburne, Pipe Place, Lichfield, sold six rams; Mr. C. Byrd, of Littywood, fifteen; Mr. Thomas, of Building Farm, Baschurch, 11; Messrs. Fowler, of Acton Reynald, four, and R. O. Lyecester, of Toft-hall, Cheshire, two, all remunerative prices; and Mr. Pickering, of Halston, Salop, realised an average of over £10 for seven, a two-shear by D.N.G. fetching 14 guineas.

MOFFAT SHEEP SHOW AND TUP FAIR.—The Upper Annandale Agricultural Show took place at Moffat. The show of Cheviot sheep was the best ever seen at Moffat. The entries this year were very numerous, owing to the Highland Society's premiums being competed for. Mr. Johnstone of Bodesbeck (Capelgill) gained the silver medal for the best tup belonging to a proprietor, with the tup which

he bought for £145 at Mr. Brydon's sale in 1869. Mr. Brydon gained all the first prizes for tups open to tenants offered by the Highland Society, as well as all the prizes in the local class for tups, except one second, which his son, Mr. H. Brydon, gained. He also took the first and second extra prizes for Cheviot rams of any age, open to Scotland. Mr. J. Brydon, jun., and Mr. Johnstone were commended for tups of any age. Mr. McGregor, Belridding, took the prize for gimmers offered by the local society, Mr. Johnstone, with very fine animals, being second. For ewe lambs, Mr. Welsh took first prizes with a remarkably fine pen, Mr. Brydon being second. Mr. Brydon was first and third for ewes for the Highland Society prizes, Mr. Welsh being second. Mr. Brydon took both prizes for gimmers, Mr. Welsh being third. The blackfaced tups were magnificent specimens of the breed. Mr. Brydon, jun., took the first prize with a remarkably fine animal, his father being second. Mr. Tweedie, Castle Crawford, was first for lambs with a choice pen, Mr. Bryden being second. The following is the list of judges: Cheviots—Messrs. Elliot, Hyndhope; Smith, Chanlockfoot; Scott, Deloraine. Blackfaced—Messrs. Denholm, Bailtaws; Wilson, jun., Minevie; French, Glencaple. There was a small show of tups penned for sale. The number of Cheviots was 405, blackfaced 75, long-wooled 5. The bulk of the Cheviot tups was of an ordinary description, superior animals being scarce. Customers were plentiful, and the demand was brisk. Prices were 20s. to 30s. up for ordinary tups, and £2 to £3 for the better class since last year. Craigbeck three years old Cheviots sold at £8, Rennelburn £7 to £8, Sandhope £2 15s. to £3, Kirkill shot Dinmonts £4 to £5, Crossdykes one year old £3 10s., a three years old at £10, Bunara Dinmonts £4, two year olds from £6 upwards. Prices for one-year-old Cheviots ranged from £2 15s. to £8, and two and three years old from £5 upwards. Mr. Johnstone, Capelgill, sold his tup in the proprietors' class at £50. Blackfaced tups sold from £4 to £5. A number of sales of draft ewes took place at an advance of 5s. to 8s. 6d. on last year's prices. Landshawburn ewes sold at 40s., Taulawhill 35s. A number of hirsels made the latter figure.

THE FRENCH PEASANT-FARMERS' SEED FUND.

At a meeting of the Executive Committee, held in Grosvenor-street, on Wednesday, September the 20th, there were present Lord Vernon, the President, in the chair; Mr. James Howard, M.P., the Treasurer; Messrs. H. Corbet, Delf, J. Odams, Pitman, and the Hon. Secretaries, B. T. Brandreth Gibbs, H. M. Jenkins, and W. H. Delano.

The chief business of the meeting was to determine upon the manner in which the autumnal distribution of seed-corn in France should be conducted; and it was eventually resolved to send further supplies of wheat to the extent of £3,000 each to the three districts where the funds had been mainly employed in the spring of the year. This course was agreed to, in consequence of some of the spring wheat having failed, partly from the unfavourable season and partly from the late period at which it was sown. Mr. Jenkins was deputed to personally confer with the acting authorities of the French Society in Paris as to the desirability of these several grants being made in corn or in money.

Captain Delf, who has written a report from personal inspection on the operation of the funds, stated that the barley, oats, and potatoes sent out had produced very flourishing crops, but that the wheat had occasionally failed from the causes already named.

Lord Vernon presented a gold medal from the Central Agricultural Society of the Seine to Captain Delf for the energy and ability which he had displayed in superintending the distribution of the seed-corn sent out. It has also been determined to present similar medals to Lord Vernon and Mr. Pitman, who, like Captain Delf, has been acting in France.

OXFORDSHIRE AND BANBURY AGRICULTURAL SOCIETY.

MEETING AT BANBURY.

The last show in Banbury took place in 1868, when it lasted for two days, but on this occasion it was limited to one. The entries now slightly exceeded that of 1868; then there were 100, on Tuesday there were 111. A number of the cattle, sheep, and pigs entered were not sent in consequence of the foot-and-mouth disease being on the farms of the intending exhibitors; consequently the show fell short as to numbers. Both of the Champion Prizes fell to Mr. George Garne, of Churchill Heath, for a two-year-old Shorthorn.

PRIZE LIST.

JUDGES: Mr. E. Little, Lanhill, Clippenham; Mr. Randall, Chadbury; Mr. J. Sabin, Culworth; and Mr. E. Wayte, Prescote.

CATTLE.

Best horned animal in the yard, exhibited in either of the classes 1 to 6.—Prize, silver cup, value £5 5s., G. Garne, Churchill Heath.

Best horned animal in the yard, exhibited by a tenant-farmer in either of the classes 1 to 8.—Prize, Silver cup, value £5 5s., G. Garne.

Bull above three years old.—First prize, £5, W. Caless, Bodicote; second, £3, G. Garne.

Bull above two and under three years old.—Prize, £5, J. A. Mumford, Chilton Park Farm, Thame.

Bull above one and under two years old.—First prize, £5, G. Garne; second, £3, W. Caless, jun., Adderbury Grounds.

Cow, having already produced one calf, in milk or in calf, above three years old.—First prize, £5, F. Lythall, Banbury; second, £3, J. How, Broughton, Hunts.

Heifer in milk or calf, under three years old.—First prize, £5, J. How; second, £3, W. Caless. Highly commended: F. Lythall.

Heifer for breeding purposes, under two years old.—First prize, £5, G. Garne; second, £3, J. How. Highly commended: H. W. Abbotts, Bodicote.

NOT PURE-BRED ANIMALS (ALDERNEYS EXCEPTED) BUT ESPECIALLY ADAPTED FOR DAIRY PURPOSES.

Pair of cows in milk, above four years old.—First prize, £5, F. Lythall; second, £3, J. Hutt, Water Eaton. Highly commended: J. Parsons, Walton Grounds.

Pair of cows or heifers, under four years old, in milk.—First prize, £5, W. Caless, jun.; second, £3, J. Hutt.

Best animal exhibited in class 7 or 8.—Prize, silver cup, value £5, F. Lythall.

EXTRA STOCK.

Fat Shorthorn heifer.—Prize, £4, J. A. Mumford (Climax II.), bred by T. T. Drake.

Shorthorn heifer.—Prize, £3, W. Caless (2 years 10 months 2 weeks), bred by exhibitor.

HORSES.

Brood mare for breeding hunters, the owner to produce a certificate that the mare is free from all hereditary disease.—Prize, silver cup, value £5 5s., C. C. Garner, Railway Grounds.

The tenant-farmer who shall exhibit the best hunter under six years old, being at least equal to 13 stones weight.—Prize, silver cup, value £5 5s., S. Berridge, Drayton Lodge.

Cart mare with foal.—First prize, £5, the Rev. C. W. Holbech, Farborough; second, £3, H. Middleton, Cutteslowe. Highly commended: A. Hobley, Neithrop; W. Horns, sen., Chacombe.

Cart stallion.—First prize, £5, W. Buller, Hanwell; second, £3, J. Belsier, Thenford.

SHEEP.

Oxfordshire Down shearing ram.—First prize, £5, J. Tredwell, Upper Winchendon; second, £3, J. Tredwell.

Oxfordshire Down ram, above two years old.—Prize, £5, N. Stilgoe, Adderbury.

Best Oxfordshire Down ram exhibited in classes 12 or 14.—Prize, plate value £4 4s., N. Stilgoe.

Pen of five breeding Oxfordshire Down ewes, having bred lambs in 1871.—First prize, £4, J. Tredwell; second, £3, J. Tredwell. Highly commended: Z. W. Stilgoe, Adderbury Grounds.

Pen of five Oxfordshire Down shearing wethers.—Prize, plate value £3, Z. Stilgoe. Commended: N. Stilgoe.

Long-wooled shearing ram.—First prize, £5, the Executors of the late T. Gillett, Kilkenny; second, £3, ditto.

Long-wooled ram above two years old.—First prize, £5, the Executors of the late T. Gillett; second, £3, ditto.

Pen of five breeding long-wooled ewes, having bred lambs in 1871.—First prize, £4, the Executors of the late T. Gillett; second, £3, W. Denchfield, Banbury.

PIGS.

Boar not exceeding 18 months old.—First prize, £4, H. Humfrey, Kingstone Farm, Shrivenhams; second, £3, J. Wheeler, Long Compton (King Lear 7th).

Best boar exhibited in class 20.—Prize, plate value £3 3s., H. Humfrey.

Sow in farrow or with pig, not exceeding 18 months old.—First prize, £4, H. Humfrey; second, £3, J. Wheeler, (Lucy 4th).

EXTRA STOCK.

Sow.—Prize, £1, J. Wheeler (Lucy 1st).

WESTMORELAND AND KENDAL DISTRICT AGRICULTURAL SOCIETY.

The annual autumn meeting was held at Kendal, when a successful exhibition of cattle, sheep, and horses took place. There was a large increase of entries over previous years, and the judges expressed their opinion that the quality of the animals shown had much improved. The competition in the Shorthorn classes, as well as in those of sheep and horses, was very keen.

The following are the winners of first prizes:

JUDGES.

CATTLE AND PIGS.—Messrs. W. Jobson and J. Culshaw.

SHEEP.—Mr. T. H. Hutchinson and Mr. T. Wilkinson.

HORSES.—Mr. G. Bolam and Mr. J. Watson.

CATTLE.

SHORTHORNS.

Bull not exceeding two years old.—H. Gibbon, Holme-scales.

Bull above one and under two years.—J. Davidson, Penrith.

Heifer above two and not exceeding three years.—J. Davidson.

Heifer above one and not exceeding two years.—G. Ashburner, Broughton-in-Fariness.

Three cows for breeding stock.—J. and J. Gaitskill, Whitehaven.

Cow for dairy purposes, three years old and upwards.—T. W. Simm, Water Crook.

Cow for breeding stock, three years old and upwards.—J. Woodhouse, Lancaster.

Bull calf under twelve months.—J. and J. Gaitskill, Whitehaven.

Heifer calf under twelve months.—H. J. Gibbons, Home-scales.

Calf (bull or heifer), under six months.—W. Ashburner, Ulverstone.

Three Shorthorns, for breeding purposes, not exceeding three years.—Silver cup, value 5 guineas, given by F. A. Argles.—J. Davidson, Penrith.

Cow and calf.—Timepiece, given by Messrs. Scott and Son, J. C. Bowstead, Penrith.

SHEEP.

LEICESTERS.

Aged ram.—T. Parker, Hincaster.

Pen of three shearing gimmers.—T. Parker.

Pen of three ewes.—E. Briggs, Burton.

Tup lamb.—J. Davidson, Penrith.

Pen of three gimmer lambs.—T. Parker.

LONG-WOOLED.

Aged ram.—J. Davidson, Penrith.

Shearing ram.—J. Sedgwick, Lambrigg.

Pen of three shearing gimmers.—J. Sedgwick.

Pen of three ewes.—J. Sedgwick.

Tup lamb.—A. D. Knightley, Old Hall.

Pen of three gimmer lambs.—J. Sedgwick.

SHROPSHIRE.
Aged ram.—W. H. Wakefield, Sedgwick,
Shearling ram.—W. Stavert, Helsington.
Pen of three shearling gimmers.—W. Haudley, Greenhead.
Tup lamb.—C. W. Wilson, High Park.
Three gimmer lambs.—C. W. Wilson.

FELL SHEEP.
Aged ram.—W. Bownass, Middleton Hall.
Shearling ram.—E. Hudson.
Pen of three yearling gimmers.—E. Hudson.
Pen of three ewes.—A. W. Long, Mint House.
Tup lamb.—E. Hudson.
Pen of three gimmer lambs.—A. W. Long.

HERDWICK SHEEP.
Aged ram.—R. Browne, Troutbeck.
Shearling tup.—R. Browne.
Three shearling gimmers.—C. W. Wilson.
HORNED CRAG SHEEP.
Shearling ram.—R. Parker, Moss End.
Three shearling gimmers.—R. Parker.

HALF-BRED SHEEP.
Pen of three shearling gimmers.—W. Atkinson, Borneside Hall.
Silver cup given by Mr. Wm. Lowther, M.P., for the best pen of four longwooled sheep.—T. Parker.
Aged Leicester ram (prize given by General Upton).—J. Davison, Penrith.

PIGS.
Boar of any breed, above six months.—H. J. Gibbons, Holmescales.
Breeding sow.—A. Webster, Foulshaw.
Breeding sow, small breed.—R. Hulton, Milnthorpe.

HORSES.

FOR ROAD OR FIELD.
One-year-old gelding.—R. Ashburner, Uverston.
Two-year-old gelding.—F. Harrison, Birkrigg Park.
Three-year-old gelding.—W. Armstrong, Kendal.
One-year-old filly.—J. Garnett, Holeslack.
Two-year-old filly.—W. H. Wakefield, Sedgwick.
Three-year-old filly.—W. Whitwell, Tolson Hall.
Brood mare, in foal or with foal at foot.—R. Hutton, Milnthorpe.
Colt foal.—D. H. Fenton, Kendal.
Filly foal.—J. Atkinson, Rawes Hall.

PONIES.

Pony of any age, mare or gelding, not exceeding 13½ hands.—C. W. Wilson, High Park.

HACKNEYS.

Hackney of any age, mare or gelding, over 13½ hands and not exceeding 15½ hands.—T. Rigg, Windermere.

HORSES FOR AGRICULTURAL PURPOSES.

One-year-old gelding or filly.—R. Ormrod, Ackenwithwaite.
Two-year-old gelding or filly.—G. Airey, Lancaster.
Three-year-old gelding or filly.—T. Bird, Kirbythore.
Brood mare, in foal or with foal at foot.—Messrs. Hodgson, Shap.
Colt or filly foal.—Messrs. Edmondson, Scathwartherigg.
Pair of agricultural horses shown in gear (prize given by Mr. G. E. Wilson, of Dallam Tower).—Messrs. Hodgson.
Single agricultural horse.—Messrs. Hodgson.

HUNTERS.

W. Armstrong, Kendal.

NORTHAMPTONSHIRE AND PETERBOROUGH AGRICULTURAL SOCIETIES.

MEETING AT PETERBOROUGH.

The annual show and meeting of the Northamptonshire Agricultural Society was held at Peterborough, in conjunction with the show of the Peterborough Agricultural Society. The entries, with the exception of the horses, were not so large as when the show was last held here, in 1865. This is to be accounted for from the prevalence of the foot-and-mouth disease amongst cattle, and the comparatively short numbers of sheep in the country.

The judges were: For beasts, Messrs. Ladds, Ellington,

Hunts; J. Robinson, Newport Pagnel; J. Knowles, Wetherby. For riding horses: Capt. Arkwright, Knuston Hall, Wellingboro'; Messrs. J. M. K. Elliott, Heathencote, Towcester; W. Young, Beverley, Yorkshire. For cart horses: Messrs. T. Woods, Wytchley Warren; W. Chew, Thorpe Achurch; J. Rooke, Weldon Grange. For sheep and pigs: Messrs. W. Fowler, Manton, Lawrance Willmore, Leicester; S. Druce, Eynsham. For poultry: M. R. Teebay, Fulwood, Preston. For butter: Messrs. J. Hudson, Ludgate-hill, London. For implements and roots: Major Grantham, West Keal Hall; Mr. B. Painter, Burley-on-the-Hill. For shoeing horses: Messrs. Young, Beverley; G. Lepper, V.S., Aylesbury. Veterinary surgeon: Mr. W. Richardson, Peterborough.

PRIZE LIST.

FAT STOCK.

Ox exceeding three years and three months old.—First prize, £10, Lieut.-Col. Reeves, Leadenham; second, £5, E. Wortley, Ridlington.

Steer not exceeding three years and three months old.—First prize, £10, J. How, Broughton, Hunts; second, £5, Marquis of Exeter.

Cow of any age.—First prize, £10, W. Faulkner, of Rothershorpe, Norths.; second, £5, J. Aubrey Mumford, Thame, Oxon.

Heifer not exceeding four years old.—First prize, £10, J. J. Sharp, Broughton, Kettering; second, £5, F. Lythall, Spittall Farm, Banbury.

BREEDING AND STORE STOCK.

Bull of any age.—First prize, £15, Marquis of Exeter; second, £5, R. E. Oliver, of Sholebroke Lodge, Towcester.

Bull above two years old.—First prize, £10, W. Bradburn, Wednesfield, Wolverhampton; second, £5, Lady Pigot, Branches Park, Newark.

Bull above one and under two years old.—First prize, £10, R. Wood, Clapton, Thrapston; second, £5, J. Aubrey, Mumford.

Bull calf above six and under twelve months old.—First prize, £10, C. Bayes, Kettering; second, £5, Lady Pigot.

Cow in milk or in calf.—First prize, £7, J. W. Kirkham, Cadeby Hall, Grimby; second, £3, Lady Pigot.

Pair of cows of any breed (belonging to a tenant farmer).—First prize, £7, J. J. Sharp; second, £3, J. Freeman, Glaphorne, Oundle.

Heifer of any breed, above three and under four years old.—First prize, £7, J. How, Broughton, Hunts; second, £3, W. Bradburn.

Heifer of any breed, above two and under three years old.—First and second prizes, £7 and £3, F. J. S. Foljambe.

Heifer of any breed, above one and under two years old.—First prize, £7, T. E. Pawlett, Beeston, Sandy, Beds; second, £3, J. How.

Heifer calf of any breed, under twelve months old.—First prize, £3, Lady Pigot; second, £2, Marquis of Exeter.

Shorthorn heifer, above one and under two years old.—First prize, £15, J. J. Sharp; second, £5, F. Lythall.

Best animal in classes 9 to 14.—A silver cup value £10, J. How.

HORSES.

Mare and foal for hunting purposes, got by a thoroughbred stallion.—First prize, £15, W. Jenkins, Husband's Bosworth, Rugby; second, £10, H. Jones, Littleport, Ely.

Mare or gelding for hunting purposes.—First prize, £15, W. Whitehead, jun., Wollaston; second, £5, J. Payne, Shington, Leicester; extra prize, J. Hill, Oundle.

Mare or gelding.—First prize, £15, W. J. Cheney, Gidding Grove, Oundle; second, £5, Major F. Bowman, Belmont House, Duddington.

Gelding or filly adapted for riding purposes.—First prize, £7, J. E. Bennett, Husband's Bosworth Grange, Rugby; second, £3, R. B. Warwick, Stanground, Peterborough.

Gelding or filly adapted for riding purposes.—First prize, £7, J. Goodliff, Connington-lane, Hunts; second, £3, A. Goodman, jun., Thorney, Peterborough.

Colt or filly adapted for hunting purposes.—First prize, £7, Hon. C. W. Fitzwilliam, Alwalton; second, £3, J. Goodliff.

Mare for breeding hackneys, with foal, not exceeding 15 hands 1 inch.—First prize, £7, H. Cooke, Decoy Farm, Crowland; second, £2, S. Deacon, Polebrooke.

Hackney (mare or gelding) not exceeding 15 hands 1 inch.—First prize, £7, J. N. Beasley, Pitsford Hall, Norths; second, £3, P. Durrans, Oundle.

Cob (mare or gelding), not exceeding 14 hands 1 inch.—Prize, £5, W. Coles, Northborough.

Pony (mare or gelding), not exceeding 13 hands 1 inch.—Prize, £5, W. Fowler, Manton.

Pony (mare or gelding), not exceeding 12 hands 1 inch.—Prize, £15, J. Horusby, Grantham.

Cart mare with foal at foot.—First prize, £7, J. Tomlinson, Lutton; second, £3, H. Jones, Littleport, Ely.

Cart gelding or filly above three and under four years old.—First prize, £7, R. Hopper, North Bank, Whittlesey; second, £3, R. Timms, Braunston, Rugby.

Cart gelding or filly above two and under three years old.—First prize, £7, R. Wood, Clapton, Thrapston; second, £3, E. Vawser, Holme, Hints.

Cart gelding above one and under two years old.—First prize, £5, S. E. Pilgrim, The Outwoods, Leicestershire; second, £2 10s., W. Fullard, Thorney.

DRIVING PRIZES.

Horse (mare or gelding) not less than 15 hands 2 inches high.—First prize, £7, P. Horusby, Barrowby Cottage, Grantham; second, £3, J. Adams, jun., Newborough.

Horse (mare or gelding) not exceeding 15 hands 2 inches or under 14 hands 2 inches high.—First prize, £7, T. H. Vergette, Boro' Fen, Peterborough; second, £3, J. Core, Angel Hotel, Peterborough.

Pony (mare or gelding) not exceeding 14 hands 2 inches.—First prize, £3, J. Reynolds, Chatteris; second, £2, G. S. Maxwell, Walton.

JUMPING PRIZES.

Best jumper.—Prize, £5, T. P. Wright, Helpston. Extra class; first prize, £3, Mr. Geary; second, £2, Mr. Pain, of Shangton, Leicester.

SHOEING HORSES.

To Smiths for shoeing hunting horses.—First prize, £6, M. Cox; second, £3, J. W. Sauderson; third, £1, A. Anstey.

To Smiths for shoeing hackney or carriage horses.—First prize, £3, T. Danes; second, £2, J. Letts, Northampton.

To Smiths Apprentices for shoeing hackney or carriage horses.—First prize, £2, R. Fincham; second, £1, J. Cooper.

SHEEP.

Pen of ten long-wooled ewes.—First prize, £7 7s., C. Clarke, Ashby-de-la-Lauude; second, £3 3s., J. Lynn, Stroxtan.

Pen of five long-wooled theaves.—First prize, £5, C. Clarke; second, £2 10s., T. Aitken, jun., Decoy Farm, Spalding.

Pen of five short-wooled or cross-bred ewes.—First prize, £5, J. Treadwell, Upper Winchendon, Bucks; second, £2 10s., J. Treadwell.

Pen of five short-wooled or cross-bred theaves.—First prize, £5, F. Street, Harrowden House, Bedford; second, £2 10s. F. Street.

Pen of three short-wooled or cross-bred shear hoggs.—First prize, £5, Sir William de Capel Brooke, Bart., Geddington Grange; second, £2 10s., T. Tryon, Bulwick Park.

Pen of three long-wooled shear hoggs.—First prize, £5, Sir W. de Capel Brooke, Bart.; second, £2 10s., Marquis of Exeter, Burghley Park, Stamford.

Shearling long-wooled tup.—First prize, £10, A. Hack, Buckminster, Grantham; second, £5, W. F. Marshall, Branston, Lincoln.

Long-wooled tup of any breed.—First prize, £10, A. Hack; second, £5, R. Wright, Nocton Heath, Lincoln.

Shearling down tup of any distinct breed.—First prize, £7, J. Treadwell, Upper Winchendon, Bucks; second, £3, J. Longland, Grendon, Northampton.

Down tup of any distinct breed, two-shear and upwards.—First prize, £7, J. Longland; second, £3, C. B. Bletsoe, Grendon Hall, Northampton.

Five long-wooled wether lambs.—First prize, £3, W. Cranfield, Buckden, Hunts; second, £1 10s., W. B. Gills, Glinton.

Five long-wooled ewe lambs.—First prize, £3, W. Cranfield; second, £1 10s., T. W. D. Harris, Wootton.

Five short-wooled or cross-bred wether lambs.—First prize, £3, F. Street, Bedford; second, £1 10s., F. Street.

Five short-wooled or cross-bred ewe lambs.—First prize, £3, J. Longland; second, £1 10s., F. Street.

PIGS.

Boar of the large breed.—First prize, £5, Messrs. Duckering and Sons, Northorpe, Kirton-in-Lindsey.

Boar of the small breed.—Prize of £5, Earl of Carysfort, Elton Hall, Oundle.

Breeding or sucking sow.—Prize of £5, J. Lynn, Stroxtan. Breeding or sucking sow of a small breed.—Prize of £5, Messrs. R. E. Duckering and Sons.

Three fat pigs of one litter.—Prize of £5, Messrs. Duckering and Sons.

Five breeding pigs of one litter.—Prize of £5, Messrs. Duckering.

BUTTER.

Twelve pounds of butter, wholly or partially the production of Alderney cows.—First prize, £3, Major Gen. Bouverie, Delapré Abbey, Northampton; second, £1, Rev. C. H. Lucas, Edithweston, Rutland.

Twelve pounds of butter.—First prize, £3, W. Newitt, Bradden, Towcester; second, £1, J. Freeman, Southwick, Oundle.

Six pounds of butter.—First prize, £3, S. Whitehead, Glatton; second, £1, T. Wagstaff, Chesterton, Peterborough.

SALE OF A PORTION OF MR. SHELDON'S HERD,

AT BRAILES, ON THURSDAY, SEPTEMBER 21, 1871.

BY MR. STRAFFORD.

This was the fourth biennial sale at Brailes, and by far the most successful that has yet taken place. Mr. Sheldon may generally be seen at the ring side when the best herds are dispersed, and a specimen is generally purchased for the Brailes herd. Occasionally a few came in by private contract, and this was the way the Acombs and Craggs, of which the present catalogue was chiefly composed, were obtained. Both tribes were bred by the Messrs. Bell, of Kirklevington, and of late years have been like all Kirklevington stock, very eagerly sought. The Acombs here were probably the best of the tribe, and consequently fetched excellent prices, but the Craggs were somewhat crossed out. The company was not numerous, but with Colonel Kingscote, Messrs. Beauford, Sartoris, McIntosh, Foster, Drewry, Cheney, Leney, Slye, Saville, Finlay Dun, Roper (for Lord Skelmersdale), Stone, Knowles, Sturgeon, and others, a good sale was guaranteed, more especially as the stock were in fine condition, an excellent breeding state, and of very fashionable pedigree. These bright prospects were, however, marred by a slight outbreak of foot-and-mouth disease, which came on last Tuesday; but Mr. Sheldon, who took the chair at the lunch, said that he would keep every lot at his own risk until they were in good health. There seemed no hesitation on the part of the company to give their full value, though no doubt the sale of bull calves, which by the way were rather plain colours, was no doubt affected thereby. The first lot, America, a deep, short-legged Marmaduke—Acomb cow, went to Mr. Slye at 76 gs. Lot 2, Clarence, of the Craggs, also a large animal, was bought by Mr. Fawcett, of Leeds, for 51 gs., who was bidding for America. Col. Kingscote bid for Lady Emily 2nd, a sweet fine Bates—Knightley cow, but Mr. Saville was fortunate in getting her at 81 gs., and with these three good prices at starting a good sale seemed secured. Lot 4, Countess of Barrington 2nd, one of the fashionable Barrington tribe, was too unwell to bring out, so she was sold, as Mr. Strafford remarked, "in Willis' Rooms style," to Mr. Slye for 170 gs. But by far the best lot in the sale was this cow's daughter by Grand Duke 7th, a true Short-

horn, full of character, flesh, and elegance. Put up at 200 she was soon away to 400 gs. Mr. Foster gave five, and at "fifteen" he had finished, so he went to Mr. Oliver, and is certainly—as these times go—one of the best and cheapest cows sold. Mr. F. Leney bought a very good and pure Knightley in Hyampea (110 gs.), and Antoinette, virtually a pure Bates cow (255 gs.) as a beginning of a herd for his son Edward. Mr. Cheuey went in for a capital Darlington cow, newly calved, and Woman in Red of the Blauch tribe, was hardly so good as the sort is generally. Mr. Roper gave 180 gs. for Antoinette's daughter, hardly equal to her dam, and a Knightley heifer in low condition went cheap enough to Sir G. Philips at 55 gs. Mr. Leney took the only Fog-gathorpe specimen at 90 gs., and Mr. Sartoris got a good-looking heifer in Formosa at the same price. A pair of roan hairy heifers of the Craggs tribe were two very good-looking ones, and Mr. George Garne evidently got the best. Save the Grand Duchess of Barrington, the Lucretia's were, perhaps, the most fleshy and handsomest lots, and Mr. J. Wilson-Wilson, of Broadway, bought most of them. Mr. McIntosh purchased two of the Acomb heifers at good prices. The bulls were rather low in condition, and many of them very young. Mr. Scratton, who has gone from Essex to Devon, took Hyampea's son by Duke of Brailes at 70 gs., and this bull promises to make a very useful animal. Mr. Knowles got the yearling Lord Barrington, a long dark roan, at 150 gs., and he also bought a calf of the same sort at 67 gs. for Colonel Gunter. They were mostly by Eighteenth Duke of Oxford, who was not shown. A fall of bull calves in these days of fashion is a serious thing for an average, and the 15 at £44 each pulled down the £112 for the 26 cows to a general, and still very fair average of £56 for the lot all round.

COWS AND HEIFERS.

America, by Marmaduke (14897), Mr. W. W. Slye, 76 gs.
 Clarence, by Grand Sultan 2nd (17999), Mr. Fawcett, Leeds, 51 gs.
 Lady Emily 2nd, by Seventh Duke of York (17754), Mr. G. Saville, 81 gs.
 Countess of Barrington 2nd, by Ninth Duke of Oxford (17738), Mr. W. W. Slye, 170 gs.
 Harebell, by Fourth Duke of Thorndale (17750), Mr. H. W. Beauford, 135 gs.
 Hyampea, by Esop (19197), Mr. E. Leney, 110 gs.
 Darlington 12th, by Duke of Geneva (19614), Mr. E. H. Cheney, 150 gs.
 Antoinette, by Fourth Duke of Thorndale (17750), Mr. E. Leney, 255 gs.
 Grand Duchess of Barrington, by Grand Duke 7th (19877), Mr. R. E. Oliver, 415 gs.
 Lucretia, by Barley-corn (17345), Mr. J. W. Wilson, 50 gs.
 Clarissa, by Oxford (20450), Mr. G. Drewry, 66 gs.
 Woman in Red, by Duke of Darlington (21586), Mr. J. W. Wilson, 67 gs.
 Autumn Queen, by Third Grand Duke (16182), Mr. F. Cobb, 53 gs.
 Edith of Fawsley, by Prince Christian (22582), Sir G. Philips, 55 gs.
 Antonia, by Duke of Darlington (21586), Lord Skelmersdale, 180 gs.
 Giulia, by Duke of Darlington (21586) Sir G. Philips, 75 gs.
 Lady Elizabeth, by Duke of Darlington (21586), Mr. E. Leney, 90 gs.
 Formosa, by Duke of Brailes (23724), Mr. F. Sartoris, 90 gs.
 Lady Surmise, by Duke of Brailes (23724), Col. Kingscote, 71 gs.
 Louisa, by Duke of Brailes (23724), Mr. J. W. Wilson, 80 gs.
 Aspasia, by Earl of Warwickshire (26079), Mr. D. McIntosh, 100 gs.
 Clarice, by Yaratán (23246), Mr. Fawcett, Leeds, 56 gs.
 Malmsey, by Yaratán (23246), Mr. G. Garne, 60 gs.

Leonora, by Duke of Brailes (23724), Mr. J. W. Wilson, 47 gs.
 Ada, by Eighteenth Duke of Oxford (25995), Mr. J. Knowles, 77 gs.
 Amata, by Eighteenth Duke of Oxford (25995), Mr. D. McIntosh, 125 gs.

BULLS.

Earl of Fawsley 3rd, by Duke of Brailes (23724), Mr. D. R. Scratton, 70 gs.
 Lord Barrington, by Duke of Brailes (23724), Mr. J. Knowles, 150 gs.
 Lord of the Border, by Eighteenth Duke of Oxford (25995), Mr. Bacon, 50 gs.
 Earl of Warwickshire 4th, by Eighteenth Duke of Oxford (25995), Mr. Harbage, 42 gs.
 Rosierucian, by Duke of Brailes (23724), Mr. Harbage, 22 gs.
 Cymbal, by Eighteenth Duke of Oxford (25995), Mr. Miller, 20 gs.
 Earl of Clarence, by Eighteenth Duke of Oxford (25995), Mr. Penon, 28 gs.
 Earl of Fawsley 4th, by Eighteenth Duke of Oxford (25995), Sir H. Dashwood, 34 gs.
 Nuneham, by Eighteenth Duke of Oxford (25995), Mr. Harbage, 21 gs.
 Lord Surmise, by Eighteenth Duke of Oxford (25995), Mr. Fawcett, Leeds, 22 gs.
 Albert Victor, by Duke of Brailes (23724), Mr. J. Knowles, 16 gs.
 Duke of Barrington, by Eighteenth Duke of Oxford (25995), Colonel Gunter, 67 gs.

EXTRA BULL CALVES.

Sir Launcelot, by Eighteenth Duke of Oxford (25995), Mr. Denchfield, 10 gs.
 Cremorne, by Duke of Brailes (23724), Mr. Harbage, 16 gs.
 Duke of Darlington 2nd, by Eighteenth Duke of Oxford (25995), Mr. Denchfield, 35 gs.

SUMMARY.

26 Cows averaged	£112	9s.	5d.	.....	£2,924	5
15 Bulls averaged	£44	4s.	2d.	.....	603	3
41 Averaged	.....	£56	0s.	8d.	.....	£3,527 8

SALE OF THE LATE SIR JOHN ROLT'S SHORTHORNS, SHEEP, AND HORSES,

ON TUESDAY, SEPTEMBER 19, 1871.

BY MESSRS. THORNTON AND MINETT.

The late Lord Chief Justice found great relaxation from the cares and anxieties of the Bench in his beautiful estate at Ozleworth, and the small farm and thoroughbred cattle, with which it was stocked. Not only in the cattle, but with the sheep also, he was greatly interested, and had his life been spared, a very first-class stock would have been established, and the show-ring seen more of its specimens. Even so recently as last March, two of the best animals were bought at Kingscote, and the young bulls and heifers that were sent to the popular annual sales at Berkeley Castle betokened the good judgment and skill that were displayed in their management. The flock of Cotswolds and the herd of Shorthorns were of about fifteen years' standing. Mr. Langston's flock at Sarsden supplied the ewes; while the rams were selected from those breeders who produced the finest specimens from the purest blood. Milk as well as beef were sought in the Shorthorns, and several animals possessing good qualities, but of short descent, came from Messrs. Rich of Didmarton. These and their descendants comprised the larger portion of the herd, though an Ursula from the Didmarton sale in 1868, one of the Acombs from Brailes, and a Bracelet from Capt. Oliver's brought a little more fashionable blood.

The company began to drop in by nine o'clock, as Mr. Minett intended beginning with the implements at half-past ten for eleven, and by that time fully two or three hundred were either handling the Cotswolds in the pens, or looking over the Shorthorns as they grazed in the same field; but never had Gloucestershire men to look so sharp, for no sooner did Mr. Minett take up the riding-whip than he proceeded to knock the various lots of implements down, and keep up to the time appointed. When two or three lots of hurdles had been sold at a little more than half what one or two had intended to give, voice took the place of astonishment, and the competition became as brisk as it was good, everything making a good fair value. Mr. Minett drew up to the corner of the tent, with the last lots, just as the bell rang out twelve o'clock for luncheon, the 115 lots of implements having been scattered far and wide in the hour preceding. Col. Kingscote occupied the chair, in a tent that accommodated fully 500, but into which over 600 mauaged by some means to obtain admittance. Mr. John Rolt's health was warmly received, and it was mentioned that he fully purposes continuing that good work which his father had begun. Lord Fitzhardinge gave the auctioneers, and by ten minutes to one the ring side was crowded, the waggons and rostrum filled, and even the walls made a good perch for the light weights. Mr. Thornton gave an account of the breeding of the herd, and the usual first cow, one of the short pedigree, went, heavy in-calf, to Mr. W. Marsh for 37 gs. Lot 3, Dora, was the attraction of the sale, a large fine red cow of the Darlington tribe. She was a purchase at Kingscote last March for 200 gs., having in the meantime produced a good roan bull-calf, and was "half gone" to that splendid Duchess bull Third Duke of Clarence. The 50 gs. first bid was nowhere, as 100 followed it, and several were in up to 150 gs., when the biddings settled down between Lord Fitzhardinge and Mr. G. Hooper, his Lordship getting her at 240 gs.; he also bought her bull calf, an animal of great promise for 46 gs., and no doubt when he comes into the Berkeley annual next spring, he will have grown into a splendid yearling. Numidia 3rd, the best milker in the herd, was a very cheap lot for the Rev. Mr. Way at 32 gs. Mr. Hooper, disappointed in Dora, made up for it in Ursula 21st, a Seventh Duke of York white cow, which he got at 70 gs. Mr. Gow, agent to Sir W. C. Trevelyan, got Amy of the Acomb tribe, and her daughter, Annette, cheap at 41 gs. each, also the Second Duke of Collingham, white heifer, from Ursula 21st at 90 gs., as well as the roan heifer calf from Amy at 29 gs. There was some doubt about Bracelet 7th's breeding, still at three years old she could hardly be called hopeless, and at 60 gs. she may prove a very paying speculation at Berkeley. A very handsome roan heifer by Lord Red Eyes 4th, out of Ursula 21st also goes to the Castle at 74 gs. Duke of Fussbox, the 200 gs. yearling at Kingscote, had grown into a very useful bull, but having been much used, appeared here to disadvantage. Mr. Hooper was Mr. Gow's chief opponent, but at a hundred he seemed "done," and at five guineas more the bull went into Northumberland. The dairy stock and store heifers made fair good prices, though they were not very high in condition.

The Cotswolds were beautifully brought out, and were symmetrical, good-looking sheep, though hardly so large or so grey as the hill breeders seem to desire. The ewes went to a number of purchasers at prices from 57s. 6d. to 86s. 6d. per head. Mr. Holborow, Mr. Clarke, Mr. Hobbs, and Mr. Poole being the larger purchasers. The Chilver lambs ranged from 27s. to 60s. each, but the ram lambs were in capital demand. A two-shear ram went to Mr. Barber for 15½ gs. Mr. J. Fowler gave £9 for a

lamb, and Mr. Garlick £9 2s. 6d. for another. The 21 averaging £5 13s. 6d. Three shearing wethers preparing for Birmingham and Smithfield shows were bought by Mr. Burnett for £9 10 each.

The horses were well known, and chiefly the produce of Matchless and Dairymaid, two well-known mares, and got by Birdhill and Redoubt. A very useful bay gelding, six years old, made 71 gs. (Mr. R. P. Davies), and a young promising horse, Greek Fire, went for 61 gs. to Mr. W. W. Brown, who also gave 40 gs. for a three-year-old gelding out of Matchless. Mr. Burnett gave 100 gs. for a pair of bay cart mares, and a three-year-old cart colt went to Mr. S. Savage for £50. The sale was over by about five o'clock, the company staying through to the end, and the proceeds amounted to nearly £4,000.

The following are the prices and purchasers of the Shorthorns:—

COWS AND HEIFERS.

Bergamot, by Cupid, Mr. William Marsh, Berkeley, 37 gs.
 Goody Two Shoes, by Prince of Orange, Mr. Knight, 23 gs.
 Dora, by Second Duke of Airdire, Lord Fitzhardinge, 240 gs.
 Numidia 3rd, by Duke of Lancaster, Rev. Mr. Way, 32 gs.
 Beatrice, by Prince of Orange, Mr. Marsh, Berkeley, 33 gs.
 Zuleika, by Prince of Orange, Mr. Griffiths, 25 gs.
 Ursula 21st, by Seventh Duke of York, Mr. G. Hooper, Newport, 70 gs.
 Amy, by Duke of Darlington, Mr. Gow, Northumberland, 41 gs.
 Numidia 4th, by Earl of Elgin, Mr. Viveash, Swindon, 35 gs.
 Czarina 5th, by Earl of Elgin, Mr. T. Ind Ozleworth, 24 gs.
 Lady Bell, by Earl of Elgin, Mr. Bush, Olveston, 28 gs.
 Bonnie, by Falconer, Mr. Bush, Olveston, 20 gs.
 Bracelet 7th, by Grand Duke 7th, Lord Fitzhardinge, 60 gs.
 Georgiana, by Falconer, Rev. A. G. Cornwall, Bagpath, 21 gs.
 Zenobia, by Falconer, Mr. Plummer, Cirencester, 21 gs.
 Czarina 7th, by Falconer, Mr. T. Bush, Olveston, 25 gs.
 Blue Bell, by Falconer, Mr. Bush, 17 gs.
 Annie of Wetherby, by Heir of Wetherby, Mr. Scratton, Devonshire, 50 gs.
 Ursula of Ozleworth, by Second Duke of Collingham, Mr. Gow, 90 gs.
 Bergamot 4th, by Falconer, Mr. Viveash, 25 gs.
 Cynthia 2nd, by Falconer, Mr. Chas. Pride, 14 gs.
 Czarina 8th, by Falconer, Mr. Viveash, 18 gs.
 Lady Godiva, by Falconer, Mr. Brown, 15 gs.
 Bergamot 5th, by Falconer, Mr. J. Bennett, 24 gs.
 Czarina 9th, by Falconer, Mr. D. Pugh, Malvern, 22 gs.
 Annette, by Duke of Brailles, Mr. Gow, 41 gs.
 Ursula of Ozleworth 2nd, by Lord Red Eyes 4th, Lord Fitzhardinge, 74 gs.
 Bergamot 6th, by Second Earl of Walton, Mr. Pugh, 27 gs.
 Bergamot 7th, by Earl of Stafford, Mr. Dobson, 15 gs.
 Anne, by Second Earl of Walton, Mr. Gow, 29 gs.

BULLS.

Duke of Fussbox, by Third Duke of Clarence, Mr. Gow, 105 gs.
 Lord Godolphin, by Second Earl of Walton, Mr. T. Ind, 10 gs.
 Duke of Ozleworth, by Third Duke of Clarence, Lord Fitzhardinge, 46 gs.
 Duke of Miserden, by Earl of Stafford, Lord Fitzhardinge, 28 gs.
 Czar, by Second Earl of Walton, Mr. Pope, near Cheltenham, 10 gs.
 Baron Winstone, by Second Earl of Walton, Mr. Plummer, 11 gs.

THE ROYAL AGRICULTURAL BENEVOLENT INSTITUTION.—A Committee has been formed for the purpose of raising Funds to present Mr. Naish, the honorary Local Secretary for Hampshire and one of the Executive Council, a substantial Testimonial. Mr. Naish has for the last ten years not only worked hard in the field of benevolence, but has generously contributed his means and time towards the furtherance of these special objects.

THE DETERIORATION OF SHORTHORNS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—From some remarks on my paper published in your last number, it would appear that on two or three points I did not express myself so clearly as I intended. The word "quality" as I have used it in the portion of my paper to which you refer, includes the essential points which constitute a good animal, and is not used except where otherwise specified, to signify the mere quality of flesh. With regard to your paragraph referring to my remarks on the selection of a bull, I think that on a second perusal of my paper the seeming inconsistency will disappear. A distinction should be made between my remarks addressed to farmers and those addressed to breeders of first class stock. The sentence you quote "select a bull from a herd superior to your own, and above all with a pedigree without a blot," referred solely to breeders, and I think I explained that a long pedigree, such as the pedigree breeders would choose, was not necessarily a good one. My objection is by no means to any particular strain, but to every strain where size, substance, and form are sacrificed to mere touch.

I did not for one moment attempt to deny that those who have pursued this system have realised enormous sums of money, but my arguments were meant to prove that the practice must end in the rapid deterioration of Shorthorns.

I am, sir, yours obediently,

WM. SANDAY.

Radcliffe-on-Trent, Nottingham, Sept. 21, 1871.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Mr. Sanday has shown me the draft of his paper on the above subject, which he read at the meeting of this Chamber at Newark, on the 13th inst., and I find that the sentence upon which you comment in reference to Shorthorns;—"My own opinion is that the animals bred at the present day are inferior *both in size and quality* to those bred 20 or 30 years ago"—is incorrectly printed. The words "both in size and" are an interpolation in pencil, and not in Mr. Sanday's writing. The sentence should read "are inferior in quality," &c.

Your obedient servant,

CHAS. B. DORAN.

Chamber of Agriculture, Nottingham, Sept. 23.

CATTLE DISEASE STATISTICS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—When you say a word more upon cattle diseases, will you ask what becomes of all the statistics that are sent to the Veterinary Department of the Privy Council? You have no idea how expensive, complex, and troublesome these returns are; how they insist upon having them sent in every week, and yet no Parliamentary return, or any weekly or monthly statement is made to the public of the progress or state of our diseases among stock! And those gentlemen take £12,000 a-year for doing nothing more than collect statistics, that are never published; or they send out Privy Council Orders that half the local authorities cannot or will not obey.

Yours,

A TENANT FARMER

(Who gives his name).

LEIGH AGRICULTURAL ASSOCIATION. — The eleventh annual show of the Leigh Agricultural Society was held on Thursday, near Bedford Leigh railway station. There was a large attendance of visitors, but the number of entries in the various classes of stock exhibited in the showyard did not approach those of last year. In the show of stallions Mr. Peter

Read, Partington, gained the first prize, and the second fell to Mr. Edward Waterworth, Standish. For the best entire colt, under two years, for agricultural purposes, Mr. Lawrence Ashcroft, Mawdsley, received the first prize. A silver cup, value £10, for the best mare or gelding hunter, was taken by Monkey, the property of Mr. W. G. Walmesley, Westwood Hall, Wigan. Mr. Jas. Green, Scholes, obtained the second award for his mare Maggie, aged four years. The prize for leaping was won by Proper, belonging to Mr. T. H. Newton, Altrincham. Mr. J. Fielden, Lostock Grange, near Bolton, carried off the second premium. There was a creditable exhibition of horses of other kinds. In the competition for the best brood mare, Mr. George Stephenson, Worsley, gained the first award, and Mr. H. Nield, Worsley, came in second. The various classes of stock were well represented. Young Windsor, a white bull, shared the honours of the first prize for the best bull of any breed with Lord of the Vale. The former animal is owned by Mr. H. Nield, Worsley, and the latter by Mr. W. T. Hulton, Hulton Park, near Bolton. The remaining prizes were awarded as follows:—Best bull not exceeding one year old: 1, C. W. Brierley, Middleton; 2, H. Nield, Worsley. Best dairy cow, in calf or milk: 1, P. Johnson, Great Lever; 2, Henry Nield, Worsley. Pigs: Best boar of large breed, P. Eden, Salford; best boar of middle breed, H. Nield, Worsley; best boar small breed, 1 and 2, P. Eden, Salford; best breeding sow, large breed, 1 and 2, P. Eden, Salford; best fat pig large breed, R. Yates, Leigh. Cottagers' prizes: Best breeding sow, any breed, S. Ritson, Bedford. There was nothing of marked superiority in the poultry and pigeon show. There was a strong array of dogs of all breeds.

WESTERHAM MARKET.—The revival of the market. Several of the old inhabitants affirm that it is nearly 70 years since the last market of live stock was held here, and which then ceased owing to a murrain by which a large number was destroyed, and a spot known as Currant Hill, just outside the town, is pointed out as the place where heaps of the wretched animals were buried, but from which burial place it is to be hoped many of them have returned to their primeval condition long ere this. If the contents of the market on Wednesday last, both as regards number and quality, is a fair specimen of those that are expected to follow on every second Wednesday in each month, many large towns will have cause to be envious. Mr. Dalton purchased some heifers of Mr. Jno. Fox, of Brook-place, Sundridge, and of Mr. Steer; Mr. Ingfield took into custody two fine Shorthorns belonging to Col. Warde. Mr. Dark sold several heifers. Mr. F. Young had a score of fine Devons consigned to him, but we did not hear whether he sold any or not; his price was believed to be rather high. Mr. White, of Shoreham, purchased one of Mr. Bettridge's Devons, and Mr. Thorne, of Brastead, bid high for the remainder. Mr. Palin purchased several Welshman. The veal was also exceedingly good-looking, Mr. Walter Osborne, Limpsfield, getting £7 15s. for one of Mr. Twort's calves (which can't be beaten), Mr. Blythe, of Sevenoaks, being the purchaser. Mr. Ingfield and others also bought at £7 7s. Mr. Watkins and Mr. Jas. Youngs also found ready buyers at long prices. The show of mutton was unusually good, and many pens were sold. Mr. Osborne disposed of 15 Downs, belonging to Mr. Ingfield, to Mr. Muynard, of Greenwich, who, we believe, caters for Prince Arthur. Mr. F. E. Clarke sold Mr. Palin's pen of fat ewes to Mr. Thorne, of Brasted. Mr. Dark and others also succeeded in selling all they had got there at long prices.

THE BEDFORDSHIRE AGRICULTURAL SOCIETY. —At the last meeting of the Committee Earl Cowper, K.G. was elected a member. With a view to extend the influence and usefulness of the Society, the President, Mr. James Howard, M.P., proposed that meetings for the discussion of practical subjects connected with agriculture should be held during the winter months. The suggestion was cordially approved, and Mr. E. Crouch, of Clophill, the Vice-President, consented to introduce the subject of The Feeding and Management of Stock; Mr. Charles Howard, of Biddenham, also undertook to read a paper upon The Best Mode of Harvesting Crops; and the President promised a paper on Land Tenure. The Committee passed a resolution expressing its approval of the efficient manner in which the Secretary had conducted the business of the Society, and voted him a bonus in addition to his salary.

REVIEW OF THE CATTLE TRADE FOR THE PAST MONTH.

A fair amount of steadiness has been observable in the cattle trade during the month. The supplies of beasts have been good, owing to the liberal receipts from abroad; but from our own grazing districts the arrivals have not been extensive. The foot-and-mouth disease continues to make great ravages, and causes much apprehension. The quality of the English stock has been satisfactory, and foreign breeds have come to hand in fair condition. Although not active, the trade has been firm, and the choicest home breeds have made 5s. 10d. per 8lbs. The best foreign stock has been disposed of at from 5s. 2d. to 5s. 6d. per 8lbs.

As regards sheep, the supplies have been only moderate, but the quality has been good. The trade has been firm, and values have been well maintained. Choice small breeds have been in request, and have commanded extreme currencies, the best Down and half-breeds selling at 7s. per 8lbs. For heavy sheep the demand has been less active, but prices have ruled very firm.

Calves have been in fair supply, and moderate request at full prices.

Pigs have been disposed of at about late rates.

The total imports of foreign stock into London during the month have been as follows:

	Head.
Beasts	14,130
Sheep and Lambs	70,375
Calves	2,574
Pigs	5,470

COMPARISON OF IMPORTS.

Sept.	Beasts.	Sheep & Lambs.	Calves.	Pigs.
1870	9,329	31,661	2,109	3,039
1869	13,745	47,341	3,385	4,587
1868	11,051	11,846	1,493	3,116
1867	11,082	34,572	779	4,500
1866	15,405	45,625	2,183	2,942
1865	12,553	69,792	3,192	9,434
1864	14,444	48,201	3,161	5,701
1863	11,923	50,780	3,213	2,691
1862	7,219	33,985	2,257	2,546
1861	6,759	36,236	2,323	3,214
1860	8,120	37,420	2,200	3,188
1859	6,966	49,141	1,744	1,895
1858	5,999	26,205	2,735	2,472

The arrivals of bullocks from our own grazing districts, as well as from Scotland and Ireland, thus compare with the three previous years:

Sept., 1868.	Sept., 1869.	Sept., 1870.	Sept., 1871.
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From Lincolnshire, Leicestershire and Northamptonshire.....	12,750	11,450	8,550	9,600
Other parts of England.....	1,990	1,730	2,800	1,750
Scotland	360	3	315	20
Ireland	352	830	1,200	400

The total supplies of stock exhibited and disposed of at the Metropolitan Market during the month have been as under:

	Head.
Beasts	30,660
Sheep and Lambs.....	176,230
Calves	3,929
Pigs	579

COMPARISON OF PRICES.

Sept.	Beasts.	Sheep and Lambs.	Calves.	Pigs.
1870	23,115	126,570	2,889	1,115
1869	28,255	156,680	4,142	705
1868	26,940	157,440	2,643	1,630
1867	75,290	127,510	1,565	2,979
1866	26,560	129,430	1,984	3,120
1865	27,040	151,440	3,324	3,287
1864	30,910	137,490	3,184	3,700
1863	27,710	131,100	2,458	2,657
1862	28,074	139,200	2,364	3,031
1861	26,950	142,990	2,260	3,626
1860	27,980	144,450	3,302	2,922
1859	24,560	145,430	1,891	2,771
1858	27,446	131,150	3,280	4,281

Beasts have sold at from 3s. 8d. to 5s. 10d., sheep 4s. 6d. to 7s. 2d., calves 3s. 8d. to 5s. 8d., and pigs 3s. 6d. to 5s. per 8lbs., to sink the offal.

COMPARISON OF PRICES.

	Sept., 1867.				Sept., 1868.					
	s.	d.	s.	d.	s.	d.	s.	d.		
Beef from	3	2	to	5	2	3	2	to	5	6
Mutton	3	4	to	5	2	3	2	to	5	2
Veal	4	0	to	5	8	3	6	to	5	0
Pork	3	6	to	4	4	3	4	to	4	4

	Sept., 1869.				Sept., 1870.					
	s.	d.	s.	d.	s.	d.	s.	d.		
Beef from	3	4	to	5	2	3	8	to	6	0
Mutton	3	4	to	5	8	3	10	to	6	2
Veal	4	0	to	5	4	3	6	to	6	0
Pork	4	2	to	6	0	4	4	to	6	0

WEALD OF KENT.

The farmers are very actively engaged in securing the latter portion of the product of the year—namely, hops. Many of the plantations will produce a sample both fine in quality and very satisfactory in quantity. The Weald of Kent is highly favoured; for very many parishes, although showing condition and quality, are very short in quantity, and garden after garden will be picked far too quickly to satisfy either the growers or the labouring population, to whom a heavy picking is as important as to their employers. Caution is at this moment the legitimate attitude of both producers and purchasers. The growth of 1871 must, under any circumstances, be small in the aggregate, however satisfactory to the planter in certain exceptional instances. No really close estimate can at present be formed as to what will be the yield of our hop gardens generally from the gathering recently commenced; but from what we hear of the crop thus far it almost invariably proves lighter than the estimate formed from its appearance before picking. Cranbrook and a few of its adjoining parishes will probably produce half a crop—say, from 5 to 8 cwt. to the acre; while some will not be much over 1 cwt. The yield of wheat this year is disappointing, and will prove fully a third short of the average. Many samples are very thin, and will not reach 60lbs. per bushel in weight. Barley turns out the reverse of wheat; quality good, and the crop above an average. Beans do not come out so well as the appearance led us to expect; still, on the whole, they will not come much below an average. Peas are various; on some grounds a good crop has been secured, while others turn out indifferent. Oats are well spoken of, and the crop will prove a good one. Turnips and mangolds look very promising. All kinds of stock realize high figures, particularly sheep, which are very dear. We have no hesitation in saying that the balance-sheet of the farmers this year will cause them to be thankful.—Sept. 16.

A NEW SELF-DELIVERY REAPER.—According to the *Scotsman* an entirely new self-delivery reaping machine, recently introduced into this country from New York by the inventor, Mr. Walter A. Wood, was tried on a field of oats on the farm of Southfield, Duddingston, N.B., with complete success, as in several respects free from the defects of many self-deliverers. The principle of construction in this machine reduces the draught to a minimum. The balance is perfect, the weight being so distributed as to avoid all pressure upon any particular part, and especially upon the horses. The knives or cutting part of the machine is similar to those already in use; but to obtain the direct action on the knife the cutter bar is in a line with the axis, and the pitman rod works through the wheel and in a direct line. The height of cut can be regulated with ease, the points of the fingers can also be elevated or depressed, and the whole machine may be managed by a boy. The motive power is acquired by a wheel three feet in diameter with a 10-inch face. The gear is internal, the wheel without spokes, supported by side plates, and working on friction rollers. The rake and gathering arms work direct from the main shaft, and by the way in which the pivot is constructed they revolve in an oblique manner in the upward turn, in order to clear the driver. This rake is entirely under the control of the driver, by which means he regulates the size of the sheaf, and it also enables him to carry the corn when turning corners. The driver's seat is at the side of the machine, out of the way of the rakes, just where his weight is most required, and where he can see and control the work. The reaper has a 5-foot cut, and is driven by two horses.

REVIEW OF THE CORN TRADE DURING THE PAST MONTH.

With nearly three-parts of September dry and the first fortnight summerlike, unusual opportunities have been afforded for gathering-in the crops, and all this fine time was wanted, from their simultaneous ripening and the scarcity of hands to do so large an amount of work. But we may now consider this matter in the main accomplished fortunately without any sprouting of the corn, and as thrashing proceeds we shall be better able to estimate the yield of wheat, about which alone there seems to be so many doubts. That it varies exceedingly this season there can be no question, and we are sorry to say that the first reports of its general unproductiveness get more and more confirmed as our information increases. In some localities it is viewed as a fifth below an average, in some a fourth, and on others still more, with inferiority of quality to boot. If, therefore, we take it at a seventh we shall have as the result 3 qrs. to the acre instead of 3½. Thus, on 3,575,996 acres we shall only have a produce of 10,727,988 qrs., and as our average imports have been 8,400,000 qrs., instead of that quantity we are likely to require 1,787,998 qrs. more, or 10,187,998 qrs. in all, between now and next harvest. A large commercial operation enough in itself, but with shipping and capital commensurate, quite possible, if not interfered with materially by the wants of France, which are now rated at 11½ to 13 million quarters. But we cannot help considering this estimate exaggerated, and it is to be remembered that the rural population of France have yet some old stores on hand, and are well content to live on other less expensive cereals than bread, as white beans, barley, lentils, and other pulse, besides the consideration that they have much land in the south which has early gatherings, and are near to the early countries, Spain, Italy, and Algiers, to make up a void at the close of the season. Then there has been an immense crop of maize in America, and there is abundance of red wheat in Southern Russia to be had at low rates. But there is enough in our own experience, and these reports, partly corroborated by a continuance of high prices just after harvest, to justify the husbanding of our own resources and the prevention of all waste, more especially as we have so great a diminution in our live stock, with a consequent certainty that meat must still be dear for a long time to come. Prices have, however, been somewhat easier lately in France, Hungary, and some parts of Germany. The following rates were recently quoted at the places named: Best white wheat at Paris 69s., best red Richelle 61s.; Ghirka wheat at Marseilles 52s., low Danish mixed with rye 43s. 6d. At Havre American red 59s., wheat at Brussels 63s., Courtrai the same, Antwerp 66s. 6d., Amsterdam Polish 60s., white at Rotterdam 63s., Mecklenburg at Hambro', cost, freight, and insurance 64s.; Danish red 61s. cost, freight, and insurance. At Manheim, to which much low Russian has been shipped from London, 60s., for native sorts; wheat at Danzig best new quality 63s. cost, freight, and insurance; at Alexandria 42s. free on board; at Valladolid in Spain 50s. 6d.; at San Francisco 66s. cost, freight, and insurance; at New York, No. 2 spring 47s. 9d. free on board per 480lbs.

The first Monday in Mark-lane commenced on a very small English supply of wheat, with, however, plenty from Europe and America. The number of fresh samples on the Essex and Kentish stands was limited, and as

there was a seed demand for France factors were enabled to obtain 1s. advance on the previous rates. The demand also for the Rhenish Provinces hardened the values of Russian and American red to a similar extent. Cargoes afloat were also in request, and good qualities were quite as much dearer. The weather being favourable for the harvest gatherings, the wheat trade in some parts of the country was dull, and a few places accepted a small decline, but the general aspect of the trade was upward fully 1s., as at Louth, Newark, Sleaford, Stockton, Wakefield, &c.; several noting a rise of 1s. to 2s., as Birmingham, Bristol, Lynn, and Manchester, and most of Saturday's markets. Though Liverpool was scarcely dearer on Tuesday, Friday's market was brisk at 3d. to 4d. more per cental. Edinburgh and Glasgow were 6d. to 1s. per qr. dearer; but the wheat trade at Dublin was quiet.

On the second Monday there was a fair arrival of English wheat, and again plenty of foreign, though the supplies were not quite so free. The show of fresh samples from the near counties was not equal to expectation, and the French seed demand still continuing, select lots sold at very high rates, and prices generally were 1s. to 2s. higher, but millers made their purchases slowly, and with some reserve. With orders still on hand for red wheat for the Rhine, holders of Saxonska and American qualities were able to obtain an advance of fully 2s. over the previous Monday's rates; and fine cargoes afloat were freely placed at 2s. to 3s. more money. The London advance this week appears to have taken the country by surprise, and with fine weather ruling, some places were only firm; others were 1s. dearer, as Bury St. Edmunds, Birmingham, Stockton, Uppingham, &c.; a greater number equalled the London improvement of 1s., as Boston, Brigg, Gloucester, Ipswich, Lynn, Louth, Market Rasen, Rotherham, &c.; while Bristol, Gainsboro', and Melton Mowbray outwent London, noting an advance of 2s. to 3s. per qr. Liverpool on Tuesday was 2d. to 3d. per cental dearer, but yielded 1d. to 2d. on Friday; and most of the Saturday's markets showed symptoms of weakness. Edinburgh was up 2s. per qr., and Glasgow 2s. 6d. to 3s. Dublin was 6d. to 1s. higher, with a good demand.

On the third Monday there was a fair supply of home-growth, and again abundance of foreign. The show of fresh samples from Essex and Kent was limited. New white, not proving fine in quality or condition, was fully 1s. per qr. lower, and even fine old samples with difficulty obtained the previous rates. Though there were still orders for foreign of low quality, the limits were reduced 1s. per qr., at which reduction buyers found they could readily suit themselves. Floating cargoes scarcely maintained the full prices that were made on Friday. With a continuance of fine weather, and more wheat brought to the country markets, they became less active, and new qualities everywhere sold at 1s. per qr. less money, while many places quoted the reduction 1s. to 2s., as Alford, Melton Mowbray, Stockton, Market Harborough, Newcastle, Newark, Rotherham, Sleaford, and Birmingham, while Hull, Louth, Boston, &c., called the reduction 2s., and Brigg and Newbury made it 2s. to 3s. Jiverpool was down 3d. per cental on Tuesday, and 1d. more on Friday. Edinburgh only noted a dulness in the trade. Glasgow was down 1s. to 1s. 6d. per qr. At Dublin there

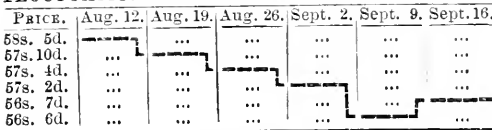
COMPARATIVE AVERAGES.

Years.	WHEAT.			BARLEY.			OATS.		
	Qrs.	s.	d.	Qrs.	s.	d.	Qrs.	s.	d.
1867...	61,026½	...	62 11	8,039½	...	40 7	3,151½	...	27 0
1868...	91,075½	...	64 1	25,265½	...	44 0	4,005½	...	23 5
1869...	57,593½	...	60 5	5,394½	...	39 3	2,391½	...	25 5
1870...	91,811	...	36 4	24,441½	...	36 4	4,749½	...	23 9
1871...	71,419½	...	66 7	2,186½	...	35 8	2,472½	...	24 9

AVERAGES

FOR THE PAST SIX WEEKS:			
	Wheat.	Barley.	Oats.
	s.	s.	s.
	d.	d.	d.
Aug. 12, 1871.....	58 5	35 11	26 6
Aug. 19, 1871.....	57 10	35 9	27 6
Aug. 26, 1871.....	57 4	32 7	26 7
Sept. 2, 1871.....	57 2	35 0	26 4
Sept. 9, 1871.....	56 6	35 1	26 0
Sept. 16, 1871.....	56 7	35 8	24 9
Aggregate of the above	57 4	35 0	26 3
The same week in 1870.....	48 6	36 4	23 9

FLUCTUATIONS IN THE AVERAGE PRICE OF WHEAT.



BRITISH SEEDS.

Mustard, per bushel, brown	13s. to 15s.	white	8s. to 9s. 6d.
Canary, per qr.	...	...	62s. 60s.
Cloverseed, new red	...	...	62s. 64s.
Coriander, per cwt.	...	...	22s. 23s.
Tares, winter, new, per bushel	...	...	6s. 6d. 7s.
Trefoil, new	...	...	28s. 34s.
Ryegrass, per qr.	...	...	34s. 36s.
Linseed, per qr. sowing	64s. to 66s.	crushing	58s. 63s.
Linseed Cakes, per ton	...	...	£11 0s. to £11 5s.
Rapeseed, per qr.	...	...	82s. 84s.
Rape Cake, per ton	...	...	£6 6s. 0d. to £6 10s. 0d.

FOREIGN SEEDS.

Cloverseed, red	48s. to 53s.	white	64s. 70s.
Hempseed, small	40s. to 41s.	per qr.	Dutch 44s. 45s.
Trefoil	...	...	24s. 28s.
Ryegrass, per qr.	...	...	34s. 36s.
Linseed, per qr. Baltic	58s. to 62s.	Bombay	63s. 64s.
Linseed Cakes, per ton	...	...	£10 10s. to £11 5s.
Rape Cake, per ton	...	...	£6 6s. to £6 10s.
Rapeseed, Dutch	...	...	76s. 80s.
Coriander, per cwt.	...	...	22s. to 23s.
Carraway, new	...	...	36s. 37s.

HOP MARKET.

BOROUGH, MONDAY, Sept. 25.—Since our last report we have had a very brisk demand for Hops of the new growth at very firm prices. This day's market is again active at an advance of 4s. to 5s. Yearlings have also experienced a good sale, at a slight advance in value. Reports from the plantations state the picking to have progressed favourably with a slight falling off in colour.

Mid and East Kent	£9 0	£10 10	£12 12
Weald of Kent	8 10	9 9	10 10
Sussex	7 5	7 15	8 12
Faruham and Country	11 0	13 0	15 0

YEARLINGS.

Mid and East Kent	3 0	4 4	6 10
Weald of Kent	3 0	4 0	5 15
Sussex	3 0	3 10	5 0
Faruham and Country	4 10	5 5	6 0
Olds	1 0	1 5	1 10

CANTERBURY HOP MARKET, (Saturday last).—The supply of new samples to-day was not equal to the demand. The picking being now finished, it is beyond dispute that the crop has been greatly over-set. One planter, that had 1,000 pockets last year, this year has 150. Another set his growth at 3 tons before commencing to pick; he has 25 cwt. Two of 12 acres each have each 3 pockets; and numbers have none. The old duty 75,000 to 80,000:

East Kents	£10 0	to 13 0
Mid	9 0	to 12 0
Weald	7 10	to 9 10
Sussex	7 0	to 8 10
1870's.		
East Kents	5 0	to 7 7
Sussex	3 0	to 5 5

POTATO MARKETS.

BOROUGH AND SPITALFIELDS.

LONDON, MONDAY, Sept. 25.—Moderate supplies of potatoes have been on sale. There has been a fair demand at our quotations. Last week's import consisted of 81 bags, 594 packages, and 300 barrels from Antwerp.

Regents	60s. to 75s. per ton.
Shaws	55s. to 65s. "
Kidneys	100s. to 120s. "
Rocks	55s. to 60s. "

PRICES OF BUTTER, CHEESE, HAMS, &c.

BUTTER, per cwt.:	s.	s.	CHEESE, per cwt.:	s.	s.
Dorset	134 to 140	Cheshire	66 to 80		
Friesland	130 134	Dble. Glouc., new	66 70		
Jersey	110 118	Cheddar	60 90		
FRESH, per doz.:	15 17	American	43 56		
BACON, per cwt.:		HAMS: York	94 100		
Wiltshire, green	72 78	Cumberland	92 100		
Irish, green, f.o.b.	78 73	Irish	93 104		

LONDON CHEESE MARKET, (Thursday last).—We can report but little alteration in the English Cheese trade since this day week. Prime upright flaky Cheshire lumps are rather more sought after at moderate rates, and really fine are saleable to a limited extent. Common descriptions at 40s. and similar prices are neglected. Choice Cheddar and fine double Cheese are scarce, and meet a ready sale. Scotch Cheese is too dear for this market. The demand for American Cheese continues good, especially for fresh and fine factory dairies, which may now be quoted at 54s. to 56s. Medium and good, though taken pretty freely at last week's prices, have realized no important advance. The lower priced useful sorts, namely, at about 40s. to 46s. have been readily taken from the market. The arrivals this week are 61,090 boxes.—CORDEROY AND CO.

NEW YORK CHEESE MARKET.—The following is from the *New York Produce Price Current* of September 2nd. The American cent is of less value than our halfpenny—say 1s. equal to 26 cents: Cheese—Receipts, 65,554, or 15,102 less than last week; exports, 63,134. Corresponding week last year: receipts, 45,242, with 39,552 exported. Cable, 49s.; gold, 112½. Total receipts for the month, 256,334, against 245,641 for August last year, which counts an extra week. Shipments for the past four weeks, 267,723, against 250,668 for five weeks one year ago. It is very evident that our dairy products are largely in excess of what they have been in any previous year. The market is as blue as skim-milk, diluted at that. A decline of 1s. 6d. abroad, and the highly-entivated tastes of the English shippers, who test cheese by every known method short of quantitative analysis (it is not certain that chemical tests are not used upon the samples taken to their offices), and consign everything not super fancy to a low grade, are the assigned reasons of ¼c. to ½c. decline upon our market. We regard 10½c. as the closing or afternoon price of fancy Factory, though sales were made this morning, in a few instances, at 10¼c. When that price could not be obtained, 10¼c. was accepted for just as good cheese. Shippers are getting very fair useful Factory cheese at 8c. to 9c., though they paid 10c. for 704 really good, and 10¼c. for 260 fancy. A few new Pineapple cheese have been received, but there is no call for them. The country market is about ¼c. ahead of prices here. Receipts since September 1st, 1870, 1,553,418 pkgs.

ENGLISH WOOL MARKET.

CURRENT PRICES OF ENGLISH WOOL.		s.	d.	s.	d.
FLEECES—Southdown hogs	per lb.	1 8	to 1 9		
Half-bred ditto	per lb.	1 8½	to 1 9		
Kent fleeces	per lb.	1 8½	to 1 9½		
Southdown ewes and wethers	per lb.	1 7	to 1 8		
Leicester ditto	per lb.	1 6	to 1 7		
SORTS—Clothing, picklock	per lb.	1 7	to 1 8		
Prime	per lb.	1 4	to 1 5		
Choice	per lb.	1 3	to 1 3½		
Super	per lb.	1 2	to 1 2½		
Combing, wether mat	per lb.	1 10	to 1 11		
Picklock	per lb.	1 6	to 1 7		
Common	per lb.	1 3	to 1 4		
Hog matching	per lb.	1 11	to 2 0		
Picklock matching	per lb.	1 6	to 1 7		
Super ditto	per lb.	1 3	to 1 4		

THE FARMER'S MAGAZINE.

OCTOBER, 1871.

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AGRICULTURAL MEETINGS IN 1871.

- OCTOBER 3.**—Royal East Berks Agricultural Association.—Meeting at Maidenhead. Entries closed. President, Colonel Vansittart. Secretary, Mr. W. Eulstrode, Mount Farm, Cookham Dean, Maidenhead.
- OCTOBER 5.**—Farnworth Agricultural Society.—Meeting at Farnworth. Entries closed. Secretary, Mr. J. Davenport, Ditton, Warrington.
- OCTOBER 9.**—Ludlow Agricultural Society.—Meeting at Ludlow. Entries closed. President, William Blakeway, Esq. Secretary, Mr. T. Weyman, Ludlow.
- OCTOBER 17 and 18.**—Herefordshire Agricultural Society.—Meeting at Hereford. Entries closed. President, M. Clive, Esq. Secretary, Mr. J. T. O. Fowler, Hereford.
- OCTOBER 20.**—Usk Farmers' Club.—Annual Meeting. Secretary, Mr. J. H. Clark, Usk.
- OCTOBER** —Ayrshire Agricultural Society.—Meeting at Kilmarnock. President, The Earl of Glasgow. Secretary, Mr. J. M. Murtrie, Ayr.
- NOVEMBER** —Framlingham Farmers' Club.—Meeting at Framlingham. Entries close November 1. President, F. S. Corrance, Esq., M.P. Secretary, Mr. W. B. Kent, Earl Soham, Wickham Market.
- NOVEMBER 18.**—Royal Berks Root Show at Reading. Entries close November 15. Secretaries, Sutton and Sons, Reading.
- NOVEMBER 22 and 23.**—Rutland Agricultural Society.—Meeting at Oakham. Entries close November 6. President, Charles Winston Eaton, Esq. Secretary, Mr. E. Wortley, Ridlington, Uppingham.
- NOVEMBER 23 and 24.**—Chippenham Agricultural Society.—Meeting at Chippenham. Entries close November 17. President, Sir John Neild, Bart. Secretary, Mr. E. Little, Lanhill, Chippenham.
- NOVEMBER 24.**—Carter & Co.'s Root Show.—At 237, High Holborn. Entries close November 15.
- NOVEMBER, 25, 27, 28, 29, and 30.**—Birmingham and Midland Counties Cattle and Poultry Show in Bingley Hall, Birmingham. Entries close October 25. President, Earl Beauchamp. Secretary, Mr. T. B. Lythall, New-street, Birmingham.
- DECEMBER 4, 5, 6, 7, and 8.**—Smithfield Club Fat Cattle Show, in the Agricultural Hall, Islington.—Entries close for Implements October 2; for Stock, November 1. President, The Marquis of Exeter. Secretaries, Mr. Brandreth Gibbs and Mr. D. Pullen, Half-moon Street, Piccadilly.
- DECEMBER 5, 6, and 7.**—Yorkshire Fat Stock Show, at York.—Entries close November 16. President, The Earl of Zetland. Secretary, Mr. J. Watson, Lendal Bridge, York.
- DECEMBER 6, 7, 8, and 9.**—Royal Dublin Society.—Christmas Fat Stock Show in Dublin. President, The Lord-Lieutenant of Ireland. Superintendent, Mr. A. Corrigan, Dublin.
- DECEMBER 7.**—Rugby and Dunchurch Fat Stock Show, at Rugby.—Entries close November 22. President, The Earl of Dalkeith. Secretary, Mr. E. Harris, Rugby.
- DECEMBER 12 and 13.**—Tredegar Agricultural Show at Newport, Monmouthshire. Entries close November 15. President, Lord Tredegar. Secretary, Mr. J. G. Palling, Newport.
- DECEMBER 12, 13, and 14.**—West of England Fat Stock Show. Meeting at Plymouth. Entries close Nov. 1. President, the Earl of Morley. Secretary, Mr. J. Moon, Athenæum-lane, Plymouth.
- DECEMBER 13.**—Rye Fat Cattle Show.—Meeting at Rye. Entries close November 29. President, Alex. B. Vidler, Esq. Secretary, Mr. H. E. Paine, Rye.
- DECEMBER 15.**—Carmarthen Cattle and Poultry Show.—Meeting at Carmarthen. Entries close Dec. 2. President, E. J. Sartoris, Esq., M.P. Secretary, Mr. D. Prosser, White House, Carmarthen.

THE
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AND
AGRICULTURAL JOURNAL,

IS THE

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No. 6, Vol. XL.]

DECEMBER, 1871.

THIRD SERIES.

Per
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THE

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AND

MONTHLY JOURNAL

OF

THE AGRICULTURAL INTEREST.

Dedicated

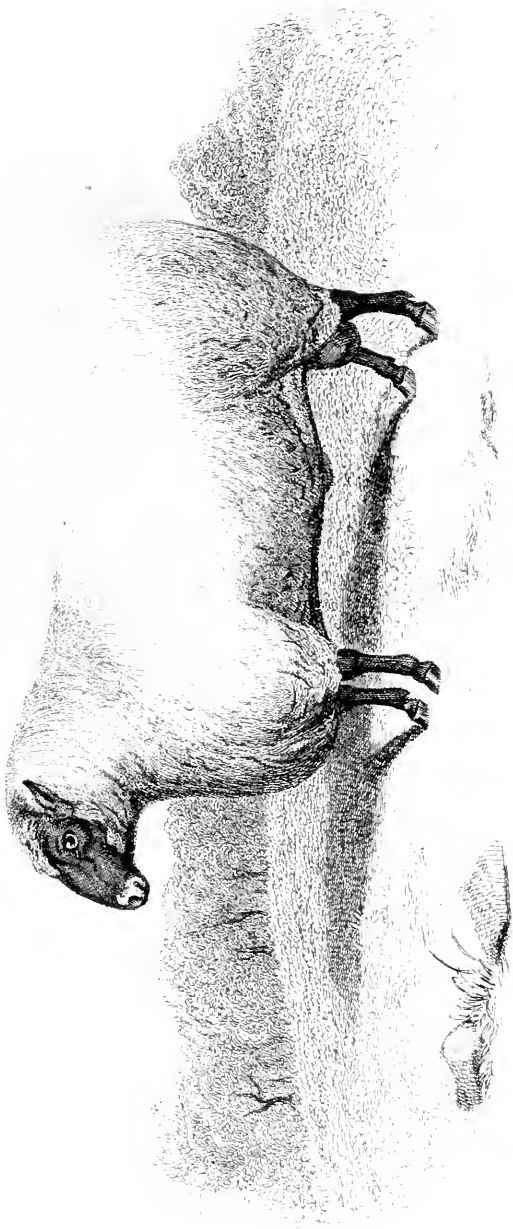
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1860



THE FARMER'S MAGAZINE.

DECEMBER, 1871.

PLATE I.

A "ROYAL" SHROPSHIRE RAM.

THE PROPERTY OF MR. THOMAS MANSELL, OF ADCOTT HALL, SALOP.

The ram Major, bred by Mr. Mansell, is by Conservative, dam by Maccaroni, out of a ewe by Short-legged Patentee.

Conservative, also bred by Mr. Mansell, was the reserve and of course highly commended ram at the Oxford meeting of the Royal Agricultural Society in 1870; having previously been also noticed at the Manchester Royal meeting, where he was let to Mr. Charles Byrd, of Littywood, and was consequently the sire of both the first prize shearling and first old sheep at Wolverhampton. Conservative was subsequently sold to Mr. Nock, of Sutton Maddock, as whose property he once more reached to a Royal reserve at Wolverhampton. Oxford Hero, the second prize shearling at Oxford, was also by Conservative, as well as other winning sheep at the national shows. Maccaroni, bred at Adcott, was sire of Mansion, a first prize ram at Plymouth.

Major was first exhibited at Oxford, where he was not noticed by the judges; but was let to Mr. F. Byrd, of Dunstan, for 63 gs.; who returned the sheep in very good condition, and he took first prize in the old class at Wolverhampton. Mr. Byrd's first and second prize ram lambs at the recent Penkridge meeting were by Major, who has since been sold to Mrs. Beach, of The Hattons.

In our report of the Wolverhampton meeting on the Monday following, we said: "The first prize shearling ram was by the reserve sheep in the older class, and this three-shear, although shown by Mr. Nock, was bred by Mr. Mansell. The second prize shearling was the property of Mr. Mansell, as was the first prize old sheep, and the two best pens of lambs were by an Adcott ram. It will be so seen that many of the prize sheep go back to the same

strains of blood, whilst nearly all were of the same character. The old rams were declared to be superior to the shearlings, and the Adcott first was at once accepted as an illustration of his order. He is really handsome to look on, has plenty of size, and is good in his mutton if not quite right about the colouring of his head. The weak point here is that at Oxford the same judges took no notice of this sheep, while they placed another of Mr. Mansell's second which is here only commended, and very properly placed behind his companion. Of course young rams may alter and improve or go back in the course of a year, but it is hard to understand any such 'subsequent' difference in the two sheep here standing side by side. Lord Chesham, who would thus look to be going with the stream, took the Oxford prize last season, but we question if he were ever much fancied at Latimer; and even the judges themselves will allow that their second reading was far the preferable." The judges say for themselves in the new number of the Royal Agricultural Society's Journal: "The all-aged rams were the most noticeable feature. In this class we found a large proportion of the animals of marked superiority, in illustration of which, 20 were either awarded prizes or received special commendations at our hands. We consider this the best class of Shropshires ever brought together in the Royal Show-yard, an opinion we feel sure all who have given them a careful inspection will admit. The first-prize sheep was not without a fault; although one of the heaviest carcasses of mutton, with a heavy fleece of wool of superior quality, we considered him rather deficient in style." The judges of Shropshires, at both Oxford and Wolverhampton, were Messrs. B. Bond, of Swansmoor, Stafford; W. Kemp Bourne, of Fishewick, Lichfield; and R. H. Masfen, of Pendeford, Wolverhampton.

PLATE II.

THE SENTRY.

Look out, Bob! and no doubt Bob will look out, although from his expression we should say he would rather go on with the beat. However, he holds hat and pipe as hostages of his master's quick return, as but for the "inclement season" it would appear that the sports-

man had gone to get a dip, and there are people who take their unadulterated plunge up to Christmas. The dead game in the foreground should be just the sort of vermin to burrow about a barren sand bank.

THE FARMERS' CLUB.

THE AGRICULTURAL LABOURER.

The first meeting of the Club, following the adjournment in May last, was held on Monday evening, November 6th, in Salisbury-square, and was numerously attended. Mr. J. B. Spearing, chairman of the year, presided. The subject appointed for discussion, viz., "The Agricultural Labourer—his Employment, Wages, and Education," was introduced by Mr. C. S. Read, M.P.

The CHAIRMAN said: Gentlemen, as this is the first meeting since our long summer recess, I may, perhaps, as your chairman, be allowed to make a few general remarks before we proceed to the direct business of the evening. I will do so as briefly as possible. I think, that on the whole, I may venture to congratulate you upon the improved prospects of agriculture, the last season being more likely to prove remunerative than the three or four preceding ones. Our wheat crops are, as a rule, defective, both in quality and quantity, owing to the deficiency of heat; but other grain crops, more particularly barley, oats, and peas, are more than the usual average. Our root crop is a most abundant one, and the price of stock is unusually high. Coming to the more direct subject for the evening, which relates to the agricultural labourer, I may remark, that I never remember to have seen in the western district so much damage done to crops, both in the field and in stackyard for want of hands to scoure them (Hear, hear). The question of labour is, in fact, becoming a more serious one every year, and it behoves us to consider well how far we can with advantage increase the use of machinery as an auxiliary in farming operations. It seems to me that the agricultural labourer already is getting either more cunning or over-educated—I don't know which it is (laughter), and does not like so much hard work as he used to do—and if he becomes much more educated than he is we shall not be able to depend upon his labour at all. I will not detain you any longer, but will at once call upon Mr. Read, who will, no doubt, introduce the subject in a most able and interesting manner.

Mr. C. S. READ, M.P., said: Mr. chairman and gentlemen, I have first to apologise for not being prepared with a written paper. I am sorry to say, that I have not been able to find time even to write my introduction. But I have made such copious notes that I fear I shall tire you very much before I have done, though I trust you will give me a patient and indulgent hearing, on account of the great importance of the subject, important especially at the present time. Some of you may, per-

haps, be inclined to ask what was my reason for suggesting as a subject for discussion "The agricultural labourer—his employment, wages, and education." In glancing over the list of papers which have been read before this Club, I found that about every two years the condition of the agricultural labourer had, either directly or indirectly, been the topic of one night's discussion: I felt confident that at no period of our history has the transition state of the labourer been more remarkable than it is at the present moment, and I was jealous that we should retain the reputation of the Club for never neglecting or disregarding the agricultural labourer (Hear, hear). I may add, that if I had known that after a lapse of five-and-twenty years the Royal Agricultural Society was going to issue such a paper as that of Mr. Dent, in the last number of the *Journal* (cheers), I should not have ventured, perhaps, to undertake to introduce this subject; for I feel quite sure that after the publication of that able essay—and anyone who has read it, as everyone ought to do, must acknowledge that it is able—any remarks of mine must appear dull and flat indeed (cries of "No, no"). Now, I do not wish so much to give you my own opinions on this question as the conclusions which have been formed by disinterested and competent witnesses. I have, therefore, consulted the Report of the Commission appointed in 1865 to inquire into the agricultural gang system, the Report of the second Commission, appointed in 1867, to inquire into the employment of women, young persons, and children, in agriculture; a very excellent little book, though at the same time a very dear one, published some time ago, entitled, "The Agricultural Labourer," from the pen of Mr. Keibel, being a reprint of series of articles which appeared in the *Pall Mall Gazette* and the *Cornhill Magazine*; Mr. Bailey Denton's paper on the same subject, read before the Society of Arts; and Mr. Dent's recent essay in the *Journal* of the Royal Agricultural Society to which I have just alluded; and lastly, I have referred to the papers which have been read before this Club. Now, I have no desire to wander from my subject, but when we are talking of the wages and the condition of the agricultural labourer, it is absolutely necessary to go beyond money payments, and to consider other things connected with them. And first I would remark with regard to the division of agriculturists into landlord, tenant, and labourer, that as we have this division we must accept it. I think it is a wise division. You all know that that division has been recently assailed; but I believe that in a small rich country like this it

is desirable that the existing classification should continue, and that there should be the tenant-farmer occupying an intermediate position between the landlord and the labourer. It was well remarked by Mr. James Howard—whom we must all rejoice to see again amongst us with restored health (Cheers)—in a very business-like and practical paper read by him at Northampton in 1859, that capital and labour are alike the two piers of an arch on which society rests. It appears to me that the stream of agriculture is so wide that it cannot be bridged at one span; and hence we have got an intermediate pier in the centre of the stream. The tenant-farmer supplies half capital and half labour, while the landlord is the sleeping partner—the rich capitalist who has money enough to rest contented with a small rate of interest for his investment. The tenant-farmer could not live on the capital which he possesses without thorough work; so he puts his capital into the land and expects to be remunerated through the cultivation of the soil. The labourer is a man who has no capital, and who wants good wages and constant employment. What has been the result of this division? Better rents, larger produce, and higher wages than are obtained in any country in the old world. I now come to the question of the labourer's early history. We are frequently told by learned men that there has been a very bright page indeed in that history. Well, gentlemen, I am of opinion that the middle ages are very well to write about, but were very middling times to live in. The labourer then was nothing more than a slave. He was the villien of his lord; he was confined to one parish, and if he left it he was branded with the letter F; his wages were settled by statute, and at one period their amount was one penny per day at harvest time, and a half-penny at other times. I am quite ready to admit that in the palmy days of the Plantagenet kings, putting out of consideration his social position, the labourer was well fed and well cared for. During the wars of the Roses, however, he suffered very greatly, and it was not till the days of Good Queen Bess that his prosperity revived, and an Act was passed, which provided that no new cottage which was built should have less than four acres of land attached to it. During the subsequent civil wars and the time of the Protectorate, the agricultural labourer experienced great depression. But with the Restoration came another golden age which lasted to the latter half of the last century, when the inclosure of commons and the high prices of the war curtailed the labourer's means and increased the cost of living. What does this history teach us? Why that in times of civil strife and commotion the agricultural labourer suffers just as much as his rich neighbour, and that he flourishes most in times when monarchical and aristocratic institutions, both of which are being assailed at the present moment, are in the ascendant. I do not intend to dwell on this point. But I would ask any one present—the oldest gentleman in the room—to tell me whether he remembers a time when the agricultural labourer was better off or more prosperous than he is at the present moment. (A voice: "Certainly not.") We must not be contented with general assertions, but must compare his condition now with his condition at some other specified time. Let us then go back just twenty years, that is to the first days of free trade, and I say emphatically that he is decidedly better off than he was at that period, the improvement resting, not on my authority, but on that of Commissioners who have investigated the subjects. His wages are slowly but surely on the rise; his employment is more constant

than it was, and I may add, from my own experience, that he is paid better now for doing less work (A voice: "No question about it.") So far as I am concerned I am very glad of it, and I only wish I could afford to pay him more. In 1851 Mr. Caird, after travelling through nearly all the counties of England, reported the result of his investigations in *The Times* newspaper. He visited six of the lowest-waged counties—Gloucester, Wilts, Suffolk, Cambridge, Berks, and Dorset, and he found that in those counties the average pay of agricultural labourers was 7s. 1½d. a week. The Agricultural Commissioners tell us that Dorset is still the lowest county as regards wages, and I find that, according to them, the average there is now 8s. per week. But, then, the labourer has a cottage, fuel, and other perquisites, and Mr. Stanhope says that he really earns 10s. to 12s. In the Cotswold Hills, Bishop Fraser tells us, the wages range as low as 10s., while others quote them up to 14s., so that there we have a medium of something like 12s. a week, against 7s. 1½d. in 1851. These were wretched wages, not including piecework. But 1851 was an exceptionally low year: there was a season of great agricultural depression, and therefore I do not quite coincide with Mr Dent when he puts the increase of wages at the present period at 75 per cent. I think that estimate is a mistake; I would rather put the increase at 50, or at the most 35 per cent., on day work; and with an increase of one-third in twenty years, I think the wages of the agricultural labourers in this part of the country may be regarded as being in a satisfactory position. We may be told that higher wages are paid in Northumberland, Cumberland, Lancashire, and the East and West Ridings of Yorkshire. In 1851 the average rate of wages in those counties was 13s.; it is now from 13s. to 15s., and consequently there has been no such increase in the higher wage counties as in the others during the period in question. Let me refer you a moment to the excellent essay of Mr. Bailey Denton on the agricultural labourer, written after twenty years' experience in almost every county in England, by one who may certainly be regarded as an impartial authority, and who has no such reason as farmers are supposed to have for stating wages higher than they really are. Mr. Bailey Denton divides the country into seven districts, and he says:

"The mean weekly day-labour wages of able-bodied men throughout the whole of England may be taken at 12s. 6d. To this must be added the additional gains by occasional piece-work, extra payments at hay-time and harvest, when double the ordinary wages is frequently given. In the aggregate, the actual income derived from these employments is equal to from 1s. 6d. to 3s. a week, according to the custom of different districts. Where piece-work can wholly take the place of day labour a labourer may earn 25 per cent. more than by the day. The total value of the beer and cider supplied to each labourer as his allowance at hay-time and harvest, when employed in drilling and machine-thrashing, and when engaged in piece-work, if spread over the whole year, would amount to from 1s. to 2s. a week more, according to locality. With these additions to his direct money wages, the farm-labourer gains from 15s. to 16s. per week, taking the mean of England."

Fifteen or sixteen shillings a-week, without the wages of his wife or children. And now let any farmer turn to his labour-book of twenty years ago, and see if he does not now pay a good deal more per acre than he did then. Why I recollect when 25s. per acre on light arable land was considered a good amount of money to spend in wages; but the amount is now frequently 35s., and I am afraid that I do not get off under 40s., the cause of that being, my friends tell me, that I go to Parliament and don't look after my farm (laughter). All this

increase has come in spite of the increased use of machinery. And let me just say this, that I believe that in the future the cost of our manual labour will be one of our most difficult items to deal with (Hear, hear), and that if it goes on increasing much more it will tend more than anything else to turn the land into grass, in spite of all Mr. Mechi's efforts to put it under the plough (laughter). Now let us contrast for a few moments the condition of the rural with that of the urban labourer. Well, the rural labourer has pure air and good health. We cannot put a market or money value upon that advantage. There can be no doubt that the death-rate in towns is 5 per cent. higher per 1,000 than it is in the country. The rent of a cottage in the country is about 1s. 6d. a-week, while in towns three or four shillings is paid for a similar kind of dwelling. A few months ago a man left my employment to fill a very good berth at Norwich. Only last Saturday I saw his wife, and I asked her how they were getting on. "Well," she replied, "My husband earns plenty of wages, but I have to pay 3s. 6d. every Saturday night for a very small cottage, without any garden at all." Then consider what a good garden produces for the labourer. I really think that if he has a rood of ground he ought to make at least £4 out of it. I am assured that mechanics pay for fruit and vegetables quite 2s. a-week; and therefore, if you put the two things together—rent and garden—you will find that the rural labourer has an advantage in those respects over the artisan to the extent of something like 4s. a-week. There are other little advantages in the country as compared with town. There are gleaming, picking acorns, cheaper bread, better milk, and more abundant pork; I won't say a word about the pig, because, unless they are specially kept for manuring the garden that may be a disadvantage. There are, however, for the town labourer more choice of shops, and less wear of clothes, and is nearer to his work, and there is more demand for children's labour. To make the contrast complete, we must mark the present advance in the price of most provisions. All luxuries are much dearer than they were. We of the middle classes, who are house-keepers, well know that the price of meat is much higher, and I think the labourer must find that the increased value of butter and cheese pulls considerably on his weekly income. On the other hand, under free trade, flour is ten per cent. cheaper than it was under protection, and in the case of a labourer with a family of children it is often found that from half to three-quarters of the weekly income is spent on flour diet. Fuel has been made much less costly, through the spread of railways; tea and sugar, and groceries generally, cost less. I might allude to the condition of the foreign labourer, for recollect what Mr. James Howard in his paper on continental farms told us about the manner in which foreign agricultural labourers are fed and clothed; and you have doubtless also read Professor Voelcker's report on the poor peasant-farmers of Belgium. I believe that on the Continent 12 hours is the general working day of the agricultural labourer. I have myself seen labouring men working regularly in Paris on Sundays. I was told the other day, by a gentleman from New York, that he was confident that the wages of our agricultural labourers earning £35 a year were, taking into consideration the cost of the necessaries of life in America, quite equal to wages to the amount of £30 in the United States. Again, consider for one moment the different rates of wages in different localities. To my mind, when all things are considered, there is no very great difference: the result is much the same, if you take

into account the perquisites, beer, &c., rents, different hours, and the amount of work performed. One of the very best of her Majesty's Commissioners, and certainly one of the most practical of the whole number, Mr. Culley, after stating that in Northumberland the wages of an agricultural labourer are 18s. per week, compares the condition of a labourer there with one in Berkshire who earns only 12s. a week, and he goes on to prove that, in consequence of the larger amount of work exacted from the northern labourer, the northern farmer pays less per acre than the Berkshire farmer. Again, Mr. Bailey Denton says—and remember he has undertaken works all over the kingdom, and, as I said before, he is a fair and impartial judge—

"Measured by the real value of the services rendered by the agricultural labourers in different parts of England, the prices peculiar to different districts are as high as the return to be gained from those services will sanction. I consider it a fallacy to suppose that the labourers of one district are as good workmen as the labourers of another, and that for the services of each, when applied to the same object, the same money should be paid."

Again, he says:

"Where labourers are superabundant, it is most desirable that the surplus hands should move into another district, where labour is scarce; but to encourage unions, with a view to raise wages in low-paid districts, without improving the quality of the work done, is cruel both to the employed and the employer, for the one will be deprived of the only sound ground of independence; while the other will be obliged to pay money for an inadequate return."

Will Canon Girdlestone, after reading this, again recommend labourers to form trades' unions? I don't think they would have a very much better chance of doing that than farmers—and I am quite sure that we should not agree on that point (laughter). Why, it may be asked, should not labourers transplant themselves without having associations formed for them? They do so daily in every part of the land. A single man who likes to save a week or two's wages can go to almost any portion of England by parliamentary train. I say a single man. A man with a wife and family cannot. I was rude enough to say before Miss Becker at the meeting of the British Association at Norwich that I thought a wife and children were an incumbrance to an agricultural labourer (laughter). I was considered a very un-gallant man for expressing that opinion; but I think we of the middle-class know that as regards locomotion a wife is something of a hindrance (laughter). Now as to the changes in the agricultural population, it appears that from 1801 to 1841 there was a gradual and rapid increase. It was checked by about 1851, and has since declined. It has especially declined among able-bodied men; it has not declined in sheep-farming or stall-feeding districts. Machinery in no way accounts for the decrease but when the Registrar-General tells you that half London is recruited from the country"; when you know that soldiers and policemen, guards on railways, porters, carters, are all more or less recruited from the rural population, I don't think you can much wonder at the result. And I would remark that this importation of fresh blood into old manufacturing towns is one of the very best things for the country that could possibly happen. The population of manufacturing towns have a strong tendency to become decrepit and undersized, and they ought to feel only thankful when they get an influx of strong, able-bodied countrymen to restore the physical character of the community. Correspondents of the newspapers are constantly asking us how a man can live on 2s. a day. Now, in the first place, I contend that he does not live on 2s. a day; in the next place, I main-

tau that if he get 2s. a day in the winter, he ought to be well contented; for this reason, among others, that agriculture is a primitive industry, and depends more on unskilled labour than any other craft. It costs a great deal of time and money to make a skilled artisan. What I would ask, is generally paid for corresponding unskilled labour in towns? Take the bricklayer's slab, take the unskilled labourer who is employed about the docks, take shoemakers, hand-loom weavers, and the lower class of manufacturing operatives, and I believe you will find that as a rule agricultural labourers receive as much as is paid for the same style of work in towns. Moreover, all must admit that employment is more constant in winter than it was twenty years ago; that slack hands, as we call them, find more regular work; and that machinery and high farming tend to employ hands all the year round. I contend that the hours of the labourer are not excessive, nor is his strength unduly taxed. Of course, in the harvest and the haysel the hours are longer; but then the labourer is rewarded for his additional work; with extra hours there is extra pay, and I believe that during the last harvest a good many labourers in Norfolk earned from 30s. to 40s. a week. I don't know whether the breakfast half-hour is common in any other counties, but it has crept into Norfolk, and it seems to be extending into other districts. Nominally the time allowed is only ten minutes, but practically work stops for half an hour. We constantly see our horses stand shivering under the fence for that period, and I believe that on the whole the thing is tacitly admitted; so that the so-called ten hours is, in our case, in reality nine hours and a half. Manufacturing hands begin work with the strike of the clock, and hence there is no loss of time. Our farm labourers first yoke, they then ride to field, and they are back by the hour of leaving off. In fact the manufacturer generally gets half an hour, and frequently an hour more out of his workpeople than we get out of ours. We have all heard a great deal lately about the nine hours' movement. I, for one, am quite ready to accept that demand for work—nine hours' actual work. I will engage to say that taking one day with another we do not get more than nine hours out of our men now. In winter the working-day is often only about seven hours. There is one thing that I want to impress on my brother farmers, and that is the necessity of making a better use of wet days. I do think that we should all try and get a great deal more in-door work done in wet weather (Hear, hear). Preparing manure, crushing corn, grinding cake, and many other things ought to be done on rainy days. If a poor fellow does happen to be caught in the middle of a storm, let him go home and dry his wet clothing instead of continuing to work in them to the injury of his health, and let him make up for it by a little overtime. Again, I think a little more regard should be paid for Sunday in connexion with labour. With the exercise of some forethought many labourers might have more time for attending church. Now I look to task, or piece, or taken work, as it is called in different localities, as the "future" of the agricultural labourer. I believe that the price of piece-work has risen very much more than weekly wages, and I am very glad of it. If a high rate of day wages is paid there will not be much piece-work. But why should I talk about piece-work? In 1861 Mr. Charles Howard concisely and completely summed up the advantages of piece-work in the following words:

"First it enables the farmer to get his work done more expeditiously, and at the proper season, with less supervision

on the part of the master. 2nd. That generally it is less expensive than day work, and the master pays for no more than is done. 3rd. That, regulating wages by the quantity and quality of the work performed, is an incentive to industry, and affords greater scope for the exercise of skill, thereby giving the industrious and skilful man his legitimate advantage over the lazy and indifferent one. 4th. By placing higher wages within the reach of the labourer, the temptation to the best of our rural population to leave farming work for other spheres is lessened."

Did I not say that that description was complete? and did I not say that it was concise? (Hear, hear.) It would be impossible for anybody to say more in advocacy to this class of work than Mr. Charles Howard did in his address to the Club in 1861. It is worthy of remark that in all those trades in which piece-work prevails there is great development and great prosperity both of masters and men. And I am sorry to confess that I believe task-work is not gaining ground, but is rather losing it in agriculture (Hear, hear). One very legitimate excuse is made for this: it is that in hoeing turnips a dexterity and nicety are needed rather than the putting forth of all a man's strength. There may be something in that argument, but I will tell you what is the chief reason why task-work does not prevail more; it is that farmers do not like to incur the trouble connected with piece-work (Hear, hear). Let me add—I hope I shall not offend any young farmer present by doing so—that I fear there are a great many young employers who really would not know the value of piece-work. If you were to take many of our young dandies round their land and ask them the prices of hedging, ditching, hoeing, ploughing, &c., I don't believe half of them would be able to tell you (laughter, and Hear, hear). Piece-work makes not only better and more skilful labourers, but also more practical and intelligent farmers (Hear, hear). Day work gives to all labourers just the same uniform wage; it does exactly what the trade unions want to do, that is it brings down the best man to a level with the worst (Hear, hear). You may say that there are many things which cannot be done by piece. I agree with you. There are things which require watchful care and attention rather than any great skill or strength. I am free to confess that, as a rule, agriculturists do not pay sufficiently for this care and attention. Take, for instance, the case of some old men. Why, gentlemen, there is hardly an old man upon your farm probably who has not some special qualification. One old fellow has the bump of order, is especially tidy and neat; another has a taste for implements; another is great in dressing corn; another is useful in training lads; another is valuable in relation to the health of stock; another—and this is perhaps a more questionable character at times—is very active in keeping down sparrows, a mortal foe to rats, and possibly also can snare a rabbit or something bigger. In many ways such persons might, I think, often be made as useful as younger and stronger men. The relations between farmers and labourers have been much shaken of late; but there is still a kindly interest between employer and employed, and long may it last! (cheers). We have one great advantage over the manufacturers—we are personally acquainted with all our labourers. The farmer has many opportunities of doing good at no great cost to himself. In many cases, I fear, all the skim milk in the farm is given to the pigs. Why should it not be given to the labourer who requires it? Surely this would be much better than every labourer's keeping a cow, as some persons contend that they should! Supposing the labourer had accommodation for keeping a cow, which is hardly ever the case; supposing the

wife did know how to manage a dairy, which she does not; supposing the man had a good cow, and cows did not die; and, lastly, supposing that the labourer had the exact amount of the food which should be given to the animal—supposing all these things; it is quite possible that it might be a very nice thing for a labouring man to keep a cow; but until all these possibilities had become realities it would I think be much better for the farmers to let their labourers have skim milk at a mere nominal cost, especially as it is such a necessary article of diet to young children. Then, again, you can benefit the labourer to a large extent by affording him facilities for growing potatoes, by carting his coals, by supplying him in some cases with underwood, and in others with brushwood. Then there are the comforts of the farm kitchen. I am happy to say that these are generally dispensed with a kind and liberal hand. I think every farmer ought to be able to feel every night that he has done something towards making those around him happier and better, and if he cannot do that, why then I think he has not played his part satisfactorily. I now come to the subject of machinery. Twenty years ago this was in its infancy. The active hostility of the labourer had been disarmed, but still every machine is regarded by him as having been invented for the sole purpose of depriving the poor man of his hardly-earned wages. Now, I contend that machinery has eased the labourer's excessive toil, and left what remains to be done easier for the muscles though it may be harder for the brain. It is surely easier to direct a great power than to exert that power one's self! Surely there is no harder work than swinging a flail all day, no stronger exertion than mowing with a scythe, no more back-breaking work than reaping; and yet harvest wages are no less than they were, and men are better employed and better paid in winter. Machinery is one means of rewarding intelligence. Where the steam-plough is used the best man gets the highest wage. The best engine-men are invariably agricultural labourers, and this fact shows that such men have a great deal in them, and that all that is wanted is that it should be brought out. I now come to cottages. Here a great evil still exists, although a great work has been accomplished all over the country. I believe there has been a general effort on the part of landed proprietors to furnish good and decent homes for the labourers on their estates. The other day while I was at one of the great houses of the land I saw a garden terrace which had not been completed. I asked the lady of the house how it was that the terrace was not finished, and she replied, "My husband, immediately after he had bought the estate, determined that all the cottages should be put in proper order, and this is to be done before the garden work is completed for me." I believe that he was right in that determination; and I will venture further to say that those noblemen and gentlemen who are supposed to be interested in what is called the new social movement are better employed in improving the cottage accommodation for the labourers on their estates than in attempting to provide country villas for all the town artisans. As regards settled estates great facilities have been afforded of late for the building of improved cottages; but the Inclosure Commissioners have not done all that might have been done. They surely do not want to have all the old cottages pulled down, and yet they do not advance money for repairs and alterations. For some parishes—I speak especially of open ones—the accommodation is still very bad, though the inspectors of nuisances have done something to prevent overcrowding, and dilapidated and dangerous houses from being

tenanted. There is nothing worse for health and morals than badly ventilated and over-crowded dilapidated cottages. It is, however, a very odd fact that in the worst counties of England in that respect you find a healthy and moral race. If you go to Scotland and look for a moment into one of those wretched little pens—I will not call them bed-rooms—where the agricultural labourer sleeps, you will fancy that he must be stifled, and yet a more healthy race of people does not exist than the Scotch peasantry. If you go across the water to Ireland you find a most loathsome and horrible cabin, where the whole family almost literally pig together, and in the midst of all that you find a modest, moral, and virtuous race of women. Still, as I have before intimated, nothing can be said in defence of many of our wretched hovels. The worse the accommodation, and the greater the inconveniences, the higher frequently appear to be the rents. It is a curious fact that many labourers appear to like all this. Why, think you? Because there are no rules, no restraint about taking lodgers, no inspection by the landlord, parson, or farmer's wife. Where, it may be asked, should new cottages be built? Why, surely on the farm. I am aware that some labouring people do not like that arrangement. This is especially the case with some of the women, who cannot gossip, cannot have their little friendly chat, as they would in other localities; and to this I may add that the family have perhaps to walk farther to church, and the children to school. On the other hand, the father of the family is much farther off the beer-shop, and much nearer to his work on the farm, and has a much better chance of having a good garden. Now the question arises, who ought to have the letting of labourers' cottages—the landlord, or the tenant-farmer. I have myself never seen any reasonable objection to the letting of the cottages with the farm; and if a landlord does not like that, he should, as a matter of course, allow the farmer to nominate the tenants. I, for one, entirely object to weekly notices to quit. However badly a labourer may have behaved, we have, I think, no right to turn him and his family in the road at the end of seven days (cheers). We should, I think, give him at least three months' notice, and we may during that time be able to find a better labourer. Gentlemen, I am very sorry to have detained you so long (Loud cries of "Go on"). I will, then, with your kind indulgence, now speak of allotments. These, to be of any use, should be near the man's home, and I think they should never exceed a quarter-of-an-acre. One word about the so-called immorality of the rural districts. I think the number of natural children in those districts has been greatly exaggerated. This is a very important point, because, mind you, in the country we have nothing like that recognised, and, as some persons would term it, well-ordered system of prostitution which exists in many towns (Hear, hear). A paternal Government has been trying to make that more safe and more pleasant (Hear, hear). In the country, every slip from the path of virtue is sure to leave its mark at the end of nine months. When a woman does fall there, she does not of necessity become an abandoned wretch, but as a general rule, in the end gets married, and becomes a faithful wife and good mother. Let me now speak of the women who are employed in agriculture. I do not know any subject on which a greater amount of nonsense and twaddle has been uttered than on this one. Commissioners who have investigated the matter, have said that there is a great deal of work that can be done by women with benefit to the farmer and without injury to themselves, and that when this is the case it is foolish

to object to it. Bishop Fraser has been led away to attack the dress of women employed on farms as unfeminine, instancing nailed boots, leather gaiters, and short skirts. Such things, if not ornamental, may at all events be useful; and I may remark that they are not more unfeminine than the pilot jackets and billycock hats which adorn many of the young ladies of the present day (laughter). Sure I am that the dress which is thus objected to is not more likely to unsex those who wear it than half of what is uttered in these days of women's rights (cheers). They tell us that this is a "low type of labour," and that a "low class of females are employed in it." Well, this may to a certain extent be the case, but all are not of the class described; in some cases a servant prefers field-labour to seeking another situation, and among those employed are some who, without any fault of their own, have come to grief in some better employment. I may add that there are a number of half-witted, stupid creatures, who cannot gain an honest living in any other way. The employment of women in agriculture is however dying out, with better wages and the discovery of more suitable employment. I believe that with this kind of improvement it will in time become entirely extinct; but let it be that for years to come there will be married women without children, or old spinsters who are fitted for nothing better, and like it; and I do not see how any great harm can arise. All that I have said against the employment of women applies with greater force to girls. They should be at school or at service, and not at work on the farm; but I do not think that we want an Act of Parliament to limit the age at which they should be employed. I certainly do not at all agree with the Commissioners that 16 is the lowest age at which a girl should go out to work. In all probability, if she does not go out to work till then, she will not go at all. Such a limit is too high for the purpose of education, and I may add also that it is too young in relation to morality and health. With regard to boys and the prohibition of their working under 10 years of age, I may remark that one of the Commissioners (Mr. Tremenehere) differs from his brother Commissioners on that subject. In the work of Mr. Keibel, to which I have before referred, I find the following statement of Mr. Tremenehere's views:

"He contends, first of all, that the earnings of children under ten are often indispensable to the parents, while in many of the most important agricultural counties there is an 'imperious demand' for their labour. He denies that their earnings are more than absorbed by the extra food which they require, and the extra wear and tear of clothes which ensue when they are at work; and he scouts the notion that, with the exception of house-work, young children are put to any kind of agricultural labour which is physically injurious to them. He draws a very clear distinction between the farm and the factory. In a factory or a workshop a child is liable to work in a close and heated atmosphere; and when working in connection with machinery, its attention is ever on the stretch, and its movements are often rapid and continuous for various periods of time together. The effect of such a mode of employment upon the very young was shown to be physically injurious to them, and, therefore, to justify legislative measures for their protection. But it has been seen that employment in the healthy occupation of agriculture cannot be shown to be attended with physical injury, even to the very young."

The working of the Agricultural Gangs' Act has, I trust, on the whole been satisfactory. It was a mild measure, and, like all mild measures, was more likely to be accepted than a violent one. As I was consulted by the Government about the passing of that Act, and helped to pass it, I feel much pleased that it has answered so well. But agricultural gangs are, I believe, after all nothing more than a necessary and transitory evil. They have existed and been known chiefly in the Fen districts and in the great barren, unenclosed sheepwalks of Norfolk. In the old times a labouring man considered that

you were asking him to be transported, if you asked him to go and live in the Fens; he would have thought that you wanted him to incur all the evils of ague and fever; but in Norfolk these dreary wastes are enclosed, the Fens are now drained, and cottages are being built in the Fens, ague is gone, and I believe that in a few years the employment of agricultural gangs will have become a thing of the past. With regard to commons, I would observe that all the best were enclosed long ago, and in my opinion it is better for the country to grow more corn and employ more people, though it may have been a hard thing for the cottager. As regards the rights of the cottager, I want to know what right he had independently of the cottage which he occupied. He has no greater right over the soil than the parsons or the farmers' sons. The right is attached to the cottage, and the owner of the land generally gets an allotment in consideration of that right. My own experience in regard to commons is, that they are, as a rule, surrounded by the very worst description of cottagers. You find congregated on the waste a miserable race of squatters, occupying horrid hovels and living in the greatest poverty, filth, and ignorance. The squatters may certainly keep a little poultry on the common, but in very many cases a sharp farmer or dishonest dealer reaps the chief benefit, by taking off the ground a large proportion of the grass, whilst to the cottager the result is lost rather than gained. One word now, on the comparative value of small and large farms. On arable land, with plenty of machinery and capital, the labourer finds the most constant employment and is better paid, except in certain busy seasons when everybody needs him, upon large farms than upon small ones. And remember what Dr. Voelcker wrote about Flanders. In Flanders it is a rule that with small farms there go high rents and low wages; while my little experience of Ireland enables me to state that, while the same rule holds good there with regard to small farms, if you go to districts where the farms are large you will find high wages and low rents. In some districts of Norfolk there are small farms combined with bad cultivation, high rates, and unemployed poor in winter; while in other districts where the farms are large—in some cases they may be too large—you have the reverse of this state of things. I think it would be a mistake to do away with all small holdings, especially near large towns. There should, in my opinion, be some small dairy farms, and some little farms for meritorious labourers. But on the other hand, I am confident that a good man will save more money as a skilled labourer than as a small farmer; and if he does succeed as a small farmer it will be, in the words of Mr. Charles Howard, which we must all remember, because he does the work of two labourers, and lives at the expense of one. Now you all know my opinion about game; but let me just read to you what is said on this subject by Mr. Keibel, to whom I have before alluded. That gentleman says:

"Among the peculiar sources of demoralisation to which the English peasant is exposed, the preservation of game is often cited as the worst. This is a very great mistake. Nobody knows better than the poacher the real character of the game. If his apologists like to shelter him behind a wholly mistaken conception of it, of course he will avail himself of their kindness; but as for supposing that the poacher himself is led away by the delusion that pheasants are wild animals, in which nobody has any right of property, it is one of those fond inventions which only personal acquaintance with a single member of the profession is required to dispel. Game is no more a temptation to dishonesty than other luxuries; and whatever is to be said against the game-laws is to be said against them rather as a farmers' grievance than as labourers'."

Let me add, that game indirectly affects *farming operations*. You cannot farm against ground-game, and on estates where game is preserved to an unlimited extent you will always find

the land half cultivated, and the labourer half employed, and very often taking to poaching for want of employment. Let me now speak of some of the aids to the labourer. As regards benefit clubs, I may remark that about two years ago Mr. Charles Howard read a very able paper on that subject, and went into it very fully. I think that farmers generally should encourage sound clubs more than they do. I think they should support clothing societies, shoe clubs, building societies, savings' banks, even co-operative stores—anything, in fact, that tends to make the labourer thrifty and provident. The great drawback to the advancement of the labourer is his carelessness about the future, his want of thrift and forethought. But this is mainly engendered, in my opinion, by the operation of the poor-law. In the days of the old poor-law a third or fourth child of the labourer was almost always maintained by the parish; but I remember that even in those days a single man was not paid as much as a married man, even if he were thirty years of age and a good labourer. At the present time we find labourers, as a rule, without the slightest thought for the future. Marriages at only nineteen and twenty years of age are not at all uncommon, and you will find a woman, earning in service £10 a-year, spending the whole of her wages upon her back, and a young labourer, earning 14s. or 15s. a week, pouring the whole of it down his throat, and then marrying with scarcely a sixpence to buy the bed which they are to lie upon. But suppose a married man with children does belong to a club. When he is ill he gets 10s. a week from the club, the parish allows my neighbour, who has made no such provision, the same. If there should be such a wonderful creature as a labourer who has provided himself with an annuity of 3s. a-week after attaining the age of 60, in all probability the parish will allow the man who hasn't 2s. 6d. a-week. I say that the workhouse is still a disgrace. People will not go into it, and I am very glad that they won't. Up to a very recent period there was no poor-law in Scotland. Up to that time there was an emulation among labourers in that country to keep their parents from the parish; now, I am told, the great desire is to see how much can be got out of the parish. If you go to Ireland you will find that the amount of out-door relief is next to nothing compared with ours. There is, in fact, less real pauperism there than] in this country. I think that in the future we must make some distinction, as has been done in Ireland, between sickness and destitution, so that, as in the case of the Irish dispensaries, medical "relief" will not be considered to pauperise a man. A few words more in reference to the poor-law. Let me read to you what some of the Commissioners say on that subject.

"Many deserving and industrious labourers, says Mr. Stanhope, appear to be discouraged from making the effort to secure independence by self-help, from the fear of losing their presumed right to relief from the poor-rate; and the guardians have no fixed rule by which to determine such cases. Sometimes they do consider the receipt of club allowances a bar to parochial relief, and sometimes they don't. Uniformity of custom should surely be established upon this point. Mr. Norman wonders that the poor ever do practice self-denial for the sake of maintenance in old age, when the poor-law will give it them without, and feels sure that this has a direct tendency to weaken those feelings of self-reliance and independence among the labouring classes, on the development of which qualities the amelioration of that class must necessarily depend. Mr. Portman (p. 165) writes to the same effect. But the problem which is raised by all three seems almost insoluble, except by abolishing the system of out-door relief altogether. As for not going into the 'house,' the poor have not grown indifferent to that humiliation, and would still make sacrifices to avert it. But we don't see how it is possible to disconnect parish relief and improvidence. To tell a man to starve in the streets because he has not had sufficient self-denial to provide for his old age is to defeat the very object of the poor-law. To say you will relieve none but those who have been provident is simply

to say that you will relieve none except those who don't want it."

Well, we must leave this matter to wiser heads; but you will never make the poor provident with the present system of out-door relief (cheers). I believe that the custom of paying wages partly in beer or cider is happily going out of fashion. I know that a wet groat goes further than a dry shilling; but wherever this sort of payment is customary it certainly ought to be optional. Public-houses are condemned very generally in the rural districts. I will not trouble you with any observations of mine on this point, but let me just read to you what Mr. Culley, that very practical Commissioner, says about the matter:

"I do not for a moment desire that the labourer should be denied every facility for quenching his thirst in beer; on the contrary, I should like to see beer sold across the counter with as little restriction as bread and butter, save only that it should not be drunk on the premises. I would confine the license to sell beer to be drunk on the premises to that class of houses which are also licensed to sell spirits. Under such a system a man would probably take home to his family only so much as he could conveniently pay for, and as they could consume without injury, and he would be robbed of the temptations to excess, which it is the business of the beerhouse-keepers to provide."

I can thoroughly endorse those sentiments. I must entirely pass over the subject of harvest homes, but, in my opinion, we should have more agricultural holidays. I may mention that at our last gathering of that kind at Dereham there were about ten thousand persons present, almost all of whom were agricultural labourers and their families, and I did not see a single drunken man. My last head is Education. That subject has been thoroughly thrashed out, and, therefore, I will not thrash it any more. In the past farmers have been indifferent on this subject. Education was regarded as the parson's business, and he was left to do it in his own way at very small cost and no trouble to us; but now we have a new race of educators that have never done anything before. Some of you may remember what was once said about the agricultural labourer, namely, that there were two things which he had to do, to get a living and get to heaven. I do not believe that the compulsory attendance of children up to 12 years of age in a secular school will help them to do either; I think that is a wrong thing in itself, and will lead to harm. Much has been done already in the way of elementary education, but the man who is taught book learning is not necessarily a better labourer. Our fathers were badly educated in the ordinary sense, but they were better men of business and more practical than many of ourselves. Farmers must pay for educating the working classes in the rural districts, and so provide the means of reducing the supply of agricultural labourers. In future we are to enable labourers to leave us with a little more alacrity than they do at present; and I cannot help thinking that whatever may be the result of improved education, we shall derive less benefit from it than any other class. We may well be perplexed as to what is to be taught in future at the expense of the ratepayers. You all know, I suppose, what has been going on lately in the London School Board. The Norwich School Board has decided that in all schools other than infant schools there shall be taught geography, history, grammar, algebra, geometry, natural philosophy, physical geography, the natural sciences, political economy, and languages. If all this is to be given gratis I would ask what are our children to learn, and to what extent are we to educate them? The Elementary Education Act won't work well in the country (Hear, hear), I mean in the rural districts. In the towns I hope it will do some good, but up to the present time it has produced no end of talking in towns without teaching a single child to say its letters. What we have suffered from in the country is not the want of schools, but the want of children to attend them regularly—I think that it might be well to have some indirect compulsion. If you were to say that no child should be sent to work until it could pass an examination in the three R's, that would be a great inducement to parents to send the child early and regularly to school, and to keep it there for a reasonable length of time. I have not

time to say anything about technical education, but I need not tell you what a close practical bearing that has upon the question of the improvement of the condition of the agricultural labourer. Before I conclude I must call attention to the four methods of improving the condition of the agricultural labourer, which, five-and-twenty years ago, Mr. Nicholls shadowed forth in the Royal Agricultural Society's *Journal*: 1st, "Enlarging the field of labour"—that has been done by railroads; 2nd, "Extending the benefits of education"—of those benefits the labourer seems likely in the future to have enough and to spare; while to the 3rd and 4th suggestions, "more comfortable cottages and larger gardens," a steady and reasonable, though not very rapid progress has been made. It would be well for us all to remember how much we, as a nation and as farmers, actually depend on the labour of our peasantry. Adam Smith tells us "Labour is the source of all wealth"; but political economy is older than its great modern disciple, for King Solomon wrote, "In all labour there is profit." In improving the condition of our labourers we shall, therefore, be surely strengthening the foundation of England's greatness. But in attempting this grand object it is as well to regard Nature's laws. Man's primary object and desire must be to satisfy his animal wants; that done, he begins to think, as a reasoning being, of comfort and decency, and then, and not till then, will he appreciate mental culture. We appear inclined to force upon him this mental culture, hoping thereby to give him sounder ideas of decency and comfort. But he must earn more wages before he can materially increase his comforts, and it is no use supposing he is likely to have much higher wages unless he becomes a better workman. "He must improve his working powers," says Mr. Dent, "and so earn a better wage for himself, without becoming a more costly servant to his employer"; or as Mr. Bailey Denton rightly puts it, "the only way to justify an increase of labourers' wages will be by rendering the value of labour greater than it is now." Much has been done to improve the labourer's hard lot, and what remains to be done must be accomplished in this direction. The farm labourer should not look so much to the Legislature to assist him as depend on "self-help." Fortunately the mitigation of his hardships, like most other English grievances, points to reform rather than revolution. All the Commissioners' suggestions run in this strain; and I cannot better conclude these lengthy remarks than by quoting Mr. Kerbel, who thus most fairly sums up and impartially balances the present condition and future prospects of the agricultural labourer:

"On the one hand is his life of silent, secluded, uncomplaining toil, his undeniable privations, his honesty, his simplicity, his helplessness, so unlike the loud self-assertion and menacing pugnacity of the city artisan; all prepossessing us in his favour, all imbuing us with the idea that a system which does not do more for him must be radically indefensible. On the other hand, we see in him but one link in the social chain which has endured for centuries, the origin of which was noble and generous, and the continuation of which has been secured from age to age by the accumulative force of kindly traditions and immemorial sympathies. If we fail to give its full value to every reflection which is suggested by either side of the shield we are dashed headlong into error; and it is the certainty of this which should make us so cautious of dogmatizing. But I am happy in believing that the more the question is studied, the more will it be seen that the highest interests of the landlord, the tenant, and the labourer harmonise with each other, and that in a logical development of, rather than a total departure from, the ancient social system of England lies our best hope for the future" (cheers).

Mr. S. SIDNEY (Islington) said he had listened with pleasure to Mr. Read's *apology* for the condition of the English agricultural labourer. He ventured to intrude himself on their attention thus early because he was perhaps more likely to differ from most of those present than anyone else, and because it was only fair that those who differed from him should have an opportunity of answering him (laughter). In the opening part of his address Mr. Read expressed some doubt as to whether there ever had been a golden age for the labourer. For his own part he had no doubt the history of this country, as of every other, there had been a golden age. That golden age was when land was cheap, and the labourer began to earn money-wages; he had not then the luxuries of this age, but he had rude plenty—fuel and food, and such clothing as he and his family could make for themselves from the forest and

the waste land where his live stock pastured without rent. But a period followed when the agricultural labourer began to descend rapidly in the social scale, and from that descent he had never recovered. In the last century especially wars arose which had the effect of imposing heavy taxes on the country; while at the same time they tended to raise largely the value of the land, increased temporarily the profits of farming, and reduced the labourer to a state of pauperism from which he had not yet emerged (cries of "Oh, oh"). It would be impossible to do much to improve the agricultural labourers until they have been raised from that chronic condition of pauperism (renewed cries of "Oh, oh"). He knew he was offending the feelings of some gentlemen present by such plain speaking; but he could easily make out his case. What was the burden of Mr. Read's introduction? Was it not that through his gross ignorance and his wretched position the labourer was unable to provide for himself? (Hear, hear). If that were a just description, what were labourers practically but paupers? He (Mr. Sidney) did not blame the present generation for that state of things. It was in disturbed times that this evil system of poor-law settlement and poor-law relief in addition to wages was established. The law said that the more children a man had the more relief he should receive; the single labourer received less than a married one; labour was performed which was of no value to the community, men were even employed in digging holes and then filling them up again. That state of things continued from about 1800 to 1833 or 1834. When the new poor-law was established—one of the most unpopular laws that was ever enacted, at least among a very large proportion of the nation—the evil was to some extent checked. Up to that time the labouring man was always taught to consider that he had a perfect right to relief for himself and his wife and children, and it was owing in a great degree to that kind of teaching that he became so unthrifty. In treating this subject (continued Mr. Sidney), Mr. Read assumed that the labourer might almost always have a cottage with a good garden attached to it. I know the contrary. I know that cottage accommodation, combined with a good garden, is one of the most difficult things in the world to obtain. And why? Because the law of settlement, which has only been recently modified, has been a direct discouragement to anything of that kind. I know also that there is a very strong feeling among farmers that if a labourer had any other employment than that for which he receives wages that would be an injury to them. Some farmers would like to see their men independent, but I venture to say that where there is no independence there will be no thrift (Hear, hear). We have been reminded this evening that many agricultural labourers in this country earn more money than a great number of the peasant proprietors of Belgium. But to this I would reply that the peasant proprietors thus referred to are thrifty, because they are independent, and they have hope! It is impossible to raise the moral and social position of our own labourers so long as they eat up their wages to the end of their days and look forward to coming on the parish. It is not sufficient to consider how much money a man earns; what you want is to make him an independent being. In a great many counties of England labourers have no milk for their children, no garden or allotment out of which they may help to live; and what improvement can there be in the condition of the labourer when he cannot rise from such a state as that? As regards education if you make a man an intelligent being, there may be some hope that he will rise to a higher social condition. On the other hand if, because you wish to keep him dependent, you are afraid to let him learn geography, lest it should lead him to travel to some other district for higher wages, you must pay for ignorance out of the poor-rates. It is remarked by the French writer, Monsieur Taine, that in going about different parts of England he saw a great many labouring men who were earning good wages, but very few who were thrifty in the management of their expenses. I myself occupy the position of a large employer of labour, paying at different periods as much as from £10 to £60 a week, and I know as a fact that many men receiving 18s. a-week are not as well off as they might be with half that amount with a cottage and garden allotment fee. But on the other hand many town labourers from their intelligence rise to a comfortable position on wages not exceeding £1 a week (Hear, hear). I see no hope of cottage and garden accommodation being extended as they ought to be, so long as the land remains in its present position. So long as we have unlimited entail, so

long as many estates are in such a position that when they should afford ample employment in making improvements, the income is all tied up (cries of "Question"). I say this is one of the most important parts of the question (Hear, hear). The labourer has to live out of the land as well as the farmer, and I feel certain that if the fetters which now exist were removed, there would be much less difficulty in his obtaining proper cottage accommodation and that small plot of land, which has so much to do with the improvement of the labourers condition. Remember that thrift on the part of the labourer is a benefit to all who are connected with the land. Mr. Bailey Denton has pointed out a scheme, through the carrying out of which old men might be enabled to settle at the end of their days on their own cottages and plots of land. Those who are acquainted with what I have written on this subject may know that I have not encouraged for one moment the preposterous idea of cutting up this country into small farms, or doing away with that hereditary aristocracy to whom we owe all our great agricultural improvements. But there is a very great difference between making land more easily convertible and more easily available, and the change which some people have recently advocated (Hear). In making these observations my object has been rather to widen than to narrow the field of discussion. Even Mr. Read has shown that he is no longer satisfied with the position of the labourer. This is not a mere question of wages. There are parts of England (I refer especially to the iron districts) where labouring men, most of them having been agricultural labourers, are earning 20s., 30s., 40s., and even 60s. a-week, and yet are almost always in a state of destitution; because they are so ignorant and degraded, that they have no idea of making any other use of money than that of putting it down their throats in the form of eating and drinking (Hear, hear). The other day a friend of mine saw during the morning a large body of working-men walking in procession in honour of the nine-hours' movement, and in the evening of the same day he saw a large proportion of them drunk. Many of them came through the rural districts, and though such persons were earning high wages, they were not better off than they had been when employed in agricultural labour (Hear, hear). Mr. Read has shown that ever since the establishment of the poor-law there has been a gradual improvement in the condition of the agricultural labourer; but the labourer is not likely to derive any great advantage from this change until education has taught him to find some better recreation than eating and drinking (Hear, hear).

Mr. R. H. MASFEN (Pendeford, Wolverhampton) said he had felt great pleasure in listening to the remarks of Mr. Read, and could fully endorse the greater part of what he had said: he could also endorse some of the sentiments expressed by Mr. Sidney; but on some points, Mr. Sidney's views seemed rather contracted. He would recommend him to go through-out the length and breadth of England, and then tell them in what part of the country the agricultural labourer had not a cottage garden (Hear, hear). He (Mr. Masfen) would be happy to pay his expenses, if in his own neighbourhood he found a single man who had not a good garden. Mr. Sidney had spoken of the excellent use which a thrifty labourer might make of his earnings. Last year he lost two of his own labourers, both very good men; and he was proud to say that their bank books were handed to himself in each instance; so that practically, therefore, there were means by which the surplus earnings of the labourer could be taken care of, and turned to good account, and by which, in spite of the hindrances to which Mr. Sidney referred, he might raise himself in his walk of life. As regarded the statement that farmers did not as a body pay the labourers with sufficient liberality, he could fully corroborate Mr. Read's declaration that they paid more per acre for the various operations of manual labour than they did twenty years ago. He must say, however, that for some reason or other, labourers were not as fond of putting their bones and sinews into their operations as they used to be (Hear, hear); and hence their labour even was, irrespective of the amount of pay more expensive to the employer; but what he chiefly blamed his brother farmers for was that they allowed the supply of certain things to appear in their labour, sheets in the shape of perquisites. Within a radius of 10 miles from his own residence there was a population of not less than 800,000 employed in various kinds of work, performed chiefly by skilled artisans; and near them were a considerable number of labourers employed on farms. The other day, while he was travelling

from Wolverhampton to Birmingham, the inspector of mines in the district, who was in the same carriage, asked him how much his labourers earned in the year. He replied that the wages were so and so, and that his men got 17s. 6d. a week on an average of years. "Why, then," rejoined the inspector, "I will guarantee, and I have a greater acquaintance with the matter than any man in the district, that the colliers in the black country, on the average, do not earn as much as your agricultural labourers" on an average of years (Hear, hear). Let me tell you what happened in the case of a neighbour of mine, a large farmer. One Saturday evening, in the month of April, his men came to him in a body, and demanded an increase of wages. "Why should I give it you?" he inquired. "Well," they replied, "the men who work in the sheds of the Great Western Railway"—there were from 1,200 to 1,500 of those men—"get so much." He replied that he would give them, pure agricultural labourers, the same amount of pay, but that they had better take a week to consider the matter, and reserve their opinion in the mean time; "but," he added, "bear in mind that if we begin this new system, each of you will have to pay me the same rent as is paid by the men to whom you have referred." On one side of the farm there were a number of cottages, occupied by these agricultural labourers, and on the other a number occupied by railway men. On the Saturday morning following this interview, the men came again, and their spokesman said: "Sir, after thinking this matter over, we think we had better go on as we have been doing." The men in that great engineering establishment had no beer barrel to run to every day; they had no bottles of ale at harvest time; they had not a good garden; they had a rent of 4s. a week to pay; and he must say that it would be well if those who were in the habit of running down farmers as though they crushed their labourers by illiberal treatment would consider such distinctions (Hear, hear). As regards beer, he must say that there was no greater mistake on the part of farmers generally than that of allowing men a certain quantity of beer during harvest-time and the rest of the year. He had gathered thirteen harvests where I now live, and had not brewed thirteen bushels of malt for his labourers. He had preferred making beer a money question. If anything of that kind was to be done, the allowing malt was, in his opinion, the best system. He had never lost a single shilling, he believed, through giving his men a certain quantity of malt for the harvest. If men slaked their thirst from the farmer's barrel during the harvest, the result would often be that they would go to the public-house at night to continue the debauch. If he had nothing else to be thankful for, he was thankful for having escaped the evils of the wretched system of giving men beer during harvest; and, believing that the course he had adopted was the best for the agricultural labourer, he should be glad to see other farmers following his example.

Mr. A. PELL, M.P., said, before Mr. Read replied he wished to express the gratification that he felt in listening to his able address (cheers). The condition of the agricultural labourer was, after all, a relative one. It was vain to assert only that the employer paid him so much a week. The question whether the pay which he received was high or low must be considered with reference to the payment of labourers in other departments. On that point he would call attention to an account which he had met with that day of an expression of opinion on the part of a number of men who were engaged in some of the largest undertakings in the kingdom. "Yesterday," said the report to which he alluded, "a very large meeting of railway servants was held in Manchester, at the Free Trade Hall, for the purpose of agitating for shortening hours of labour, and for an advance of wages. The men present represented the London and North Western, the Lancashire and Yorkshire, and the Manchester, Sheffield, and Lincolnshire Railway Companies, and consisted of guards, shunters, breaksmen, engine drivers, and firemen. About 700 men were present from all the principal towns in the north of England through which these companies run. The chair was taken by a goods guard belonging to the Lancashire and Yorkshire Company, Salford, and each speaker present did not give his name for fear of consequences to himself. A letter was read from Mr. Bass, M.P., expressing great interest in the movement, towards which he has contributed a donation of £100. Each speaker had the same story to tell of long hours

and little pay. Instances were given where men had to work 19 hours a day, and one man gave a diary of 50 days' work which averaged over 15 hours a day. The men, it was said, were compelled to sleep in their vans from over fatigue, and if found out were dismissed. They had no time for reading or recreation, and scarcely time to see their children, except when the latter were asleep. A resolution was unanimously passed, recommending a day of ten hours and overtime at the rate of eight hours a day, with a general advance of 2s. 6d. per week. It was agreed to wait upon the company with that proposition." Speaking as an occupier of land and an employer of labour, he must say that the observations often made in reference to the payment of their labourers by farmers were not merited (Hear, hear). He could not help thinking that if it were generally known how large companies treated their employes, labourers would hesitate before leaving the farm. Let them consider for a moment what the nine hours' movement really was. In the *Times* newspaper of that morning he found the following statement: "The following rules governing the nine hours' system, came into operation in Messrs. G. R. Stephenson and Co's. extensive engine factories, at Newcastle, on Thursday last: Arrangements for working the 5½ hours per week on the pay commencing Nov. 2, 1871.—Working hours: On Monday, Tuesday, Wednesday, Thursday, and Friday, from 6 a.m. to 5 p.m., allowing half-an-hour for breakfast, from 8 to 8.30, and one hour for dinner, from 12.30 to 1.30. On Saturday from 6 a.m. to 1 p.m., allowing half-an-hour for breakfast, from 8 to 8.30, making the week's work 54 hours." He appealed to all present whether they thought they were likely to get that amount of work out of their men (Hear, hear). There they were on the 6th of November, and in considering that question it ought never to be forgotten that farmers, living in the country, had not the same benefit as regarded artificial light that manufacturers and other employers enjoyed in towns. It was of the utmost importance that labouring men should have that question put before them fairly, that they should know what was their position in comparison with that of others, and that they should not credit operatives with having special advantages over themselves which they did not in reality enjoy. There were one or two points in Mr. Read's address in which he ventured to differ from him. Mr. Read thought it very desirable that farmers should sell the skim milk to their men. Mr. Read could not be prepared to get a pot and measure out the liquid himself (laughter), and he felt quite sure that the difficulties attending the introduction of such a business in farming would be so great that the thing could not succeed. If skim milk was to be parted with to the labourer, he would say "Give it away; let it be added to the perquisites, to increase the comforts of the men, and possibly make them better labourers." As regarded the question of the possibility of the labourer's keeping a cow, he well remembered seeing, as a young man in the country where he then farmed, fifteen or twenty labourers, each of whom had his cow, the district being an unenclosed one. Probably Mr. Read was right in assuming that in such cases no regular account was kept of the value of what the cow consumed and what she produced; but still having a cow was an immense advantage to the labourer (Hear, hear); it made him and his family much more comfortable, his children stouter and ruddier. He was not speaking without some experience in that matter, and he believed that his view was a sound one. The cottage question was a very long one, and he would not weary them by entering into it. He had found that in Staffordshire, on one of the largest estates in the country, a practice existed of granting building leases for labourers' cottages; and if Canon Girdlestone, or any other philanthropist, would communicate with the manager of that estate, he might obtain ninety-nine years' leases for erection of dwellings for labouring families. Here was a practical answer to the much-talked-about injuries inflicted on the labourer, and the impossibility of finding cottages for labourers on large estates. As regarded the question of entail, he had been told that in the county of Norfolk there was an estate, the owner of which, in entailing it, made provision that the rent of the cottages should not exceed a certain amount per annum, and also that during the continuance of the entail there should be attached to each cottage a certain amount of land for the benefit of the cottager. With respect to strikes, he did not believe that any attempt to raise the rate

of wages by means of external efforts of that kind would answer for a moment. They could not introduce philanthropy into the business of farming; and if they wished to make it a success they must not pay one penny more for wages than circumstances required. He fully concurred in the opinion that there was great defect in the method of paying—that they treated all labourers too much alike; but the labourers themselves made it difficult to break through that rule. Every labouring man imagined that he was the equal of his neighbour, and if a farmer wished to pay extra for zeal or for ability, the trades' union principle came into operation, and the men said in effect: "We can have no favourites, if you act thus, we will leave you." Before sitting down, he would observe that he had been reminded that evening of a story which was told either by Mr. Nassau Senior, or by Mr. Trench—he was not sure which—in a book on Ireland. Some years ago the manager on some large works in Ireland wrote to his chief, informing him that the men had all demanded a rise in their wages. The principal wrote back to the manager to this effect, "Pay them all they demand. We have got so much money to expend on the works, and so much to pay away every Saturday for wages, and no more. If therefore, there is to be a larger rate of wages, the money must go to fewer hands. Let the men grade themselves, and say how much each man is to receive, whether it is to be 5s. or 3s. or 2s. a-day, or anything else; let them work the sum out; we can only pay them a certain amount weekly." Well the men proceeded to act on this advice, and the result was that in a short time they found that the demands made by the upper men and the movers in the threatened strike were such that the money at the disposal of the manager for wages would only suffice to employ about half the men, and that all the rest would have to be discharged. On discovering this the men in a body abandoned their demand. Happily it was not so difficult now to find employment for labourers during the winter as it was a few years ago. That alteration is due in a great degree to the increase use of machinery, which tended to equalise wages, and at the same time the amount of labour required, and in that way was very beneficial to the labourer.

Mr. JAMES HOWARD, M.P., said he thought farmers need not trouble themselves so much as was their custom in comparing the position of their labourers with that of artisans, as such matters regulated themselves by what were termed natural laws. Mr. Read alluded to the fact that the cost of wages per acre is greater now than it was 20 years ago; but he omitted to remark that farmers now grew considerably more produce and raised more stock per acre than they did 20 years ago (Hear, hear). Probably the wages per acre had not increased relatively in a greater proportion (Hear, hear). During the last harvest he went into one of his fields, and jokingly said to some labourers who were at work, "Why, my men, with all the machinery that we employ, we seem to be longer about our harvest than ever." One of them replied, "Yes, master, but you grow double what was grown on this farm when I was a boy." Therefore, when they talked about the cost of wages per acre, they should bear in mind the increased produce. Mr. Read intimated that he thought the increased value of labour, which he it remembered was constantly rising in every country in Europe, threatened the prospects of farmers. This was unquestionably a serious matter, and it behoved the farmer to consider whether with a view to meet it, he did all he could to avail himself of increased skill; for the question of the future resolved itself into one of increased skill. Mr. Read spoke of the old labourers to be found on many farms. Were the skill and experience of such men sufficiently employed in improving young hands? He (Mr. J. Howard) much doubted it. Most present were aware that the great implement makers employed a class of men whom they called Starters, experts, or men skilled in the use of machinery. He had seen marvellous effects produced by such men spending a few hours on a farm teaching labourers how to perform the more difficult parts of their work. His object was simply to throw out for consideration whether farmers now employed the best means at their disposal in endeavouring to raise the skill of their labourers. The only chance which he saw for the farmer under the increasing value of labour—and he believed it would continue to increase—lay in employing the skill of the labourer in directing machinery, instead of depending on mere brute force,

which he believed would do less and less in the future of farming. Whether the farmer employed 10 men at £1 a-week, or 20 men at 10s. a-week, was of no importance if the 10 men was of equal value to the labour of the 20. He (Mr. Howard) had confined himself to one or two topics, as it was impossible to discuss Mr. Read's exhaustive paper at a single sitting.

Mr. NEILD (The Grange, Worsley, Manchester) said in no county of England was the question of the wages of the labourer more keenly felt than in Lancashire, the wages paid by farmers there being vastly above the average. His engineer had remarked to him "that he felt certain no farmer could economise and do his work properly without machinery, and that it was on the large, well-managed farms that labourers obtained the best wages;" it was gratifying to hear such enlightened sentiments from labouring men of experience. Much had been said about women being employed all the year round on the farm. He employed women at 7s. a week, and some of them came from out of cotton mills and said they preferred farm to mill-work. As regarded education he would remark that if it went on at its present pace many farm labourers' children would beat the sons of farmers in head knowledge; and, therefore, it behoved farmers in that respect to set their house in order (laughter). The time for mere brute force was gone by, and it was only by means of brains and skill that a farmer could now hope to thrive. He should be very glad if the discussion of that subject could be adjourned at the close of that meeting, for it was not half exhausted. He would only add that the labouring classes had been so petted by one party or another that they seemed now rather above the middle classes (Hear, hear).

Mr. T. B. DRYNG (Claxby, Spilsby), said: When he looked back at his boyhood, and recollected what a number of men were then employed on the roads for a mere pittance, he could not help feeling that the position of the labourer was now much improved (Hear, hear). In the reports which he had met with from various counties, he found great complaints of a scarcity of labour. Farmers all over England complained that they could not get their corn cut, or stacked, that they could not obtain waggons, and that they had not sufficient labour at command for the various operations of the farm. Mr. Howard had justly pointed out that they must look for the improved system of farming to the use of machinery. Enterprising men might in some localities double the produce of their farms; but they could not do that with the same amount of labour, even with the most liberal use of machinery, and there was no longer that surplus labour which existed some time ago. It was easy to knock down four poor old cottages and erect two good new ones in their place, but the more farms were improved the greater number of cottages would be required, and if this were not done the scarcity of labour would prevent rents from rising. Many gentlemen had alluded to the want of an adequate amount of labour during the late harvest. Would they be prepared to employ additional labourers during winter? (cries of "No, no"). Well, then, what were they to do? On mixed soils it was perhaps possible for a farmer to employ as many men in winter as in summer, by growing more roots, especially with the present high price of meat.

Mr. H. TRETHERY (Silsoe, Amptill) wished to allude for a moment to the remarks of Mr. Read, in respect to the conduct of the Inclosure Commissioners. Mr. Read intimated that he thought the commissioners should be a little more liberal, and advance money for the repairing of cottages and buildings generally. Now he (Mr. Thetwery) believed that they had not power to lend money for repairing, and his object in rising was to prevent any misunderstanding on that subject (Hear, hear). The powers of the commissioners were limited to new erections. He quite concurred in the opinion of Mr. Read, that it was desirable that they should have a little more authority than they possessed; and he would suggest to Mr. Read and other members of Parliament to consider how far their powers might be usefully extended. Having had a great deal to do with the commissioners, he had often regretted that their authority did not include the repairing of buildings, as many proprietors were not in a position to expend their own money for that purpose. With regard to the emigration or removal of labourers, he might observe that it would be greatly to the interest of farmers as well as labourers if the latter could sometimes be

induced to remove to a district where their services would be in demand; but that was a very difficult object to carry out. He had more than once induced labourers to remove to another county; but for some reason or other—perhaps because they regarded themselves as part of the natural produce of the soil—they returned, although they had been earning more money elsewhere than they could obtain at home.

The Rev. E. SMYTHIES (Hathern Rectory, Loughborough) said, when that question was selected by the Committee of the Club nine months ago for discussion, it was no doubt considered by them a question of great importance; but since that time they had passed through such a period of anxiety with regard to the amount of labour on their farms, that it had assumed an aspect of vastly increased importance. Was there any gentleman in that room concerned in agriculture who did not feel that he had never gone through a more difficult period than that of the last harvest? (Hear, hear). From north and south, from east and west there were the same complaints of the scarcity of labour, and it was exceedingly difficult to get in the crops. Some persons thought that that was owing in a great degree, at least as regarded some parts of the country, to the diminution in the supply of Irish labourers; but, be the cause what it might, there was nothing like labour enough to get in the harvest properly; and the consequence was very great loss in the quality of the corn and other crops. Like a preceding speaker, he should be very glad if the considering of the subject were adjourned, as very much remained to be said upon it.

The CHAIRMAN said he felt it his duty now to bring the discussion to a close; not because the subject was anything like exhausted, but because the time did not admit of its being protracted any longer. It was a very important subject indeed. He had made some notes upon it; but owing to the lateness of the hour, he should not use them. It was not customary for the discussions of this Club to be adjourned from one meeting to another, but he would suggest to the committee, that, in consequence of the great importance of this question, they should, at their meeting in January next, have placed on the earl some similar question for discussion next year (Hear, hear).

Mr. READ then replied. He said Mr. Sidney remarked that he made an apology for the present condition of the agricultural labourer, but Mr. Sidney had made an eloquent apology for the Poor-law. What he said, or meant was that they could not expect to see much independence, forethought, or thrift in agricultural labourers as long as the present system of outdoor relief existed. With regard to what that gentleman said about the labourer learning geography, he would tell him that the labourer had learnt enough geography to know what were the wages paid in Lancashire or at Newcastle, and the way to get there. He quite agreed with what Mr. Masfen said respecting beer. It had never been his plan to make beer part of the wages of his men; but sometimes if he thought they had been overworked, or had worked a little overtime, he gave them some beer for a finishing spurt, or to cheer their spirits. As regarded the great and solemn question of skim-milk, let him offer them a little experience with respect to giving away. During his boyhood his father kept a large dairy. His mother, being a very kind-hearted woman, wished the skim-milk to be given away; but the bother and confusion which this occasioned was such as no one perhaps could have conceived possible. Every one thought that he or she had a right to come at any time, and to have any quantity. At last it was determined to charge the nominal price of a farthing per quart, to have a fixed hour for the sale, and from that time no complaint was made by anyone, and the most perfect order and satisfaction prevailed. Mr. Howard had said something about great crops. He (Mr. Read) had always found that great crops were the cheapest to keep clean, and the cultivation of such crops received the greatest amount of assistance from machinery. He agreed with Mr. Thetwery, that at present the Inclosure Commissioners had no power to advance loans for the repairing or enlarging of cottages.

On the motion of Mr. T. HORLEY, seconded by the Rev. E. SMYTHIES, a vote of thanks was given to Mr. Read for his introduction, and the proceedings terminated with a vote of thanks to the chairman.

At the meeting of the Committee on Monday, November 6, Mr. Henry Chellius, of Easton Manor, Dunmow, was elected Chairman of the Farmer's Club for 1872.

THE SCOTTISH CHAMBER OF AGRICULTURE.

At the annual general meeting, held in Edinburgh, there was a large attendance, Mr. SCOT SKIRVING the retiring President, in the chair.

The following recommendations from the associated counties, and the suggestions thereon by the Counties Committee, were submitted :

I. ABERDEEN recommends (1) to the Chamber the propriety of requesting Messrs. Mc Lagan and Loch to introduce into Parliament a bill embodying the leading features of the game bills of these gentlemen, and founded on the resolutions of the Chamber at its meeting about Whitsunday last, proposing the withdrawal of hares and rabbits from the game-list, and the declaration of all contracts for their preservation illegal. Recommend general meeting to take up and dispose of this with the Forfar recommendation. (2) To support Mr. Goodlet's (of Bolshan) motion to hold at least the summer-meeting of the Chamber at Perth. Referred to general-meeting.

II. AYR desires that the following should be submitted to the directors: (1) That the directors have some interesting subject for discussion at general meetings. (2) That they request the Hon. C. Carnegie, M.P., to re-introduce into Parliament his bill for the abolition of hypothec. (3) That the Chamber bring prominently before the general community the unsatisfactory state of the tenure of land in Scotland, and as to compensation to tenants for permanent improvements. Sent to general meeting, with a request that a general meeting be held to consider the question, at which Mr. Macneil Caird (Stranraer) should be invited.

III. FORFAR resolved to recommend the Chamber: (1) To petition both Houses of Parliament for the abolition of the law of hypothec. (2) To petition for the repeal of the game laws. (3) To recommend that admission as a life-member should, in the case of original members, and of those who had paid five yearly subscriptions, be three guineas instead of five. Sent to general meeting, with a recommendation that it be considered carefully by the directors. (4) That the present rules in force in regard to the removal of cattle from the Metropolitan Market should be maintained.

IV. ROXBURGH recommends the dissolution of the Counties Committee. Disapproval of the recommendation.

V. FIFE recommends the Chamber to consider land-leases, with the view of securing thereon (for the benefit of landlord and tenant) the maintenance of the highest cultivation of the soil to the last hour of a lease. Remitted to the general-meeting, at which Mr. Caird is to be present.

THE SUMMER MEETING OF THE CHAMBER.

Mr. GOODLET (Bolshan) moved: "That the summer-meeting of the Chamber be held annually at Perth, as the most central place for members meeting at that season of the year."

Mr. GEORGE HARVEY (Whittingham Mains) seconded the motion, on the understanding that if it was found not to work, they should return to Edinburgh again.

The motion was then agreed to.

The CHAIRMAN then delivered the customary closing address, in which he said: It is not my intention to make more than a few observations upon those semi-political questions which have from time to time engaged our attention. The chief of these are the game laws and hypothec. With regard to the latter I have indeed no right to offer an opinion, as it is only within the last few years that I became convinced, partly by the able advocacy of one or two members of this Chamber, and perhaps still more by the weakness of the defence, that the law was not only unnecessary, but was often unjust. I saw from the opponents of hypothec that it frequently was the means of placing upon a farm capital which really belonged neither to the owner or the occupier of the land; whilst from the other side I learned that there were hundreds of farms all over Scotland which were (as the advocates of the law boasted) occupied by the same families for generations, through the agency of hypothec, who were yet too poor to pay a single half-year's rent in advance, should they be called upon by a change of circumstances to do so. It struck me that it was a very questionable benefit, a very doubtful kindness, which resulted in families existing for genera-

tions, giving labour, and thought, and skill, with what capital they had, with no other result than that they should live from hand to mouth, and struggle on for ever, father and son and grandson, barely keeping their lips above the bitter waters of poverty. Hypothec is, therefore, not a law of which I feel inclined to be conservative. Gentlemen, during the year that has passed I have not said a single word in reference to game or game laws. A supporter from the first moment that I read it of Mr. Loch's bill, I knew at the same time that considerable difference of opinion existed in the Chamber as regards matters of detail, though of detail only; and, therefore, I considered it was not the part of the President to take any active share in your discussions. We are constantly twitted by our opponents with our want of unanimity in the matter: but it is my firm belief that, as regards not only this Chamber, but the whole of Scotland, the great bulk of the agricultural body—in fact, an overwhelming majority of their number—are at one in this, that they think a fair and just settlement of the question would be that, while landlords retained the exclusive right to all winged game, they should share with the occupier the right to kill hares and rabbits. This privilege they think should be fixed and settled by law, and it is only as to the precise mode of doing so that there is some difference of opinion. On the other hand, I am equally convinced that it is only a small minority who wish to see the Game-laws abolished, or who imagine that, if they were abolished, their abolition would in any way redress the evils complained of. It is not by the Game-laws that deer are at present protected, and a trespass law could protect hares and rabbits quite as well as a Game-law. Few or no farmers object to a full, fair herd of game to be used for fair sporting purposes; it is the battue and market systems (these comparatively recent innovations) that cause all that bitterness of feeling which has so unfortunately set class against class. Masses of hares, which destroy ten times the amount of food which they actually consume, are on some estates preserved all the year round for a single day's slaughter, when they are driven with the other game into the coverts or turnip fields, where they are frequently confined by netting, to be shot down wholesale by what may be called volley firing, gathered up, counted, boasted of in the local newspaper, and then sold in very matter-of-fact fashion to the poultier, who sometimes comes out with an advertisement that he has received six or eight hundred head of game, killed by a nobleman! The latest improvement I have heard of in battues was that a cart and horse was driven right across the turnip fields, following the line of shooters. This bottling up of game for a whole season for the coarse gratification of a single day reminds me of nothing so much as the poor sailor who sometimes hoards his daily allowance of rum that when he has got a bottle full he may have one glorious debauch. Goldsmith wrote:

"Yes, let the rich deride, the proud disdain
The humble pleasures of the lowly train;"

but is there no danger that these well-known lines may be reversed, and that such battues may make them be read:

"Yes, let the low deride, the poor disdain
The paltry pleasures of the lordly train"?

From a sportsman's point of view I hold that the battue system destroys the sport of shooting, and very often puts an end to fox-hunting as well; but that is only a small part of the evil. It was objected to me, when you did me the honour to elect me President, that I was a Tory; but I trust you will pardon me if I make one passing observation on this game difficulty from a purely Conservative point of view. It is, then, I would say, a very bitter thing for an earnest Conservative to see his party shut out from all share in the guidance of the country, and even its best members driven from the representation of almost every county in Scotland, chiefly because a small minority of the landed gentry, whose social position makes them conspicuous, prefer the killing of a hecatomb of hares to all that once made England so powerful and so glorious. These gentlemen seem to have deliberately made their choice; and to find a parallel to it we must go back to the day when Esau sold his birthright. I think the Chamber

should anxiously watch the present tendency to tax the animals and even the implements of the farm. The shepherds' dogs were first taxed, then the gun that scared a wood-pigeon, then the cart that took a poor man and his family to church; and I have no doubt, if a firm resistance is not given, we shall very soon have every farm-horse taxed, while the whole steam horse-power of Manchester will go free. There is another matter to which I think the Chamber might with propriety direct attention. I allude to many of the conditions inserted in leases, which are utterly out of keeping with the present position and circumstances of the agriculture of Scotland. I need not allude to them in detail, as they are only too well known. Most of them originated in distant times and were the creation of circumstances which have long since passed away, while others owe their more recent origin to mistaken ideas and to misdirected legal ingenuity. A great portion of the text of too many leases is a mere anachronism, alike injurious to the interest of landlord and tenant, and forms at the same time a serious hindrance to the free and proper and progressive cultivation of the soil. How absurd, for example, to bind a man to farm now in accordance with the ideas of a century past! Is there any other science than agriculture (except perhaps theology) in which it is attempted to force upon 1871 the principles and the practice of 1771? What would people think if doctors were bound before receiving their diplomas to do certain things and not to do certain other things, in accordance with the teaching and knowledge of a hundred years ago? It is my conviction that in hundreds of cases these leases are only signed under the compulsion of irresistible circumstances, and that the tenant has a sense both of shame and indignation when he does sign them. Why, then, are they signed? Because, in the first place, the limited extent of land in this country makes it a virtual monopoly, and there are so many persons anxious to farm that in the struggle for existence they must either accept the conditions or give up all hope of farming in this country. Agriculture differs from other professions in this, that the number of those who wish to practise it will always be swelled by new comers, who, having succeeded or failed in some other profession, wish to invest their gains or hope to repair their losses in a business which most people think they understand, and all believe to be much more remunerative than it really is. But, I would ask, are the numbers of applicants for farms not unduly swelled from the ranks of the farmers themselves? I here venture to allude to what I think a too common mode in which the sons of farmers are reared and educated. Is it not very frequently the case that farmers who know only too well how little margin of profit there is in farming at present rents allow the early years of one or more of their sons to slip away without attempting to give them such an education as would enable them, when the proper age arrives, to seek admission into some other trade, business, or profession, and thus at the period of opening manhood, hundreds of youths find it too late to think of anything else; they know how to farm, and they know nothing more, and hence, it they fail to find a farm they have the prospect of years of idleness before them. It is exceedingly difficult to suggest any general rules for the education of farmers' sons, from the great diversity of their prospects and situations in life. It has been remarked that when one talks of landed proprietors every rank of life is included, from a duke to a forty-shilling freeholder; and in like manner the word farmer may include many conditions of life, from the man who may have his sons educated at Eton and Oxford if he chooses, to his poorer brethren, who can sometimes barely afford to send theirs for a few years to the parish-school. Farmers, however, have had no lack of advice as to how they ought to educate their sons; indeed, if advice would do us any good we should be perfect, as we are decidedly the best advised persons in the world. Everybody, indeed, lectures or advises farmers, the chief qualification of most of the lecturers being a total ignorance of the subject they lecture about. I was much struck some time ago with the advice of one of these advisers on the subject of education. I shall not name the gentleman, as he is not here to reply to me, but I notice his advice because not only was it given in quite an *ex cathedra* style, but his sentiments were, I regret to say, adopted and applauded at a meeting of the Royal Agricultural Society of England. He said that no boy could turn out a good farmer if he did not devote himself to the practice of the farm from the age of fourteen or fifteen. He seemed to admit that he must go to school

previos to that period, but from that age he ought to devote his whole time to learn the practical details of agriculture. He should try to get some successful farmer to take him as a pupil, and teach him to plough and sow and stack, and so on. Now, if the lad proposed to be a peasant farmer, who was to fill his laud with his own hand, the advice was good enough; but on the contrary, the youth was supposed to receive some £5,000 to stock a farm with, which, supposing he was one of an average large family, would imply that his father possessed a considerable amount of capital. There can be no doubt that, whatever were the professions for which that lad's brother, were destined, they would receive a very different and much more extended education, and would consequently, when men, have a vast advantage over him. Why, I ask, should that son be placed all the days of his life in an inferior position to the rest of his family simply because he had been destined to become a farmer? The idea that a man will succeed better in any profession if he be schooled and instructed in it alone appears to me quite erroneous. I was filled with astonishment on reading the same advice as that which I have quoted addressed by a distinguished and strong-brained clergyman to the students of the Free Church. They were to study only divinity, and then take some successful preacher as a model. This advice was illustrated by an anecdote. A traveller on a Bristol coach asked the coachman a great many questions as to the places they passed. What mountain was that? What was the name of that river? To all which Jehu replied, "Don't know." At length the gentleman, getting cross, said sharply, "Is there anything you do know?" "Yes," said the coachman; "I know how to drive the coach." But even that man may come to regret that he could do nothing but handle the reins or whip when the railway whistle first screamed in his ear shrill notice that his occupation was in danger, and in like manner I think that the young farmer should possess as many weapons as possible with which to fight the battle of life. I would deprecate all attempts to get up agricultural colleges, as we sometimes hear talk of, where a sort of technical education is proposed to be given. I would simply say, let each man get for his sons the best education which his means and his opportunities afford, and don't let it be the worse because the boy is to farm. If it should be said that at nearly all existing institutions a boy's time is occupied in learning Latin and Greek, or the higher mathematics, I would say so much the better. Don't be disturbed by any sneers as to Greek or Latin. Don't be moved by the thought that before he is thirty the man may have forgotten nearly all the classics that the boy was taught. The Professor of Humanity in the University here, in his opening address last week, painted to his students in glowing terms the inexpressible delights of those who could so master the classic authors, as to make them the easy companions of their lives. But this pleasure, which falls to the lot of a mere fraction of those who study classics, forms no part of the reason I would give for having them taught. When a boy learns gymnastics and climbs up a pole, there is no intention of making him an acrobat—the design is to strengthen the muscles of his limbs; and so with the classics or mathematics. I would teach them to the man as the best means of exercising and strengthening the mental muscles, and I do not believe that modern languages, though *per se* much more useful and necessary, are able to educate the mind as the more difficult studies do. In fact, a man may, and indeed often does, speak several European languages with perfect fluency, and yet has no more education than a second-rate valet de place. If anyone should be inclined to alter a line of Burns, and ask me contemptuously if "turnips could be grown by dint o' Greek?" I should say that "Yes" would at least be quite as good a reply as "No," because a brain properly trained and tutored and developed is placed upon a vantage ground, and can quickly adapt itself to altering circumstances, and can easily gather fruit in any new field of knowledge.

Mr. Skirving having vacated the chair, Mr. Smith (West Drums), the newly-elected president, took his place.

The SECRETARY having read the recommendation from the Aberdeen Counties Committee,

The CHAIRMAN asked if any person appeared in support of the recommendation.

There being no answer to the Chairman's call, the resolution from Forfarshire was then read, when

Mr. GOODLET (Bolshan) said: Having been appointed the county representative at the late meeting of the Counties Committee of Forfarshire, it is my duty, and I rise with plea-

sure to support the overture from that committee, and to move in accordance with the resolution sent up by it last year, and again renewed this year, "That this meeting, viewing with regret the unsuccessful attempts that have been made by individual members of Parliament to remedy by legislation the abuses arising out of the Game-laws, and having especially in view the utterly inadequate character of the proposed Government measure introduced by the Lord Advocate, resolve to petition Parliament for the total abolition of these laws." I do not think, gentlemen, that it is necessary for me to enumerate the many abortive attempts of individual members of Parliament to legislate on the Game-laws with the avowed object of removing the grievances we, as farmers, suffer under them, as they are well known to all of us: nor need I waste your time in reviewing the Government Bill of the Lord Advocate—a lawyer's bill from beginning to end of it, and one which has been condemned by farmers generally, as leading to interminable disputes and wranglings in courts of law between landlord and tenant—bringing grist it may be to the lawyers' mill, but endless trouble and not infrequent ruin to the farmer; and, moreover, rendering more and more those friendly ties which should ever subsist between landlord and tenant, but which the excessive preservation of game for buttees on many estates has of late years done much to subvert. I shall only call your attention shortly to the position which this Chamber now occupies with reference to these laws, and which, I think, fully justifies me in supporting the overture from Forfarshire. At this time last year we had Mr. M'Lagan and Mr. Loch before us, each advocating his own bill then before Parliament. The meeting, as you will remember, was adjourned after the two M.P.'s had been heard, to give members an opportunity of discussing their bills. In the meantime, however, the directors took upon them to frame a resolution of their own, embodying, as they conceived, the principles of both, and at the adjourned meeting which took place in January last, when the two bills ought to have been discussed, they were both thrown aside, and the directors' resolutions formed the sole subject of debate. Their resolutions obtained the sanction of that meeting, and the directors were authorised to frame a bill in accordance with them. The bill, I believe, was framed, but beyond that I am not aware of its having got any further. At all events, neither of the two M.P.'s had adopted it when the debates on the Game-bills took place in Parliament some months afterwards. At the debate on the second reading of Mr. Loch's bill in March, we gather the opinions of the two members on their respective bills, and we cannot wonder if, after that, neither of them have agreed to adopt the amalgamated bill of our directors. Mr. M'Lagan on that occasion spoke of Mr. Loch's bill as "a perfectly useless measure," "not worth the paper it was written on;" and Mr. Loch, on his part, said of Mr. M'Lagan's bill, that "its only effect would be to relax the game laws so far as hares and rabbits were concerned, and the right of the tenant to shoot these animals would be no further advanced than at present." Mr. Loch, moreover, seemed to think with the Lord Advocate that it is a mistake to call the Game-laws laws for the protection of game, but that they are in reality trespass laws, and as such essential for the protection of the farmer's property. Such being the utterly antagonistic views of these gentlemen, it seems worse than useless to expect that they will ever agree to amalgamate their bills into one embodying the principles of both as desired by the overture from Aberdeenshire, and it is difficult to see how any good can come of this Chamber again asking them to do so. Mr. Loch's bill, which Mr. M'Lagan characterised as a "Land Contracts Amendment Bill," maintains the Game-laws intact, but limits the right of private contract. Mr. M'Lagan's, on the contrary, clips the wings of the Game-laws, but abstains from intermeddling with private contract. Both bills are, I have no doubt, distasteful to game preservers; but many of our landlords, I believe, would sooner see the Game-laws abolished out-and-out than that their rights of contract with their tenants should be curtailed or interfered with in any way. To me it seems a mere waste of time for this Chamber to go on busying itself to bring about unattainable compromises. All our efforts hitherto in that direction have proved lamentable failures, and since our game-preserving landlords refuse to have anything to do with Mr. M'Lagan's bill, which only proposed to drop hares and rabbits from the game list, what reason have we to expect that they will accept it with the "inalienable right" clause superadded

to it? Besides, gentlemen, I do not think our Aberdeenshire friends come before us with clean hands in seeking this compromise. Mr. Barclay stated at a meeting of the Aberdeen Tenants' Committee lately, that "it should be distinctly understood that while the tenants were willing to show the landlords a desire to settle the question by means of compromise, accepting the right to kill hares and rabbits only, they do so, reserving the right they believe the cultivators of the soil should have of defending their crops from all sorts of wild animals." Gentlemen, my notions may be antiquated, but I have always understood that, in offering to compromise a matter, men do not reserve rights but forego them; and if we are not prepared to forego what Mr. Barclay calls reserved rights, then, say I, let us cease to ask a compromise which would certainly not give us these rights. If offers of compromise are to be made at all, they should, in my opinion, come from the other side, but no such offer has yet been made to us, or at least none that copes sufficiently with the evils of which we complain. My friend Mr. Hope, in moving the director's resolution at the January meeting, remarked in the course of his speech that "possibly the members of Parliament may be entitled, before moving in the matter, to ask the Chamber, 'Tell us what you want—first agree among yourselves before coming to us.'" Now, for my part, I dispute the right of any member of Parliament to put this question to us. We are agreed that a serious grievance, arising from excessive preservation of game, exists; and it is the unanimous opinion of the Aberdeenshire farmers, as well as that of farmers generally, that a "farmer should have full power to protect his crops from all sorts of wild animals," and what we have to do is to tell our legislators *this*. It is *their* duty to provide the remedy—certainly not ours to frame a bill for the purpose. Enough for us that we prove the existence of the grievance; and the numerous bills introduced into Parliament, were there nothing else, abundantly show, not only that there is a grievance, but that its existence is admitted at all hands; and in my opinion it is now high time for this Chamber to cease seeking relief by unattainable compromises, in doing which it has, as we all know, long laboured in vain; and I propose that we should now go to the root of the evil, and petition for the repeal of laws which it seems impossible to modify to the extent, at all events, that is needful for our relief. We are neither qualified, nor, if we were, are we the proper party to frame Acts of Parliament. That is, as I have already said, the duty of our legislators; and, in my opinion, those of them who would come to us crying, "Tell us what you want—agree among yourselves before coming to us," have little desire to see us agreed, and far less to legislate for the redress of our grievances. I am convinced that it is labour in vain for this Chamber to distract itself longer with these unprofitable compromises; and in order to bring the question to an issue here, I beg leave to move, that this Chamber petition Parliament for the total abolition of the Game-laws, in terms of the overture from Forfarshire now on your table.

Mr. WM. RIDDELL (Hundalee, Jedburgh), seconded the motion. He was astonished at the cowardly manner in which Mr. Barclay, of Aberdeen, and his friends had backed out of this matter. It was certainly cowardly of their Aberdeenshire friends to send in an overture to the meeting, and not one of them to appear in support of it. He did not support the repeal of the game laws on the ground that it was a landlord and farmer question, but on the broader basis as affecting the great masses of the community. When the prices of the necessaries of life were at such a high figure, and the question as to the food of the people was of such importance as it undoubtedly was at the present moment, he could not shut his eyes to the danger of allowing these game laws to remain any longer on the statute-book, as well as the law of hypotheses. They asked the Legislature to repeal them because they were wrong and unjust. They were widening the gulf, already wide, between landlord and tenant: for, in all counties of Scotland, how seldom did they see even their landlords or their factors except on rent-day. In one estate in Forfarshire alone, he found that three per cent. of the rent-roll of £70,000 was paid to induce men to forsake useful employment for the purpose of breeding and preserving the winged and four-footed robbers of the people's food (Hear).

Mr. BETHUNE (Blebo House) did not think the motion submitted would prove an adequate solution of the question; nor did he think the agriculturists of Scotland as a body

wanted the laws abolished. He was surprised that no attempt was made to sweep away the heap of absurd game laws that existed, before introducing new laws. He believed the majority were in favour of the winged game being given up to the landlord. Not a hundred men in the House of Commons were sincerely in favour of abolishing the game laws, and there was not, therefore, the slightest ground to hope that they would get them abolished. He moved as an amendment that this Chamber memorialise the Government to bring in a bill founded on the principle of Mr. M'Lagan's bill.

Mr. HOPE (Fentonbarns) did not propose any opposition to the motion of Mr. Goodlet. The attempted amalgamation of Mr. M'Lagan's and Mr. Loch's bills had proved an utter failure; and he was still satisfied that the bill of the former gentleman would have proved sufficient to remedy all the grievances under which they suffered.

Mr. CLAY (Kerchester) seconded the amendment on the ground that it was reasonable and just. It would meet the difficulties of the farmer if they were allowed to kill hares and rabbits. The winged game in this country are considered valuable. It created an amount of sport to our noblemen and other people that could afford to carry a gun. Winged game did the farmers no harm, and he would ask the Government to repeal those privileges which had to a large extent benefited our country, and more especially the Highlands, in the shape of grouse shooting.

Mr. ALEXANDER (Forfar) said this was an imperial question, and was not to be regarded merely as one between landlord and tenant. He had no sympathy with the complaints of the tenant farmers against their landlords. The moment they signed an agreement they began to howl and swear that they had done wrong. In doing so they only exposed themselves as a lot of men who were ready to do what was wrong, and curse themselves after for doing it. He considered the question in various aspects with the view of showing how unjustly the laws were framed and administered so as to press heavily on the poor and not to touch the rich; and pointed out that for moral offences lighter punishments were awarded than what was meted out to a person convicted of poaching. Why were not the laws, if they were worthy of being preserved, enforced against the rich? One of the greatest offenders he knew was a lord-lieutenant of a county, who invited shooting parties none of whom held a licence; but nevertheless the Executive took no notice of them. The poor man was sent to jail, but they were afraid to touch the peer that made the laws and then broke them. The best thing they could do would be to turn out the Liberal Government by their votes, and when they were in opposition they would give that which they will not give when in power. He entertained a high respect for the old Tory landlords, but thought they were benighted in their views. As a class, they were equal to any in the country. There was a propriety of removing laws which prevented the formation of a grand landed party. Supposing the Game-laws, the law of hypothec, and laws which prevented compensation for unexhausted improvements were abolished, there was nothing to prevent landlords and tenants going into the same political lobby, and he spoke that sentiment in these days of social and communistic dogmatism, in the interests of true Conservatism. The laws were, root and branch, bad, and had a demoralising effect on all connected with them, and made their landed proprietors act like a set of cads, who allowed poaching among the great and prosecuted it among the small. These laws made the landowners obnoxious to the whole of the community.

Mr. SHEPHERD (Gleghornie) supported the motion. He acknowledged the failure of the compromise, and this, he added, had only the effect of developing a feeling for increasing the stringency of these laws. He held that all kinds of game might be kept within certain bounds, and in this way fed better than at present and at considerably less cost, while much of the annoyance at present experienced would be done away with were some plan of this nature adopted. Holding these sentiments, he willingly voted for Mr. Goodlet's motion.

Mr. SCOT-SKIRVING said he did not know the name of the gentleman who had spoken previous to Mr. Shepherd, but he was astonished that he characterised the landlords of Scotland as a set of cads.

Mr. ALEXANDER (warmly): I beg your pardon, sir, but I did not say anything of the kind. What I said was that these laws had a tendency to make the landlords of Scotland behave as a set of cads, and that is a very different thing from what you say.

Mr. SCOT-SKIRVING reiterated his statement, and complained that full notice had not been given of Mr. Goodlet's motion. He then referred to the uncertainty in the minds of those who asked for total repeal of these laws as to the result of such a measure, and challenged them to say whether the game was to be increased or diminished, and by whom was it to be shot. If Mr. Bethune would alter his motion as follows, he would support it instead of moving a direct negative: "That this Chamber petition Parliament to bring in a bill which shall enable the occupiers of land to protect themselves from the ravages of hares and rabbits."

Mr. BETHUNE accepted the amendment.

Mr. DONALD FISHER (Pitlochrie) said he had a pretty extensive knowledge of farmers, and knew that they did not sign the conditions of lease willingly. They were compelled to sign them; if they didn't, they must go to the right about. He thought Mr. Goodlet's motion was a very good one so far as it went, but it did not go far enough. He would suggest the following addition: "That landlords and tenants are not to be allowed to contract away the privileges sought for if they are obtained."

Mr. M'LAGAN, M.P., before the Chamber came to a division, would like to express an opinion on this subject—especially as the Chamber seemed to forget that there was to be a select committee appointed on the Game Laws next session. He would be sorry if the Chamber committed itself to either the one motion or the other, because they might depend upon it that any motion came to, whether for the repeal of the Game Laws or for carrying out the resolution of last year, would be laid aside, on the ground that the subject was being investigated, and until that inquiry was finished no bill would be introduced. In reference to himself, he mentioned that he had been quoted several times for the connection he had had with the combined resolutions of the Chamber last year. The fact was, neither Mr. Loch nor himself could introduce a bill of the kind referred to, as the bill of the Chamber came up too late for adoption, and they were already pledged to their own. Meeting Mr. Barclay in the House of Commons, he said to him that he was inclined to bring in a bill embodying the resolutions of the Chamber, and that he approved of it. He further stated that the Chamber had produced a more sensible bill than Mr. Loch's, and that he would be inclined to give it his support. His objection to Mr. Loch's bill was that while he prohibited the landlords and tenants to contract on the game, he left it open to the tenant to contract his right away to any other party, even the greatest poacher in the land. He had used an expression, perhaps too strong, that in consequence the bill would not be worth the paper it was written upon. He suggested that a committee be appointed by the Chamber to collect evidence to lay before the select committee. He moved that the Chamber delay decision in this matter until the report of the select committee appointed by the House of Commons be made public. This would leave them unlettered as to future action. He would not express his opinion on his own, as he, in common with many gentlemen, was willing to wait and see what kind of evidence was brought forward. If he found the evidence such that it would not justify him in bringing in his bill again, he would not do so; and if it justified a repeal of the Game-laws, he would go in for that.

Mr. ALEXANDER said that Mr. Bright had gone into committee on the Game-laws, and had never come out of it. Perhaps a successful vote for the repeal of this Chamber might facilitate the future movements of a committee.

A MEMBER seconded Mr. M'Lagan's motion.

Mr. CUNNINGHAME (Shields) said that they came here year after year and discussed this question. Last year they were sent home without anything being done, and this year the same thing was proposed again. He did not think they should separate without coming to a decision one way or another.

A division was then taken, when there voted: For Mr. M'Lagan's amendment, to delay decision in the matter, 14; Mr. Bethune's amendment, to petition Government to bring in a bill, 7; Mr. Goodlet's motion for the repeal of the game laws, 23. The motion was declared carried amid loud cheering.

At the suggestion of Mr. M'LAGAN, supported by Mr. SHEPHERD, it was referred to the directors to appoint a committee to collect evidence on the subject of the game laws, to be laid before the Select Committee of the House of Commons.

Mr. M'LAGAN proposed a vote of thanks to the chairman, which brought the meeting to a close.

EXPORTATIONS OF PEDIGREE STOCK.

It was announced at Wolverhampton during the week of the Royal Show that many foreign buyers were over, and from then until now a number of pedigree animals have left our shores. There seems on the part of the Americans a great desire to sent out prize winners. The large sums offered in prizes, and the numerous State fairs held in September and October in America, make it worth the while of the importer to pay a good price for our best specimens, and to run the risk of shipment. Many of "the cracks", however, both at Wolverhampton and York, were not sold; Mr. Foljambe, Lady Pigot, Mr. How, and Mr. Beattie refusing large sums for their prize animals. Still several good ones were sent out. Mr. Cochrane, who imported so largely to Canada East during 1868-9-70, made this year only a few purchases, and those were chiefly of store animals; with a Suffolk stallion or two. Mr. Miller, Mr. Thomson, and Mr. Stauton, all of Canada West, took out a few prize winners, and also some breeding heifers and bulls. A large number of Cotswold sheep were also purchased. Mr. Craig, with several others, went extensively into Berkshire pigs for the great Chicago Hog Fair, where about £200 was offered as the head prize. These animals went out safely. Mr. Gibson, of Minneapolis, who it was rumoured was buying for Colonel King, took out several of the Towuclay prize animals, the late Mr. Eastwood's noted heifer Double Butterfly 2nd, some cows from Mr. Aylmer, and also Sir W. Stirling Maxwell's prize cow, Henrietta, for, it was said, 400 gs. These had an unfortunate passage, the weather was rough, and the cattle much bruised when landed. This probably may account for their defeat at the Minneapolis Show in the herd prizes of a bull and five cows or heifers. Several herds were shown, Col. King, whose stock was chiefly bought from Mr. Cochrane's importations of last year, took the first prize of a thousand dollars, or about £200; Mr. Gibson the second prize of 750 dollars, and Mr. Brockway, an American breeder from Wisconsin, third prize of 500 dollars. At the Chicago pig exposition 5,000 hogs were shown. Mr. Craig, who took out the Cirencester Sambo 2nd, the first prize boar at Wolverhampton, won two first prizes with him, but for the great sweepstake prize of a thousand dollars for a display of pigs, he received only the second award of 500 dollars, being beaten by Messrs. Clay's stock from Kentucky, where most of the best Berkshires of America are to be found. It is reported that the trade for cattle and pigs is dull, but that the demand for sheep is on the increase. Besides these, five very choice pure-bred heifers were sent out in September to Mr. Edwin G. Bedford, of Kentucky, including one of Mr. Bowly's Gazelles, and Mr. Barnes' Lady Adela. These arrived safely. Capt. Pratt, of the ship Hudson, a well-known admirer and exporter of good stock, took out in the beginning of the month several Shetland ponies, sheep, and pigs, also a few first class Shorthorns, including British Flag, the first prize bull calf at the Royal and Yorkshire Shows, as well as Messrs. Dudding's fine red bull Standard Bearer, and four of the best heifers from their recent sale at Panton; two heifers, Flower Cherry and Lady Marie, from Mr. Torr's herd at Aylesby, and Mr. Barnard's prize bred heifer Coronella accompany the six from Panton; while it is understood that they are intended for public sale in Kentucky. It may not be uninteresting to breeders to hear that the importation made in June by Messrs. Hampton Van Meter and Co. were publicly sold in

Kentucky last August. The shipment consisted of 3 bulls and 20 cows and heifers from Lord Penrhyn's, Messrs. Nesham, Christy, Seanson, Garne, Pawlett, and other breeders. A great drought had prevailed for several weeks; beef and pork had declined nearly one-third in price since spring, yet notwithstanding these drawbacks, good prices were obtained, the investment leaving a profit to the company. The 23 head made nearly £4,000, averaging about £170. The highest price obtained was 220 gs. for Lord Penrhyn's Cowslip 2nd.

The Australian trade for bulls is still good, and the best ships generally have consignments of live stock to the colony. The Paramatta and Sobraon, two Sydney vessels, both took out Shorthorns, Herefords, and horses. By the former Mr. E. K. Cox of Sydney sent out several thoroughbred fillies going back to Whalebone and Bird-catcher blood; also Mr. Carr's young white pure Booth bull Earl Fitz Windsor, and a heifer, Lady Audley, bred by Mr. Derham. Mr. P. Anderson of New England had two heifers from Mr. Aylmer's herd; and for Dr. Jenkins, two young cows from Lord Walsingham's and Mr. R. Jefferson's herds were sent out. By the Sobraon Messrs. Fanning of Woorooloolgen imported several prize Herefords, Sir G. Wombwell's Shorthorn bull, Newburgh 3rd, the first-prize yearling at York, and a very first-class young bull Weal Lord, a two hundred guinea purchase from Mr. Torr. Messrs. Dangar, Gedge and Co. shipped the Shorthorn bull Commander, from Mr. Grove's sale, in Ireland, a Blanche cow, and a Knightley bull from the Rev. J. Storer, and a fine young cow of Mr. Barnard's, as well as some Herefords. Besides these some bulls were also purchased for Messrs. Lamb of Sydney. Several Angus Polls from Mr. M'Combie's herd, and a few Clydesdale stallions have also been shipped to the colony, where it appears pure-bred Shorthorns are more highly valued than in this country. Mr. R. M'Dougall, near Melbourne, has issued a little pamphlet headed "M'Dougall's Sires of the Season 1871," with the following inscription on the title page:

Let ev'ry man who boasts of costly blood
Describe the channel whence it floweth;
We then can tell from "Coates" if it be good,
Or if the breeder only bloweth.

After refuting some unjust observations in true Johnsonian style, he gives the pedigrees of his imported bulls, also of their sires, adding that "a few cows would be taken in to Field Marshal Booth, the white calf bought last year at Warlaby, at 100 guineas each, including three months' keep for cow, or he would be sold bodily for the sum of 4,000 guineas—not one shilling less." On Major Booth (26790), also bought at Warlaby, 60 guineas is charged, and his *lowest* selling price is 2,500 guineas. Robin Hood, the prize bull calf of Messrs. Dudding's at Oxford and Wakefield, 1870, is fixed at 30 guineas service, and 1,000 guineas sale; whilst for the Oxford Lad, the first prize Hereford bull calf at the Royal last year, 12 guineas is the service fee.

Germany is doing very little as yet; a few young bulls have been sent to Hamburg and Stettin. France, however, is rapidly rising from her trouble. This week, Mons. St. Marie has purchased four superior young bulls of Bates and Booth blood at good prices, some of these being it is understood for the French Government.

K K

ODDS AND ENDS OF FARMING FACTS.

X.—DAIRYING.—(a) The best temperature for the milk to be for the yielding of cream, as shown by the experience of the best butter-makers of a district celebrated for the high quality of the butter made, is 60 degrees, or between this and 62 degrees. If milk be raised to the temperature of boiling water, or nearly this, it will yield a much larger amount of cream than if the temperature be at 60 or 62 degrees, but the butter so made from it will not keep for any length of time. The cream that rises first from the milk is the best for butter-making purposes. Good—at least the best—butter cannot be made from cream which is allowed to remain in the milk till it is old. Cream rises best from shallow vessels, and by far the best material of which they can be made is glass. To lessen the risk of breakage of these, certainly the costliest of all milk-vessels, it is better to offer a reward for all the vessels produced whole at the end of a season, than to inflict a fine for those which may be broken.

(b.) *The temperature at which the cream is to be churned* should be the same as that at which the cream has been raised from the milk; it should not be allowed to exceed 64 degrees. It is a mistake to bring the butter too quickly. A consideration of the "facts" of the case will show the reason for this. The globules of butter in the cream are covered with a thin pellicle of casein; the object is to get rid of this as completely as possible; but it requires time to do this. Quick churning will bring butter, no doubt, more quickly, but as the casein will be in greater quantity than if the churning was more slowly done, the butter will not keep so well.

(c.) Much has been said as to the *different methods of butter-making*, some advocating churning of the whole milk, and some of the cream, and some of the cream and milk combined. A very eminent authority, who experimented largely on the churning of all these mixtures, states that (1) cream alone is more easily churned than a mixture of cream and milk; (2), that the addition of some water, during churning, facilitates the process, especially when the cream is thick and the weather hot; (3), that butter made from sweet cream has the finest flavour when fresh, and keeps the longest; (4), that scalded cream yields the largest amount of butter, but that it does not keep long; (5), that the most economical mode is to churn the milk and cream in a condition slightly acid, and that it yields a large amount of excellent butter. The same experimenter, after an experience of thirty years, says that he has come to the conclusion that butter is yielded in the largest quantity and of the best quality, by churning the whole milk. This should be kept till it is decidedly sour, and covered with a thick skin, wrinkled or uneven on the surface. This is churned at a temperature of 65°.

(d.) There are various modes of *preparing annatto for the colouring of cheese and butter*—the following is one: Mix with one and a third gallons of boiling water one pound of annatto, half a pound of concentrated potash, one and a third ounces of saltpetre. Carrot-juice yields a good colour for the purpose, but it requires to be used when perfectly fresh. When the butter is obtained from a cow properly fed there will be no fault to find with its colour.

(e.) *The salting or powdering of butter* requires to be done with great care. The following is the mode

adopted in the dairies in which the celebrated Kiel butter is made. The salt used is of the first quality—clean and dry. The butter is made into lumps about thirty or forty pounds in weight; and over the surface of each lump some one-and-a-half or two pounds of salt is sprinkled, or at the rate—say, of three-and-a-half pounds of salt to one cwt. of butter. Allowed to lie for a short time, it is then worked slightly in with the hand. The second working is made with lumps of five or six pounds weight, the salt being well kneaded in, when the lumps are allowed to lie for twelve hours. The last working is very complete, so as to get rid of all the fluid which ought to be expelled: before the third or last working is begun, a little salt, at the rate of one pound to the cwt., is added: no working of the butter in cold water is allowed. Under ordinary circumstances the proportion of salt to butter when made for market in this country is one ounce to the pound of butter: half this quantity when the butter is to be used at once. In Scotland, as is well known, what is called "fresh butter" is largely used, having no salt at all in its composition. This system certainly affords a crucial test of the flavour of the butter, although to the palates of a large majority of butter eaters in England the flavour of saltless or unpowdered butter is insipid and flat.

(f.) *The proportion of butter to milk in cream* varies very much, according to the circumstances attendant upon the breed of the cow, the mode of feeding it, &c. It is generally stated that a quart of cream should yield a pound of butter, but it may be taken as decided that this will be above the average experience of dairymen. One authority gives his at 4 pounds of butter from 7 quarts of cream, little more than one-half of the above estimate. Another authority, however, has it on record that he obtained 15 ounces of butter from 1 quart of cream. The following are statements of different results from the same cows, but with different modes of feeding: 16 quarts of cream gave 12 lb. 8 oz.; 24 quarts, 16 lb. 12 oz.; 30 quarts, 20 lb. 8 oz.; 70 quarts, 49 lb. 12 oz.; 50 quarts, 32 lb.; 60 quarts, 40 lb. According to "general" authority, a quart of cream is obtained from 12 quarts of milk. One special authority, quoting the results of many returns, states the average quantity of milk required to produce one quart of cream was ten quarts, the lowest range being eight, the highest twelve. The yield of the best out of four cows, at a public competition, was an average of 12 per cent. of cream.

(g.) *Analysis of Milk*.—The quantity of solid matter in 40lbs. being shown to be 5.06lbs. as follows: Pure casein 2.00lb., butter 1.25, sugar 1.75, phosphate of lime 0.9, chloride of potassium 0.11. Analysis of butter, the quantity of solid matter in 100lbs. being shown to be as follows: Pure fat or oil 82.70, casein or curd 2.45, water with a little salt 14.85.

(h.) *The weight of hay required by a cow per day* has been estimated at three per cent. of her weight. Thus twenty-four pounds of hay will be required by a cow which weighs eight hundredweight.

(i.) *The quality of the water used for washing the butter* in preparing it for market, is stated to have an effect upon the butter; hard spring water being the worst, soft water being the best. On this point we require more detailed information, although the facts stated in support of this opinion seem very conclusive, and it certainly is a reasonable thing to suppose that the quality of the water

used for this purpose would have some influence more or less decided. In making the Kiel butter (see *e*) no working of the butter in water is allowed. The following is the method adopted for preparing the butter for market: As the butter is taken from the churn it is slightly pressed to get rid of a portion of the whey, and then put on trays and carried into the cellar, where it is made ready for market. A long trough, and which is provided with a few holes at the bottom of the lower end, is placed in an inclined position, and is previously well washed with hot and finally with cold water. The dairymaid taking up some five or six pound in her hands, which are also washed in hot and finally cold water, keeps pressing the butter against the sides of the trough until the whey, &c., is fully expressed; as the butter gets extended in the process it is then rolled up and again pressed against the trough. The processes of pressing and rolling up are repeated again and again till the butter is perfectly freed from all whey. One churning is finished right off before another is begun.

(*j.*) *Different Modes of Feeding.*—Winter feeding. (*a*) At four o'clock in the morning each cow gets half a bushel of brewers' or distillers' grains, after which they are milked. At seven o'clock each cow is allowed to eat as many whole turnips as it desires, after which it gets a drink of water, and then the stall is cleaned, after which the animal is allowed to rest. At ten o'clock each cow is allowed to eat as much as it likes of a "steamed chop" of hay and straw. At two o'clock a feed of mangolds is given, after which a drink of water, and, after being cleaned out, a second feed of steamed chop. The cow is then milked at half-past three, after which it gets more steamed chop if it can eat it. If the cow is losing flesh, or milking very heavily, it gets an addition of three and a-half pounds of linseed cake per day. In summer the feeding is on the same plan, but, for the roots and steamed chaff, Italian ryegrass is substituted. (*b.*) For each cow in winter feeding the following substances are made up into a mash, steamed or otherwise cooked: Fifty-five pounds of turnips, a pound and a fifth of oilcake, three pounds and a fifth of rapecake, one and a-half ounces of salt, a pound of mixed meals, as beans, oatmeal, &c., together with a like quantity of the refuse of wheat, or grain dust. This mashed food is supplemented by a food given dry, or in the natural condition, made up as follows: Thirteen pounds of straw, and five pounds of hay cut into chaff, twelve pounds of mangolds and half a pound of linseed-meal; the food to be divided into three portions, the mash given first and the dry food afterwards. (*c.*) At five in the morning as much hay is shaken down before each cow as will keep it busy till about seven o'clock, after which it gets a drink of water, which is

succeeded by a feed of oat or barley straw chaff mixed with four or five pounds of meal, and a little salt, the whole moistened with water. A little hay or straw is given between the first and second feeds, which latter is at one o'clock, and is the same as the first feed. Plain straw is given to each cow for the evening and night feeding. (*d.*) The feeding materials are brewer's or distiller's grains, mangold, rapecake, or oilcake four pounds per day, bean-meal six pounds ditto. (*e.*) Another method. Ninety pounds of pulped turnips mixed with seven pounds of cut straw per day per head. The materials for three days' feeding are well mixed and allowed to lie in a bin before being used. In addition to this mixture four pounds of oilcake per head per day are given. The ninety-seven pounds of grated turnips and cut straw are divided into four equal portions. One portion is given to the animals at six o'clock in the morning, a second at nine o'clock, a third at one, and the fourth and last at four o'clock, about three pounds of hay being given in the evening, and the linseed-cake at mid-day. (*f.*) Another method: At seven o'clock in the morning each cow gets seven pounds of cut hay, at nine o'clock half-a-pound of bean-meal in a pailful of water, at ten o'clock two pounds of oilcake, at one o'clock seven pounds of cut hay, at two o'clock two pounds of oilcake after being watered, at five o'clock a quarter of a cwt. of roots, and at eight o'clock seven pounds of cut hay. (*g.*) The following method has been adopted with great success for obtaining large supplies of milk for a town business: At eight o'clock 30 lbs. of cooked roots are given, mixed with 1½ lbs. of linseed and two pounds of bean or pea meal; and a quantity of light grain or chaff; this is followed with a supply of oat-straw. At ten o'clock, sixty pounds of yellow turnips are given, with straw; at two o'clock, a sixth of a bushel of grains; and at five o'clock, sixty pounds of yellow turnips are given with oat-straw. (*h.*) The last method we now give is as follows: Sixty pounds of cooked turnips, four pounds of rapecake, and hay *ad libitum*. The cooked turnips are mixed with some chaff, the rapecake and the chaff being previously steamed together. The above methods are all adapted for house or winter feeding. In a succeeding lot of "facts," we shall glance at different methods of carrying out summer feeding, concluding this lot with a statement showing the *relative value of different feeding materials for dairy purposes*, as compared with one hundred pounds of good meadow hay: Oats 50 lbs., peas or beans 25 lbs., oilcake 50 lbs., wheat-straw 400 lbs., oat-straw 300 lbs., barley-straw 400 lbs., rye-straw 300 lbs., pea-straw 250 lbs., vetches 250 lbs., hay 80 lbs., potatoes 200 lbs., beetroot 460 lbs., cabbage 350 lbs., carrots 250 lbs.,

AGRICULTURE IN THE EAST.

The inquiry by Her Majesty's Secretaries of Legation and Consular Agents covers a wide space, from the United States, with all the intermediate European countries, to the provinces of Eastern Turkey, and further on to Persia and Bushire, on the confines of British India. It is a bold stretch of travel to cross the Atlantic, to steam up the Mediterranean and enter past the Golden Horn through the Bosphorus to the Black Sea; but the Eastern question has always been a stock-in-trade article with diplomatists, to be drawn from their portfolios at intervals, again to disappear, when immediately follow Turkish and Egyptian loans that puzzle men on 'Change with their enigmas of periodical drawings and borrowings.

If we look closely into the condition of the backward nationalities, even the Russian for instance, Turkey does not, comparatively speaking, appear in that sinking state that her interested neighbours may wish to assume, and there is a fair chance that what she most requires will be forthcoming, namely, increased banking facilities and railway communications. What is the condition of agriculture, or the status of the proprietor or peasant, how lodged, clothed, and fed, or indeed, how he exists at all, has rarely perhaps occurred to anyone to investigate. We need no apology, therefore, for directing attention to Mr. Palgrave's description of these classes in his account of Asia Minor, information that could only be gained by a

gentleman of unusual intelligence, resident upon the spot, and armed with that indefinable ex-official influence attaching to one of her Britannic Majesty's servants in foreign countries. Hence our reasons, also, for reminding representatives of the agriculturist interest, of what may be gained by keeping in friendly accord and upon intimate relations with our Foreign-office service, and with its agents abroad.

Passing from the zone on the southern coast of the Black Sea, from whence the inhabitants emigrate yearly to the mountains to escape from the intermittent fevers that prevail, we find in the interior the climate is in general healthy and bracing, except in some of the deeper valleys. Cereals form the staple agricultural produce: corn and barley are abundant and excellent, also rye and oats, although the cultivation of the latter is somewhat neglected: turnips, carrots, beet-root, pot-herbs, and the like succeed excellently when tried. Orchard fruits, such as apples, pears, apricots, plums, peaches, besides melons of every kind, require only a little horticultural care to become first-rate in quality. Silk does well in the valleys, and cotton has been planted with a tolerably good result in some favourable spots; whilst the wool of the sheep reared on the pasture lands is remarkably fine. There are other kinds of cultivations, such as the vine, the olive, and the mulberry tree, but in no instance have any of these been sufficiently developed to deserve the name of an art, or to occupy those engaged in them so exclusively as to give a distinct character to their mode of life. Along the sea-line of the Black Sea most of the villagers are more or less mixed up with fishing, and with the coasting trade; but these fishermen and long-shore sailors are only such occasionally; their fields are what they look to for their staple maintenance and occupation. The pastoral class, which is very numerous inland, is composed in great measure of Koordish and Turkoman clans, semi-nomade, wild, and almost savage in their habits. Many of the ordinary villagers also keep or breed sheep and cattle, but live stock is in almost all cases a mere adjunct; tillage is the main business. Some, though not many, of the peasants exercise the profession of carpenter, smith, or weaver in their respective hamlets, but this again is only supplementary to their agricultural work. The peasant class, therefore, is numerous beyond all others, and constitutes at least 19-20ths of the entire rural population. Some of them are proprietors of the land they till, others tenants, the latter being to the former as about 2 to 1. But whatever may be the form or title of occupation, the material result is very similar, the tenants, on the whole, being rather better off than the owners of the soil.

The condition of the average peasant, whether proprietor or tenant, is described by Mr. Palgrave, who assigns to him the average allowance of arable land—about eight English acres: more than this his rude implements will not permit him to cultivate to advantage. The market-value of an acre of land is, if for ploughing, 300 piastres (£2 10s.), on an ordinary estimate; if for planting, about 130 piastres (£1 1s. 6d.). The materials of the cottage cost little or nothing, and the construction itself is in part done by his own labour: still much remains towards completion that exceeds mere peasant skill, and the total expense of the dwelling generally reaches £16 or £25. Cottages to let are things unheard of in the country villages. A barn requires for its construction about £8, and when once built, may, like the house, last from twenty to thirty years. A pair of oxen used for drawing the plough, costs from 700 to 1,000 piastres (£5 16s. to 19 3s.). The two animals together have hardly the strength of one English beast. Buffaloes are preferred where they can be had. A pack-horse, too, is indispensable for conveying field-produce to market: the

price is from 450 to 800 piastres (£3 15s. to £6 13s.). Agricultural implements and house furniture represent a value of about £20 additional. Everything connected with field-labour is yet at its simplest and most primitive expression: the wooden plough used is merely a crooked stick, shod with iron at the point; next comes a wooden spade, or a two-pronged fork for turning up the clods; then a harrow, which is nothing but a hurdle of watted twigs—these, with a sickle of the rudest description, that tears up more than it cuts, and a clumsy iron hatchet, are the chief items. Sowing is done by hand and broad-cast: thrashing, like that of biblical Palestine, is the work of oxen or horses, who partly trample out the grain, partly crush it from the ear by dragging over it a heavy hob-nailed board, on which a boy is seated to give it additional weight. Winnowing means just tossing up the chaff and the grain together against the breeze. Manure is seldom employed—never systematically, nor is it properly spread and dug into the ground. Of subsoil-draining no one has so much as heard, nor is there any established system of rotation of crops: the land, when over-taxed, is left to lie fallow for one or more years, and then tilled exactly as before. The cultivation of vines, olives, and fruit-trees consists almost wholly in letting them grow just as Nature wills, without pruning, cleansing, clipping, binding, or even mere turning the earth about their stems. Grafting is the only horticultural art known or practised.

Upon a calculation of the annual earnings and expenditure of the three classes—the landowner, the produce-partner tenant, and the tenant in rent—there appears a balance of 26s. for the latter, the most favoured. This scanty pittance is clearly inadequate to any emergency; and if to all we add that almost every peasant, especially if a landowner, is deep in debt, with a millstone of usurious interest, yearly increasing at compound rate, tied round his neck, we shall conclude what appears to be fully borne out by fact, that the normal prospect is poverty culminating in beggary, starvation, or emigration. The peasants themselves are not responsible for this state of things. Taken individually, the villagers are hardy, industrious, steady, and, above all, perfectly sober, the Mahometans especially. But to put these qualities to profit they would require, first, good agricultural implements; secondly, ready means of market communication for the sale of their produce; and, thirdly, capital. At present the transport cost of a sack of grain from a hundred miles inland to the coast amounts to somewhat more than the prime market value of the article itself. Then, too, over all, is a Government that, taking much, gives little in return; and, worse still, the army-conscription, levied exclusively on the Mahometan subjects of the Porte, bears on the agricultural population, nine-tenths of which are Mahometan, with a weight alike disproportioned to their numbers and their means. But for all these depressing agencies neither the soil nor those who till it are primarily or principally in fault.

With regard to the practical purposes for which this inquiry was prosecuted, namely, the outlets for redundant population, and the prospects of emigrants in this amongst other parts of the world, we learn from Mr. Palgrave's account that in no case, and in no part of these regions, whether coast or inland, could a solitary European field-labourer hope to find, not to say prosperity, but even existence. No efforts that he could singly make could effect any serious change in the disadvantageous circumstances around him, and he would consequently be exposed to the same poverty and privations as the natives, with much less power of endurance; while native competition and the other adverse causes would render the emigrant's position alike unprofitable and untenable. Another pro-

ject, however, has been often canvassed in the east—that of a body of European agriculturists establishing themselves on the grounds and under the direction of a native landowner: neither would this meet with success. Accordingly the only manner in which European agricultural enterprise can succeed would be by means of a colony, and the prosperity of the colony itself would be in proportion to its independence of the local influences around, and the Ottoman administration in particular. The experiment has been already reduced to practice by German settlers, and, according to the measure of the undertaking, it has answered very well, though on a small and tentative scale hitherto. At the present time a larger body

are about to fix themselves in the interior in the neighbourhood of Angora, where the fleeces now obtained are a sufficient proof of what might be reared by proper care. Nature affords every facility for the cultivation of cereals, beet-root, tobacco, silk, or the vine; and although a European colony could not, nor should not, take its chief support from the surrounding natives, the latter would soon, in view of their own profit, aggregate themselves to the colony, to which they would add their labour and, in process of time, their capital. No better field for rural and agricultural enterprise, in the opinion of Mr. Palgrave, exists perhaps in the entire Eastern temperate zone than Central Anatolia!

THE LAND QUESTION.

At the Social Science Congress at Leeds, Mr. W. Vernon Harcourt, Q.C., M.P., in the chair, the special question for consideration was "What alterations are expedient in the laws relating to the devolution and transfer of land?"

Mr. MOZLEY, the secretary, read a paper by Mr. Wm. Sykes Ward, Leeds, on "Suggestions for facilitating the Transfer of Land." He assumed it was generally considered desirable to diminish the expense and to make the title to any estate as safe, and to enable it to be as easily transferred as the title to stock and shares in public securities or railways, so far as such purpose could be effected without any injustice to public or private rights. He referred to the expense in investigating the title of land on every transfer. With some slight or comparatively feeble and abortive exceptions, little had been done by the Legislature to amend the laws regulating the title to land, and this appeared to have arisen from the popular prejudice laying the blame on the terms of the conveyance instead of on the anomalies of the law and the practice of investigations for such titles. He then reviewed and considered the effect of some of the statutes passed during the last thirty years for amending the laws of real property. He next referred to the law of contracts, which had grown to be a great evil, from a series of decisions of the courts, and had become a very great anomaly. All other documents meant what appeared to be the construction of them in precise and grammatical English; but the contract for the sale of land meant a great deal which was not expressed, and which could never be understood by a non-professional person signing it; and until the law of contracts for the sale of land was altered by statute, no other amendments in conveyancing would be fully operative. No injustice could arise from a contract being required to be affirmative instead of negative; a vendor must agree what title he had to give, and not to stipulate what he was not required to give. He then made a variety of suggestions for facilitating the transfer of land; and if they were carried out there would not be much to desire either in the further diminution of expense or the safety of tenure. He recommended that the statute constituting the Register of Deeds for the West Riding of the county of York should be extended to all counties. The system of registration established in the county of York was, with the exception of some details which might be amended, very simple and inexpensive, and perfectly answered the purpose of preventing the suppression of deeds; yet the necessity of searching the register, and the cost of registering all deeds, caused a very considerable increase in the cost of conveyances and mortgages of small parcels of land; so much so that there was some reason to doubt whether registration should not be confined to deeds of settlement and incumbrances not effecting a change of apparent possession.

Mr. ARTHUR HOBHOUSE, Q.C., also read a paper. Adverting to the magnitude of the subject, he warned the audience that he did not intend to discuss the larger questions raised by the Tenure Reform Association and the Land Labour League, who were aiming rather at a reconstruction of the whole basis of society than at the reform of any particular department of law. Intimating a dissent from them partly on legal and partly on more general grounds, he desired to attempt

the discussion of the transfer and devolution of land from one private owner to another; and even so, he said the subject was very large and difficult, and much detail and technicality must be avoided. He first dealt with the transfer of land, meaning thereby the machinery by which it passes from hand to hand. He traced briefly the history of legislation; the Commission of 1857; Lord Cairns' Bill of 1859; Lord Westbury's Act of 1862; the Commission of 1869; and Lord Hatherley's Bill of 1870. He imputed the ineffectiveness of the Act of 1862 to its too stringent and comprehensive character; and submitted that the Commissioners of 1857 and those of 1869 were right in recommending a registry confined to absolute ownership and not requiring perfect titles in the first instance. This, he thought, would work usefully. The speaker then went on to state that it was impossible to combine any simple system of conveyancing with a very complex system of law, and that by far the most important part of the subject was the devolution of land on the mode and extent of ownership. He laid down the principle that land should always be in hands capable of fulfilling the duties required by the community at large. It was so in feudal times for military purposes; it should be so now for commercial and peaceful purposes. He then showed that owing to settlements and to personal disabilities of owners a very large portion of the land of the country was fettered by restrictions. The remedies he proposed were—1. That the land of a deceased owner pass to his executor; 2. That in the hands of the executor it should be treated as personal property now is; 3. That the disability of beneficial owners should not fetter dealings with land, but that his trustees being the registered owners, should have full power over it; 4. That nobody should be permitted to settle land except on persons in existence at the date of the settlement; 5. That the period for bringing an action for the recovery of land should be shortened. In conclusion, he warned his hearers of the great difficulty in effecting alterations of this kind, especially that contained under the fourth head; even that contained under the second head, simple and obvious as it was, had been urged for years with great ability, but with no hope of success until this year.

The PRESIDENT said that he had prepared a few observations on the same subject, and they pointed to almost the same conclusion as Mr. Hobhouse had come to. It was not likely, he said, that the ideas which were subverting continental society would find support in this country; but there was seldom smoke without fire. The law relating to land in this country was in a profoundly unsatisfactory condition, and the time had come when something must be done. It was the business of the law to define the rights of property, but it was first necessary that they should understand what those rights were. Of all property there was none in which the nations at large were more deeply concerned than that which consisted in land. The aggregate of private properties in England formed England, and England after all was the possession of the English people. He referred to the registration of titles, and said that the difficulty, he conceived, lay not so much in the registration of titles, as in the nature of the titles themselves. There were those who wished to see the State assume the ad-

ministration of the land; but he could not concur in that. He believed the State was extremely ill-fitted to perform either the public or private functions of the landowner. It would be best to leave the land in the hands of private proprietors, who should be able to buy what they wanted, and to sell when they wished. They could not, without creating more evils than they cured, attempt to make men improve their property as they ought. They should remove all those artificial obstructions which at present the law permitted to freedom in dealing with the land, and it was in that sense that the Legislature might beneficially act by removing the fetters which stayed the action of landowners. The real remedy was to be sought, not in a system of registration, but in the simplification of titles themselves. The nominal proprietor of an estate was often only the mere recipient of the rent derived from the land, and the nominal proprietor was perhaps in the receipt of barely sufficient to meet the wants of his family, and not being able to get the capital necessary to improve the land, the estate languished, and the population pined. If the nominal owner could sell, then he might sell the land to those who would be able to do justice to it, or if he could borrow upon it, then he might do justice to it himself. The law, however, allowed him to do nothing. A restriction was required upon the large power of contingent limitations which the law at present permitted; he did not suggest any interference with the rights already vested or created; but in the future the law should allow the creation of no estate in land except in fee simple. He would leave to a man the absolute power of disposing his land and property to whom he pleased. He did not like the French law which dictated the proportions in which a man had to dispose of his estate. If a change was made in the law owners might sell their outlying estates, on which they did not reside, and so tend to decrease the increasing evil of absenteeism. It was said by some that the present system was necessary to keep up old families. If old families were worth keeping up they would keep themselves up, and if they were not, then it would not be to the advantage of the community that the law should endeavour to keep them up. The amendment of the law, he thought, should come from the landed interest, who should demand greater freedom from the shackles imposed upon them by the law of settlement. He concluded by recommending that solicitors, instead of being paid so much per folio, ought to adopt the Scotch plan, and be remunerated the same as brokers, by an *ad valorem* payment in proportion to the money value of the transaction.

Mr. Serjeant Cox read the next paper, entitled, "Land Law Reform." Two parties, he said, are demanding a reform of the laws that regulate real property—one party seeking reform, the other seeking revolution. The object of the paper was to consider what reforms are required, and in what manner they may be accomplished. The substance of the complaint is that land is monopolised by a few, though many are desirous to possess and willing to purchase it—being prevented through the inability of the owners to sell, by reason of the law of inheritance, of settlements, of incumbrances, and the consequent costs of transfer. The alleged causes of the asserted monopoly of real property are: 1st, variety of tenure; 2nd, the law of inheritance; 3rd, the powers of devise and settlement; 4th, mortgages; and 5th, the system of conveyancing. Taking these alleged causes *seriatim*, the learned Serjeant suggested—1st. That facilities should be afforded for the conversion of any tenure into freehold, by extending the powers of the Copyhold Commissioners; and that all existing varieties of tenure should be reduced to three, viz., the owner in fee, the owner for life, and the tenant for a term of years not exceeding one hundred. 2nd. The abolition of the law of primogeniture, leaving to owners of property who desire to preserve the estate in the family to do so by will. 3rd. The powers of settlement and devise form the most formidable obstacles to the ready sale and cheap conveyance of real property, as purchasers are reluctant to buy property subject to such charges. He proposed to apply as a remedy the practice adopted with respect to land required by railways, viz., to permit of its being discharged, at any time, by any person entitled to the actual possession, from all incumbrances whatsoever on application to the Copyhold Commissioners. 4th. With respect to mortgages, he would abolish the existing system of requiring a re-conveyance when a mortgage is paid off, and make a simple endorsement of a receipt upon the mortgage-deed to operate as a re-conveyance

of the estate. 5th. As to the costs of conveyancing, these are almost entirely due to the difficulties caused by the preceding defects in the law of real property. So long as the law allows a man to have any interest in real property other than actual possession, there must be an investigation into title preliminary to sale. The proposed power of discharge of mortgage would do much to remedy the evil complained of; but that which most of all would abbreviate the labour and cost of title-making would be a compulsory register of incumbrances of all kinds; and no charge upon property should be valid unless registered. In conclusion, he approved of Lord Derby's suggestion of a new Domesday Book.

Mr. MOZLEY (for Professor Jacob Waley) read the fourth paper, entitled "Suggestions for Facilitating the Transfer and Disposition of Land." The two principal questions were, What are the best means of facilitating the transfer of land? and, What alterations are necessary in the laws relating to land? These questions, though distinct, are closely connected. He did not depreciate the advantages of a system of State registration of owners and transfer of land; but the officers charged with the carrying out of the Land Transfer Act of 1862 should be invested with much larger powers. He did not think the Continental system of sale and purchase of land would suit this country. It appeared more than probable that any change in the land laws not involving the complete reconstruction of our social system would not have the effect of materially diffusing the ownership of land; still, increased facilities for the transfer and disposal of land might be introduced with advantage. He proposed: 1st. That five years should be the limit (and not twenty years, as at present) for the assertion of dormant or displaced claims. 2nd. That adverse possession should operate against the estate—that is to say, not merely against the limited owner during the currency of whose interest the adverse possession takes place, but against the whole series of owners having successive interests, who, for this purpose, shall be considered as represented by the owner entitled to the possession barred by the non-assertion of his rights. 3rd. In order to protect the purchaser against concealed encumbrances, the law should require as a condition of the settlement of land against a subsequent purchaser, and this settlement should be enrolled in the Common Pleas. 4th. Estates' tail should exist only for purposes of defining and limiting the devolution of the land so long as not disposed of by the act of the tenant in tail. 5th. The personal representative of a deceased owner of land should have power to sell or mortgage the real estate of the deceased, and receive the money. 6th. A limited owner in possession should have power to lease or sell the estate for any purpose for which it is best adapted by an application to the Court of Chancery, which shall appoint trustees to receive the money and hold it in trusts corresponding to the interests in the land.

Mr. FOWLER, M.P., said he accepted the statement of Lord Derby, that the produce of England should be twice what it is, but he thought the statement was under the mark. It was his opinion that if the whole of this country was cultivated as large areas were cultivated there would be more than double the present amount of production. In what alone there would be an immense increase. Lord Derby's remedy was to give leases, but this only assisted the tenant's capital, and did not remove the restriction upon the landlord's capital. He contended that there should be nothing but fee-simple ownership, and he believed that such a change would effect a revolution in twenty years. He had no sympathy with those people who wanted to give the land into the hands of the Government for division. He looked upon that proposal as being worse than visionary—he was going to say, as worse than revolutionary; it would make the whole titles to property unsatisfactory. With regard to the arrangement of Mr. Mill, he did not think it would be wise at all to introduce uncertainty as to the ownership and the natural increment of property. He thought, if the idea was once introduced, that the right to the increment of property depended upon what a Government valuer said about it, the rich man who wanted means would fight shy of an investment so interfered with. Again, he had no sympathy with a law which said that however great a blackguard a son might be he should have his son's inheritance.

Mr. HOSKINS spoke from the point of view of the Land Tenure Association. He denied that there was any intentional

confiscation on the part of the Association, its principal aim being to allow the State to benefit by the increased value of land.

Mr. JAMES HOWARD, M.P., said that he agreed with what fell from the Chairman as to the loose and visionary notions which were afloat on what was popularly called "The Land Question," words often uttered by those who were utterly ignorant of the questions involved. There was a certain class of writers and speakers who taught the doctrine that the land of the country belonged to the people. If they simply meant by these words that England belonged to the English, they were only uttering a truism which could do no harm; but if they meant more than this—and he was afraid that some well known writers did—if they meant that people without any property of their own had a right to a beneficial interest in the property of others, they were incurring a most grave responsibility. With respect to the remarks of the last speaker, who enunciated the views of the Land-Tenure Association, viz., that the State has a right to the "unearned increase" in the value of the landed property of the country, he (Mr. Howard) thought such a position untenable. But admitting the principle, he had never seen any practical scheme for giving effect to it, and he had read all that Mr. Stuart Mill and others had to say upon the subject. For instance, how was this "unearned increase" to be ascertained, and by whom? The thing was impracticable. It was undoubtedly true that the increased wealth of the country had given a greater value to land; but so it had to almost everything else. Increased wealth simply meant a greater purchasing power, and the Legislature of this country would never listen to any proposal to pass a law of this kind that would apply to land but not to other property. Having said thus much, he was ready to join with the Chairman in saying that our present land laws were profoundly unsatisfactory: any law which hampered the legal distribution of wealth was injurious to the body politic. This was one of the first axioms of political economy, and was doubly true when applied to land; inasmuch as the land of this country was unlike other descriptions of property—a fixed quantity. He could not go with those who would frame our land laws with an especial view to the subdivision of estates, he would leave this to the operation of natural laws, such as supply and demand. He thought that to frame the law with either a view to the aggregation or subdivision of estates would prove alike injurious. He was aware that, if left to natural laws, many years must elapse before the evils entailed by the existing laws would be remedied; but he deprecated any violent action, and maintained that, if there were greater freedom and facilities for selling and buying land, things would soon right themselves. That the present hindrances to transactions in land were profoundly unsatisfactory, every one felt. If one crossed the Channel to that little country, Belgium, he found a very different state of

things: a seller of land and a buyer had simply to resort to the Lands Register Court in the adjoining county town, and there, without the intervention of a lawyer, the transfer was effected in a few minutes, and a report of the transaction, with a plan of the property sold, was transmitted to the Registrar's Court in Brussels. Again, if one took a voyage across the Atlantic, he found that in every state capital a register existed of all the land in that state, giving the owner, the number of the plot, the acreage, &c. Any change in the ownership was effected in the same way as in Belgium, and a copy of the transaction transmitted to Washington; and surely what is done so easily and satisfactorily in these or other countries ought not to be an insuperable difficulty in this. He did not quite agree with the remarks which fell from Serjeant Cox. He thought that, before the State placed upon a State register the name of the owner of any estate, due inquiry should be made into his title; therefore he agreed with the Earl of Derby as to the need of a survey of the whole country. When this had been made, and the name of the owners had been, after proper inquiry, placed upon the State register, he would give indefeasible titles, and thus avoid the necessity of a tedious and costly inquiry into the subject every time the land exchanged hands. He agreed with Lord Derby and a previous speaker (Mr. Fowler, M.P.), that the produce of the country in corn and cattle could be enormously increased; but what was required to accomplish this was the same as was required in every other business that was extended—more capital. The present laws hindered the embarkation of capital both in the purchase and in the cultivation of the land. Beef was not now solely produced in grass-fields, but was manufactured in costly homesteads, in many of which the process was carried on as systematically as in any of our northern mills and manufactories. These homesteads, and other facilities necessary for producing beef and mutton, cannot be supplied by impoverished landlords; nor can the homesteads be fully stocked except by wealthy tenants, who are shy of embarking their capital upon the estates of needy or greedy landlords without adequate security. What was needed was security of tenure. He had known many a man of capital and intelligence brought up to farming, who, rather than embark his money in the cultivation and improvement of the land of another, without a title to compensation for improvements, had carried his capital and intelligence into other pursuits. In conclusion he would express an opinion that great good would accrue to the country from the establishment of an Encumbered Estates Commission and Court, as it would bring a good deal of land into the market which the present nominal owners could not make the best of, and the result would be the introduction of capital upon it, and it was capital which was required to increase the supply of the food of the people.

LOCAL TAXATION.

At the Leeds Social Science Congress, the president of the Department, Mr. Wm. Newmarch, was chairman in this section, where the special question for discussion was, "What principles ought to regulate assessment and administration of Local Taxation?"

Mr. E. R. FORDHAM read a paper on the subject. He said local taxation, unlike almost every other system in the country, remained just in the state in which it was originally organised. It started with the assumption that everyone in the country should contribute to the exigencies of the State in proportion to his ability to do so. This was fairly secured in the then state of things, when the only income from property was that derived from houses and land, or nearly so. Now, the income from land and houses was only about one-third of the people's annual income, instead of constituting nearly the whole, as formerly. It seemed to be conceded that the onus of maintaining the pauper, of educating him, of making roads, and supporting a police force for the security of the population, ought to be thrown on the people generally. How is it, then, that all these charges, which were always increasing, should still remain almost the exclusive burden of a part of the State, the owners of real property? There were

several ways of accounting for this. One was, that property in land enjoyed a protective duty on corn, which probably enhanced its price by 6s. per quarter on all the produce of these islands, say eight million quarters of wheat and two million quarters of other grain. This would give them nearly £3,000,000, a considerable set-off towards the charge of keeping up these institutions, which then did not exceed £6,000,000; but now that this annual grant of £3,000,000 was withdrawn by the repeal of the Corn Laws, and also on the importation of cattle, there seems no reason why these charges should not be again equally shared by the whole wealth of the country, or at any rate why a much nearer approximation to equality should not prevail. This might be accomplished in two ways. The area of taxation might be much extended—it might be extended to mines, now employing a large population, but paying little or nothing to the vast mass of pauperism created by such population. Then, again, see the enormous number of ships—floating houses—their lettable value immense, tenanted by seamen, earning countless millions for the shipowner, and leaving their pauper population, belonging to those employed in such vessels, a burden borne by real property only, from which these ships are exempt. Then there were

the many millions of property in railways paying a very small proportion of income of the shareholders towards the rates. Why should not railways be rated as land? Why should not rail owner contribute the same proportion of his income from rent, or estimated rent, of a railway as a landowner did from the rent of his land? The vast amount of wealth still untaxed for these purposes would bear some share of those charges which were paid from the national exchequer by arresting the diminution of duties on such articles as tea and sugar, and slightly increasing those on alcohol. Let the Post-office charges remain as they were, and there would be a constantly increasing surplus from this source. The property and income-tax also would yield a rapidly large increasing sum. These sources would almost imperceptibly rectify the flagrant injustice of the present plan, now obsolete. With respect to the incidence of rates on houses, he contended that it was much more unjust than on land, and that it fell almost exclusively on the tenant. This state of things had an important incidence thus: £6 rental would be rated at £5, and a poundage rate of 4s. would thus deprive the tenant of £1 per annum. In the case of a labourer who earned 12s. per week, which would give him an annual income of £31 4s., it would represent in his case a property-tax of 5d. in the pound as his contribution towards the support of pauperism, &c., as occupier, while the owner of the house, much more able to contribute, would not, in respect of this property, pay a fraction. If this very unequal impost were removed, the labourer's house would cost him only £6, instead of £7, as it did now; and he would have the £1 to pay for a house with a second or third bedroom, so essential to the interests of morality. With regard to land, exactly the reverse was the case. Every tax, such as land-tax, tithe, rates, is always paid by the owner, and its amount affects the value of the land to the owner, but in no way concerns the tenant.

Mr. BURNHAM SAFFORD (vice-president of the Society for Equalisation of the Poor-rates) also read a paper, in which he said, mere beneficent administration set aside the great law of nature, by which man was compelled to exertion that he might obtain the necessities of life. The system of national maintenance in this country had produced the following instructive results, viz., it had destroyed self-reliance, forethought, and self-denial, and had fostered indulgence and sensual excess, and had become a premium on improvidence. It had deadened filial piety, having enabled children and parents both to throw their natural responsibilities upon the country. He advocated restraints among the poor on improvident marriage, such as existed conventionally among all other classes; but he deprecated the separation, and the deep anguish caused by it, of the poor old married couples in their declining years, as detrimental to the popular regard for the sanctity of the marriage tie. Those burdens of local taxation of a purely local character should be separated from those that should be national. The spirit of the basis of the existing poor-law, passed in the 43rd Elizabeth, cap. 2, contemplated that personal as well as real property should support their mutual offspring, the poor. Since the rise of trading companies, the rising influence of commerce had, instead of relieving the land, enabled it to add to the burden of the land the maintenance of the vast number of paupers caused by commercial failures. He contended that many of the grievances of taxation arose from the existence of too great a variety of financial machinery, and said many desirable results would accrue by rendering the taxation of the country equitable by transferring to one machinery all those subjects which were of a national character. The nuisance of collectors calling for taxes, he considered, might be obviated, and, at the same time, economy be secured, by having certain days appointed by public notice when the taxes could be received by an officer on circuit. He suggested the establishment of free money-orders for small sums, payable on account of taxes, as Government receipts were free of stamp duty.

Mr. BOTLY said land had increased very much in value by the great commercial operations of this country, and the fact was they were continually sending children from the agricultural districts into the manufacturing towns for occupation; therefore, it would be seen that the manufacturing districts were employing the children of agriculturists. With respect to the question of keeping up the roads, he said, remembering the wear and tear of harness and other stock, there was nothing more profitable to the agriculturist than good roads;

therefore, he thought they should bear their share of maintaining the roads in repair. As to the income-tax, he thought it would be better to put it on to real property than to tax a man for what he earned by the sweat of his brow. Everything, he maintained, went to show that land did not bear an undue proportion of the taxes.

Mr. D. FORDHAM thought the argument that land was rising in value, and did not pay a fair proportion of the rates, was a mistake. The increase of the value of land was an accidental circumstance, and there were other kinds of property which had risen much more rapidly in value than land. He instanced railway property, and particularly the rapid rise in the shares of the Great Northern Railway Company. He did not see why agriculture, although it did derive the great advantages from the roads referred to by the previous speaker, should pay so much more towards their maintenance than other property. There were some persons using the roads in certain localities very much who paid nothing to the roads. He thought, as the country was now thrown into highway districts, they should have a "Highway District Chargeability Act," the administration of which should be similar to the poor-law, because it would be found that in the neighbourhood of railways the rates were very high.

Mr. F. WILSON (London) thought the rates should be paid by land, because it was land which benefited by the population raised upon it. As the population accumulated, so should the landlord have an interest in improving his property. Thus, he thought, as the landlord was benefited by the population, he should pay for the roads. The remedy for the present unsatisfactory state of things was for the municipalities to become the proprietors of the property in the municipality, and they would thus regulate the amount of rates; therefore, no differences would ensue. They ought not to permit the increase of the rates by allowing landlords to build upon land which was not fit for building purposes, thus engendering fever and disease, which meant an increase of rates.

A conversation here ensued as to the bearing of the papers upon the subject. Several gentlemen thought the papers read did not go sufficiently into the subject, and therefore it was no use continuing the discussion.

The CHAIRMAN also expressed this opinion. He regretted that they had not been favoured with Sir Massy Lopes's paper, which they had expected, and he thought unless they could get some gentleman to further ventilate the subject it was no use proceeding.

Mr. E. CHADWICK said it was quite impossible to discuss so wide a subject within the limits assigned to them. The whole of the evils of our present taxation were, he urged, due to the early system upon which the poor-law was established. He said the one principle acted upon with respect to our taxation for many years past had been this—wherever the rates were high, the people in that district began to consider how the rates could be shifted. In those districts where manufacture was the most heavily rated they tried to put it upon agriculture, and vice-versa. Now it had come to this—and he saw it throughout the entire country—that one section of the community was trying to shift the onus of taxation upon the other. Even the Government, he was sorry to say, was following in that suit. Local municipalities assumed that nothing could be better than their own administration. He thought that in the towns the local rates were kept down to the lowest possible amount. In London, the object was to stop outdoor relief in supplement of wages. The fact was that out of the entire sum given in relief, three and a-half millions was relief given in abuse, and they would not get rid of abuse until they improved the administration. He maintained that if local administration was properly carried out there was no part of it which was not beneficial to landed property. One great cause of the present unsatisfactory state of things was central legislation. It was the penalty we were paying for centralisation.

The CHAIRMAN said the sum received in England for local taxation was £17,000,000. It was made up in the following general proportions: Poor-rate, £8,000,000, county, hundred, borough, and police rate, £3,000,000; highway rate, £1,500,000; the rest being made up by property, watch, improvement, and other rates. As to the incidence of the taxation, the difference between the English, Scotch, and Irish systems was that in England the local taxes were wholly paid

by the occupiers, and in Scotland and Ireland in proportion by both owners and occupiers. In England the rates were managed by the magistrates; in Scotland, by the owners entirely; and in Ireland, by bodies on which the occupiers were represented. The discussion, so far as it had gone, pointed very clearly to the imperfect nature—not to use a stronger word—of the English plan of assessing the whole of these rates from the occupier alone. A very considerable part of these rates was a charge on sound principles of economy. The occupier, of course, on all principles of right, and expediency, and economy, was fairly liable to provide out of his own resources a certain part of the local expenditure, such as lighting, police, and the poor-rate; but he should hardly be liable to what might be called permanent purposes. He should hardly be liable to take upon himself the cost of such great works as, for example, the cost, once for all, of extensive public works, drainage, or county or borough buildings. Those clearly ought to be borne by the owner, and at the present time a considerable part was borne by the owner. What had been done of late years, especially in the metropolis, had pointed to a much more extensive division of those local burdens than had been made in England up to the present time—that was to say, the adoption in England of those principles which had been wrought out with far more success in Scotland, and to a

certain extent in Ireland, than perhaps they had been worked out anywhere else. Then there was the much larger question which was incidentally raised, whether, in regard to this local revenue, some other kind of property besides real property should be brought into account. They knew that in England, and also in Scotland and Ireland, and he might say in nearly every other country in Europe, whatever the theory, the only fact was that those local burdens were assessed almost entirely upon real property. It was fortunate for the purpose of that discussion that they were able to refer to what had been done in the State of New York with regard to this question of the mode of assessment. The result of inquiries was to prove that the attempt which had been in force in New York and contiguous States to raise the local revenue by assessment on real and personal and all kinds of property had been an entire failure; and it had been recommended that in future the assessment should be confined entirely to real property. For his part, he entirely agreed in that recommendation. The local taxation of Belgium, which might bear comparison with that of any other country, was placed entirely upon the basis of taxing only the visible, tangible, and real estate possessed by a man. When they went beyond that, they found themselves landed in a maze of difficulties, out of which there was no escape at all.

THE AGRICULTURAL VALUE OF SEWAGE.

The history of sewage irrigation affords a striking example of the readiness with which a plausible theory may be accepted and promulgated by men of enthusiastic temperament, whose minds are given to speculation without the corrective influence of proper experience. Seeing that in the warm climate of Egypt, China, Persia, India, Piedmont, Lombardy, and elsewhere, water has from time immemorial been successfully used for irrigation purposes, and has given fertility to certain arid and otherwise almost barren districts, it has been at once concluded that sewage, which is water *plus* a small quantity of manure, must necessarily be suitable for every kind of soil, and every variety of crop, in every description of climate. This is the theory which is earnestly recommended to the notice of the British farmer, whose so-called "pig-head reverence for the practice of his forefather, and ignorant belief in his own experience," make him extremely cautious in accepting it, for he rightly thinks that the condition of the soil in the cold and humid weather of this country is very different from what it is in the warm and dry atmosphere of the south; in fact, one of the greatest difficulties he has to contend with is a superabundance of water in the land during the greater part of the year, and, with the view of remedying this, he has adopted the system of thorough and effective drainage. It is not likely, therefore, that he will readily accept a theory which requires him to ignore his experience and nullify his practice by converting his farm into a swampy morass. A few enthusiasts, however, have accepted the hypothesis, and in putting it into practice have occasionally found that in certain seasons, especially with light and porous soils, the results have been highly successful; but the success has never been enduring, for it has depended upon conditions of season as regards drought, which is altogether exceptional. When this has been otherwise, as in the experiments at Alwicks, the results have been disastrous. Even in ordinary times, there is an average of 150 wet days in the year, when sewage cannot be profitably applied to the land. On the other hand, however, it sometimes happens, as in Lombardy and Piedmont, that the seasons are so dry that the application of even water to the land is extremely beneficial. On such occasions the farmer would gladly take sewage, as he would water, for the parched and hungry crops. But this is not a common occurrence, and rarely lasts for more than a month or so. To be compelled, therefore, to take sewage at all times throughout the year is a condition of things which the farmer very properly declines, for under such circumstances, according to Mr. Lawes, it is inapplicable to every description of crop; whereas, if a person can apply it to-day, and not to-morrow, just as he pleases, he may use it with every description of crop. Professor Way is

of the same opinion, for he says, "If the farmer is bound to take large quantities of sewage at all times, he will decline to take it at all, because he cannot take it in times of rain, and it must be put upon land properly prepared for it, and laid out as a sewage farm." Evidence to the like effect has been given by Mr. Congreve, who managed one of the sewage farms at Rugby, and who found from experience that the taking of sewage at all times throughout the year was the great difficulty in the matter. "If I had a farm," he says, "in the neighbourhood of London I would take sewage if I were at liberty to take it when it suited my purpose, and should apply it over a very limited area at a certain time of the year, but if I were compelled to take it at all times I should refuse it altogether." Mr. Mechi is evidently of the same mind, for he says he would rather not be regulated as to the time of applying it, but would use it when he wanted it. This, indeed, is exactly the way in which it is dealt with at Worthing, Birmingham, and Edinburgh, where the farmers know what they are about; and this was so strongly impressed on the Parliamentary Committee of 1862 and 1863, that they stated in their report of the evidence before them, "that it is desirable that those using sewage should have a full control over it, so that they may apply it when and in what quantities they may require." In proof of this, the Committee have quoted the evidence of Mr. Lawes, Professor Way, Mr. Tregelles, Mr. Samuel Christy Miller, Mr. McCann, and Mr. Miles; in fact, almost every witness before the Committee spoke of the difficulty of managing a sewage farm so as to get rid of the sewage at all times; and, as might be expected from the perplexities of the subject, there is the widest difference of opinion respecting the time when sewage ought to be put upon the land so as to be most profitably and safely utilised. Mr. Mechi applies it to meadow land from the beginning of May to nearly the end of June, and on feeding pastures he uses it at all times during active vegetable growth. The Earl of Essex puts two dressings, each of 225 tons to an acre, upon his meadow land for hay, from October to January, or longer; and he uses it in the summer time, directly after cutting a crop of Italian ryegrass. Mr. Tregelles employs it for pasture land during the winter, and root crops in summer, using it upon swedes when they are as big as marbles, and mangolds all the while they are growing. But as ryegrass is the only plant that will stand a thorough and nearly constant dressing of sewage, it is, *par excellence*, the crop which is selected wherever there is much sewage to be disposed of; and although it is often killed by excess of sewage, especially in frosty weather, yet in summer time it is often treated to a liberal allowance of it, almost to the time of cutting. A like difference of opinion exists as

to the way in which the sewage should be distributed upon the land. Mr. Smith, of Deanstou, who was the first to dream of the profitable utilisation of sewage by irrigation, proposed that it should be applied by means of hose and jet, in the fire brigade fashion, under a pressure of a column of liquid 150 feet high. This, he thought, would force the sewage through the elaborate system of underground pipes, which were to be laid down in every sewage farm, and drive it to the place where it was wanted. Mr. Edwin Chadwick adopted this idea, and used all the influence of the old Board of Health to get it put into practice throughout the United Kingdom. Thousands of blue books, with detailed instructions for arranging the pipes and pumps of sewage farms, were circulated by the Board. Popular lectures were given, speeches were made, and sensational articles written, to show the value of sewage as liquid manure, and how it ought to be pumped on the land. It was, in fact, one of the instructions of the Board that every system of sewers should be brought to one outfall, with the view of applying the sewage to agricultural purposes. Mr. Mechi, Mr. Telfer, and Mr. Kennedy were among the first to accept the tempting theory and to put it into practice. Soon after, it was adopted by Mr. Walker of Rugby, Mr. Neilson and Mr. Littledale of Liverpool, and Mr. Chamberlaine of Norwich, nearly all of whom have had cause to repent it. The history of Mr. Walker's failure is worth recording, for it is typical of all the rest. In 1834, when the sewage of Rugby had become so unbearably offensive that Mr. Walker was contemplating legal proceedings to abate it, he unfortunately met with Mr. Chadwick's glowing account of the agricultural value of sewage, and fancying there was a fortune in the nuisance if properly dealt with, he entered into an agreement with the Local Board of Health to take all the sewage of Rugby for twenty years, if they would deliver it upon his land, and make all the necessary arrangements for distributing it thereon by hose and jet. The Board, therefore, erected a steam-engine for pumping the sewage, tanks for collecting it, and a proper system of pipes for distributing it—gladly paying the heavy expenses thereof to be rid of a troublesome nuisance; and Mr. Walker no doubt laughed in his sleeve at the apparently hopeful bargain he had made; but, alas for human foresight, the results were so unprofitable that the bargain was at length repudiated, and the pipes are no more. This, however, is the system which is still advocated by Mr. Mechi, Mr. Ellis, Baron Liebig, the Earl of Essex, Mr. Miles, of Bristol, and the Chairmen of the Parliamentary Committees of 1862 and 1863, all of whom say that small dressings of sewage, by means of hose and jet, are more profitable than larger dressings by open carriers. But this is not the opinion of Mr. Lawes, Professor Way, Dr. Voeleker, Mr. Christy Miller, the late Sir Joseph Paxton, Mr. Blackburn, and Mr. Rawlinson, all of whom recommend the distribution of sewage by open carriers—permanent or moveable. In most cases the carriers are permanent, but at Mr. Hope's farm at Romford and Mr. McDougall's farm at Carlisle, they are moveable. In every case, however, the land must be properly prepared for it, so that the sewage shall be evenly distributed, and the subsoil water freely removed. As to the quality of soil which is best suited for sewage irrigation there is likewise much difference of opinion. Most agricultural chemists of large practical experience advocate the use of a porous sandy soil. Dr. Voeleker, for example, says that all liquid manures produce the most beneficial and striking effects when they are applied to light, deep, and sandy soils, resting upon a porous subsoil—soils containing from ninety to ninety-six per cent. of sand and but little alumina, so that the sewage may go through it and not over it. Professor Way also states that he would select a pure sandy soil in preference to anything approaching clay, because sand will become richer in clay every year that sewage is applied to it,—apart from the fact that clay can always be added to sand if necessary, whereas no clay soil can be made open enough to receive sewage—in fact “a dry absolute clay is,” he says, “the last soil I should wish to use sewage upon,” because, although it has the power of extracting manurial qualities of sewage, the sewage cannot get into it. Even if the clay were ever so well-drained, the liquid would run over it.” According to Mr. Lawes it is best applied to the most porous, sandy, and sterile soils, like that of Bagshot Heath, and the same

opinion was entertained by the late Sir Joseph Paxton. On the other hand, some chemists are of opinion that the soil should contain a notable proportion of clay, because clay has the largest power of absorbing ammonia, phosphoric acid, and potash—the most important constituents of sewage. Baron Liebig opposed the scheme for distributing the sewage of London upon the Maplin sands, because they do not contain sufficient clay, and he attributed the success of the Craigintiny meadows at Edinburgh to the circumstance of their containing much alumina. He thought, indeed, that the Maplin sands would require at least two million tons of clay to give them fertility to the depth of an inch. Mr. Bailey Denton, who has recently acquired popularity in connection with this subject, is of the same opinion, and argues that a soil with a considerable portion of clay is better than a very porous soil, because it delays the percolation of sewage, and retains the manurial elements. But then the land must be thoroughly drained, for that is Mr. Bailey Denton's speciality, and he blames the Rivers Pollution Commissioners for not making it a *sine quâ non* that no irrigation should be practised without deep subsoil drainage. The value of clay as a constituent of ordinary soil is admitted on all hands, for it not only absorbs and fixes the chief elements of manure, but it also elaborates them, and fits them for the use of the growing plant. This power was first investigated by Brouner, in 1836, and afterwards, in 1845, by Huxtable and H. S. Thompson. Later still, in 1850, 1852, and 1855, it was still further examined by Way, who thought that the absorbent power of a soil was dependent on the chemical action of certain silicates of lime and alumina, which fixed the alkaline bases, and allowed the acid constituents (phosphoric acid excepted) to pass in combination with lime. Liebig's views at first were entirely opposed to these opinions respecting the absorptive power of soils; but, in 1855, he ascertained from experiment that every plant-bearing soil absorbs the fertilising elements of manure—clay doing it best, and pure sand worst—whilst turf and peaty matters had an intermediate action. He found that a common clay soil in the neighbourhood of Munich would absorb (per acre, four inches deep) 2,076 lbs. of ammonia, 1,910 lbs. of potash, and 88 lbs. of phosphoric acid; and that the action was not merely of a physical nature, for it seemed to prepare and elaborate the materials for the use of the plant—acting, in this respect, like the stomach of an animal. Voeleker also found in his experiments that all soils absorb ammonia from its solutions, clay doing it best, and organic matter worst, the difference in other soils being but slight. He ascertained, however, that the whole of the ammonia was never, in any case, entirely removed, however strong or weak the solution of it was, and that water would subsequently wash it out again, to some extent, though not completely. Potash salts were most freely absorbed by clay, and hardly at all by sand; and with respect to the phosphoric acid of soluble super-phosphate, it is absorbed and rendered insoluble by all arable soils—chalky and marly soils acting more powerfully than clay or sand—the change being not immediate, but the work of time, and requiring a large proportion of soil. The agents which are chiefly concerned in these remarkable effects are alumina and hydrated oxide of iron, with lime and other bases. Warrington, indeed, has proved that, although all the constituents of a soil, except quartz, have the power of absorbing manurial elements, yet alumina and hydrated oxide of iron possess it to the largest extent, the order of absorption being as follows: For acids, phosphoric, carbonic, sulphuric, muriatic, and nitric; and for bases, ammonia, potash, magnesia, lime, and soda—the form in which the base is best appropriated being the hydrate, phosphate, or carbonate; the sulphate, nitrate, and chloride being but slightly absorbed. The extent to which the solution is diluted is also a matter of considerable importance; for, although Liebig and some others are of opinion that the soil will appropriate the manurial elements of a solution, no matter how dilute it is, yet Voeleker has proved beyond all question that weak solutions, like sewage, will actually remove those elements from a soil, and that unless a plant is growing, and is therefore able to appropriate the elements of sewage at the time it is applied, there is no power in the soil to arrest the elements, and to store them up for future use, when they are continuously applied in such a weak form. The action of the soil, therefore, under such circumstances, is merely to strain the

liquid, and to effect the oxydation of its nitrogenous compounds, which pass away as nitrates and are entirely lost. This is easily proved by an analysis of effluent sewage water when vegetation is inactive, and the plant is unable to appropriate nitrogenous matters; for at such times, the sum total of all the soluble nitrogen in the sewage is found in the effluent water in the form of useless nitrates. It is very doubtful, indeed, whether at any time the nitrogenous matters of sewage are entirely utilised by the plant, even in its most vigorous state of growth, and whether the plausible theories which are so rife concerning the value of ammonia, &c., in sewage, are not altogether erroneous. A glance at the table which is given at page 46 of the Third Report of the Commissioners appointed to inquire into the best mode of distributing the sewage of towns (1865), will show that the amount of soluble organic matters of sewage, as estimated by the process of incineration which was then in use, is not very different from that in the effluent water.

AVERAGE COMPOSITION OF THE SEWAGE AND DRAINAGE WATER COLLECTED AT RUGBY IN THE SEASONS OF 1862 AND 1863.

GRAINS PER GALLON.		GRAINS PER GALLON.	
Season 1862—May to October, both inclusive.	Soluble organic matter.	Season 1863—Nov., 1862, to Oct., 1863, both inclusive.	Soluble organic matter.
Five-acre field—		Five-acre field—	
Raw sewage	7.83	Raw sewage	8.35
Effluent water	7.18	Effluent water	7.46
Ten-acre field—		Ten-acre field—	
Raw sewage	7.60	Raw sewage	8.80
Effluent water	7.83	Effluent water	7.98
The two fields—		The two fields—	
Raw sewage	7.71	Raw sewage	8.32
Effluent water	7.56	Effluent water	7.73

These were the results of sixty-two analyses; and in commenting on them the Commissioners say that, "of the matter in solution, a gallon of drainage water contained sometimes

more and sometimes less, but on the average much about the same amount, both of organic and inorganic, as a gallon of the sewage." In criticising this remark, the Commissioners appointed in 1868 to inquire into the best means of preventing the pollution of rivers (First Report, 1870, p. 71) say, "There can be no doubt that these results, and the statement founded upon them, so far as it relates to organic matter, are erroneous, and that the cause of the fallacy lay chiefly in the absence of nitrates in the raw sewage, and their presence in large quantities in the effluent water." But in many cases, the oxydation is far from being complete, especially when the land is overtaxed. Professor Way says that if sewage be put upon a soil in larger volume than about 1,500 tons per acre per annum, even with rich-growing Italian rye-grass, the subsoil water is foul. The same fact was observed by Mr. Westwood, of the Annerley School Farm, who found no difference in the results, as regards the crops of rye-grass, whether he used 1,500 tons per acre by hose and jet, or from 8,000 to 9,000 tons per acre by open carriers; but in the latter case the effluent water was almost as foul and as high-coloured as the original sewage. In the experiments at Rugby, Mr. Lawes noticed that, although there was an additional crop of grass with an increased flow of sewage, yet it was by no means in proportion to the quantity used; for, while with 3,000 tons of sewage an acre he got 22 tons of grass, yet with 6,000 tons an acre he got no more than about 28 tons of grass, and with 9,000 tons an acre only 32 tons of grass. It is evident, therefore, that neither the plant nor the soil is capable of appropriating all the manurial elements of sewage, and that, therefore, they must pass away in a more or less oxydised and useless form. This brings us to a question of great practical importance, namely, how much sewage can be profitably and safely applied to a given area of land. On this head, as on every other, there is the greatest difference of opinion, although it results generally in the fact that the sanitary and commercial aspects of the question are widely opposed, it being impossible to realise agricultural success, with a perfect deodorisation of sewage; for, in one case a large proportion of sewage is required, and in the other a small.—*The Medical Press.*

THE BLANDFORD FARMERS' CLUB.

At the first meeting for the season Mr. A. Spooner, of Eling, read a paper on the Chemistry of Feeding Stuffs; Mr. G. Galpin in the chair.

MR. SPOONER said we must first consider the principles that exist in food, and the effect they have on the animal system. These principles are divided into two classes, viz., the "Proximate and ultimate." The proximate principles are further divided into two classes; firstly, into those principles which consist of three elements, viz., carbon, hydrogen, and oxygen; and secondly, those which consist of four elements: carbon, hydrogen, oxygen, and nitrogen. Carbon, in a separate condition, is a solid body of a black or grey colour, as is seen in charcoal, soot, coke, and other substances of which it is the principal ingredient. The same thing happens in the putrefaction and decay of the animal and vegetable matters, although by a slower process. Carbonic acid gas is present in small quantities in the atmosphere, and is a constant product of respiration as well as in fermenting liquids, of combustion of all kinds. Oxygen in a free condition is an invisible gas without taste or odour. It constitutes one-fifth of our ordinary atmosphere. Oxygen is not combustible—that is, it will not burn, but it is a powerful supporter of the burning of other bodies. Hydrogen, in like manner, is an invisible gas, when uncombined. It is very extensively diffused throughout nature, and for its extreme lightness was formerly used for balloons. Water is composed of hydrogen and oxygen, for if these two gases be mixed together the sole product formed is water. Water is the sole result, and again, by decomposing water we obtain the gases. Hydrogen is combustible, but does not support combustion; for instance, a light, as in the case of carbonic acid, is immediately extinguished when plunged into a jar of this gas; the hydrogen burns only when it comes in contact with the air; nitrogen is also a gas without taste,

odour, or colour, and constitutes the great bulk of our ordinary atmosphere, nearly four-fifths. The presence of nitrogen cannot be easily shown, although it plays such a very important part in the composition of feeding stuffs. It is neither combustible nor a supporter of combustion; like carbonic acid gas it extinguishes flame, and may be distinguished from the latter by vapour in reaction on lime water. The proximate principles, those principles which consist of the three elements carbon, hydrogen, and oxygen, are called the non-nitrogenous, or carbonaceous compound, and, with one or two exceptions, are also called respiratory, heat-giving, or fat producing substances, on account of the part they perform the animal system. Class I., that is, those principles which contain, in addition to the elements mentioned, nitrogen, are called the nitrogenous or flesh-forming constituents, on account of the function they perform in relation to animal life. The compounds which belong to the non-nitrogenous and of producing principles are the following: Woody fibre, or lignine, which is by far the most abundant of vegetable products, and forms the bulk of most plants. It is almost useless as a feeding material, and is even objectionable when present in very large quantities, since it passes unchanged through the animal system, owing to its indigestibility; hence the amount of this substance materially affects the value of feeding matters. However, as it exists in young plants it is digestible to a certain extent in the stomach of animals, and seems to be nearly as useful as the other members of this group. The rest of the compounds of this class are starch, sugar, gum, mucilage oil, or fatty matter. The greater portion of these compounds, which exist more or less in every kind of food used for cattle, when received into the system, become, as it were, the "fuel" necessary for sustaining the animal heat in the process of respiration. The breath of animals effect the combination between the combus-

tible materials in the blood, and the oxygen of the atmosphere; and, as in this process, a certain amount of heat is liberated, the requisite temperature of the body is thus kept up. These combustible materials, which may with great propriety be called the animal fuel in food, are starch, sugar, and oil. The greater portion of food consumed by animals is required for the purpose of supplying heat to the body by undergoing oxidation in the lungs, in which process carbonic acid and water are formed, and pass off in the breath exhaled. When more of this kind of food is taken up by an animal than is necessary to sustain the proper heat of the body, that excess is stored up in the form of fat. It follows then that an animal confined in a small space, and consequently able to take but little exercise, soon gets fat, from the formation of this material of the food that would otherwise be consumed by exertion. All of these respiratory compounds are capable of being converted into fat in the animal system, but with different degrees of facility. Thus it may be readily imagined that respiratory matter, in the form of vegetable oil, as found in various seeds, is much more capable of being converted into that material than starch or sugar. This explains the superiority of the different oil cakes in the fattening of cattle over other feeding stuffs. When food is deficient in the respiratory principles the animal system suffers from the want of heat. Moreover, unless a due amount of combustible matter is present in the body for the oxygen of the air to act upon, the surface of the lungs themselves are wasted by the oxygen of the air. We may, therefore, conclude that the non-nitrogenous or respiratory principles in food keep the animal body in its proper temperature, so that the functions are maintained, and any excess of those matters furnish the material for the formation of fat, but are unable to supply actual nourishment in the proper sense of the word, that is, by restoring the waste the body sustains by exertion, and giving matter for the formation of flesh and sinew, and other parts of the animal frame. To supply those deficiencies we must, therefore, have recourse to the nitrogenous, or flesh forming principles, the composition of which I have already mentioned. They exist in the choicer portion of all vegetable substances, and closely resemble a substance called albumen, or white of eggs, hence they are sometimes called albuminous compounds, of which are the following: Albumen, casein, gluten or vegetable fibrin, and legumine, as found in different substances. All these compounds are very much alike and are considered equally valuable. Since, then, it is from the nitrogenous portion of food the bodies of animals are chiefly built up and strengthened, it follows that the value of feeding matters are very materially affected by the amount of albuminous matter they contain; for the muscles and tissues, wasted by exercise and fatigue, are renovated from these materials. For this reason, working horses require oats and beans in proportion to the amount of work they do, or otherwise their frames become wasted, and their strength diminished. And, again, the nitrogenous portion of food is also capable of keeping up the temperature of the body to a certain extent. We may therefore infer that the nitrogenous principles are the most valuable in food, but alone are totally incapable to support life. In conjunction, however, with the respiratory principles, they form the proper food for cattle, such as nature has ordained. Having discussed the composition of animal food, and the use of the various matters contained in them in the animal system, we will now direct our attention to the various kinds, and their relative feeding qualities. Linseed cake justly stands at the head of our feeding stuffs, and if good and genuine, will contain about 11 per cent. of oil (although the greater portion of its oil has before been extracted from the seed), 28 per cent. albuminous, or flesh-forming matter, 30 per cent. of non-nitrogenous matters, such as starch, sugar, and mucilage, 12 per cent. of woody fibre, and 5 per cent. of mineral matters. Linseed cake is therefore a very nutritious article. First, it contains, in some cases, as much as 12 per cent. of oil, which constituent must, up to a certain extent, be regarded as the most valuable of the respiratory form occurring in oil-cake, from the fact that having an abundance of other respiratory matter, in the form of starchy substances, which are sufficient alone to sustain the animal heat, the greater portion of the oil is converted into fat in the animal system. Ten parts of oil is usually estimated as equal to twenty-two parts of starch. The proportion of nitrogenous matter is generally speaking, greater than that found in any other

natural produce used as food. As its cost is about two-thirds that of linseed cake, and its manuring value rather greater, it is valuable for growing stock. Mucilage is also very abundant in this kind of cake, which is considered a valuable constituent in food. This mucilage is very characteristic, upon mixing oilcake with water, when it becomes at once very gelatinous, and is employed amongst other tests of judging the quality. Linseed cakes are made from seed grown in different localities, all of which possess the same qualities almost equally, provided they are free from dirt and other impurities. The only objection to linseed cake is its high price, which is governed, not only by the demand and the supply, but by the price of the oil. When the oil sells freely, and is in great demand, it stimulates the manufacture, but when the market is slow it tends to increase the cost of the cake. Linseed cakes are often at the present time very much adulterated, sometimes with bran, which, although perfectly harmless as a feeding ingredient, diminishes the value of the cake. At other times starchy materials, such as rice dust and damaged grain, are met with occasionally. Rape cake, although formerly almost entirely devoted to the purposes of manure, is now extensively used as a feeding stuff. It does not differ very widely in general composition from the linseed. The following is its composition: Oil $11\frac{1}{2}$ per cent., albumen $30\frac{1}{2}$, starch, &c., 28, and mineral matters. Thus it contains a higher percentage of albuminous matter than linseed cake. However, it has a certain bitter taste, which somewhat lowers its merit as food. The chief objection to rape cake is its liability to contain the poisonous seed of oil of mustard, the presence of which can be detected by mixing a little with water, and subjecting it to heat, when the smell of the mustard is very easily recognised. It must be borne in mind that mustard is present more or less in almost every sample of rape cake. Practice is, therefore, requisite in a certain degree to ascertain to what extent the presence of mustard is injurious. Foreign rape cake is the best, inasmuch as it is mostly made from seed grown in the north of Germany and France, which is purer than the East Indian seed, from which English rape cake is usually manufactured. Decorticated cotton cake is a valuable feeding substance containing as much as 16 per cent. of oil, and 40 per cent. of albuminous of flesh-forming matter. It is prepared almost exclusively in the Southern States of America, where the thick husk can be profitably stripped off. The taste and smell of this cake are peculiar, and less pleasant than linseed cake. It contains such a large proportion per cent. of flesh-forming element, and being so extremely rich in oil, with a fair amount of phosphates, must, therefore, be regarded as a very valuable feeding stuff, although the quantity of respiratory matter, in the form of starchy matters, is rather low compared to other cakes. If the feeding value of food were entirely proportionate to the amount of these constituents they contained, we should bring the value of decorticated cotton cake higher than that of linseed; but as this holds good only to a certain extent, we must take into consideration the taste and smell of the article, as well as the amount of essential constituents before being able to decide upon its feeding value. It is found to be at best only equal to linseed cake, although many feeders do not entertain so high an opinion of it. Common or undecorticated cotton cake contains rather a large amount of husk, and if given in very large quantities is rather hazardous, on account of injury which may happen to the animals fed upon an undue proportion of that substance; notwithstanding, it is a valuable addition to our feeding stuffs if used with care, the cost being considerably lower than linseed cake. Decorticated earth nut cake is a sweet palatable cake, extremely rich in flesh-forming constituents, containing as much as 40 per cent. It is produced from a nut found in Africa, after the extraction of the greater portion of its oil, which then leaves about 2 per cent. in the cake. Palm nut cake is a useful feeding material, particularly for pigs. It sometimes contains as much as 13 per cent. of oil, but the proportion is rather variable. Its flesh-making elements are rather low. There are various other cakes that are used in feeding, but as most of them have only a passing interest attached to them, and are not largely used, I will only mention them by name. They are poppy-cake, semolina, sesame, hemp, cocconut-cake, &c. It is very often a rather undecided question with farmers which is the cheapest and most profitable food to employ, corn or cake, and sometimes when the former is low in price the

latter is discarded altogether. Now this is not right, for it should be remembered that linseed has medicinal as well as feeding qualities, and it is well-known that animals are never so healthy and never winter so well as when they are supplied with linseed-cake. It is by no means sufficient in estimating the relative value of corn and cake merely to ascertain the cost per ton. We will now take an analysis of beans, which is the next most concentrated form of food, and compare it with that of linseed cake, and we find that instead of having 12 per cent. oil we have only 2, 24 albuminous compounds, 6 starchy matters, and 3 mineral matters. The comparison would appear more striking by calculating the amount of each constituent per ton. For instance, in one ton linseed cake there are 254lbs. of oil, compared to 45lbs. in beans; 632lbs. albuminous compounds to 622lbs., 359lbs. carbonaceous matters (starch, gum, &c.) to 1,020lbs., and 109lbs. mineral matters to 76lbs. Thus in one constituent alone beans have the advantage in quantity, literally speaking, but not in quality, for since oil is estimated at more than double the value of the other carbonaceous matters, such as starch, &c., the intrinsic value of the total quantity of carbonaceous principles would be greater in linseed cake than in beans, and with beans we may also include peas and lentils, being very similar in composition. Oats contain a larger proportion of fatty matter than beans, viz., as much as five per cent., but only a little more than half as much albuminous compounds, five per cent. starchy matters, three per cent. mineral matters. Again, the large amount of oil contained is too much for the animal unless used in small quantities, and with food in which oil is deficient. It is only in such cases, and when from the low prices of oil the seed is comparatively cheap that it is profitable to employ it. Some people think it is more profitable to buy linseed than the cake. This might have been years ago, when the former could have been bought at a comparatively cheaper rate than now, but, although it contains three times the quantity of oil, it has less of the flesh-forming element. Therefore the cake must be more profitable than the seed for feeding purposes. The following is the complete analysis of mangold: Water 87.7 per cent., starch, sugar, &c., 8.50, albuminous compounds 1.5, woody fibre 1.2, mineral matters 1.1. If we take the analysis of swedes we should find that the greater portion of them consists of water, viz., 89½ per cent., thus leaving a very small margin for the really necessary constituents of food. It is found that swedes, mangolds, and indeed roots generally, which are most valuable for feeding purposes, contain most sugar, which seems to be the highest and most valuable carbonaceous product present in this kind of produce. What a great difference in composition to linseed cake! It shows the superior advantage of giving cake in combination with turnips inasmuch as it supplies those ingredients of which the latter are deficient—that is mainly, the flesh-forming principles. By feeding alone on turnips, a much larger quantity of water than is desirable for the well-doing of the animal is given, and it causes the temperature of the body to be so lowered that an additional supply of carbonaceous matter is required to keep all that excess of water, as we may say, boiling; in fact, to sustain the animal heat. The composition of mangold is very similar to that of swede. It however, contains a greater amount of carbonaceous matters, consisting principally of sugar, with somewhat less water, and is consequently of greater value for feeding purposes than swedes. On account of the large amount of nitrogenous matter present in oil-cakes, the most profitable way of using it seems to be in combination with some article of an opposite character that is rich in respiratory matter, such as barley meal, Indian corn, or the carob or locust bean. The locust bean, also known by the term St. John's bread, contains a large amount of sugar, which affords a means of not only augmenting the respiratory elements in mixtures of food, but at the same time of imparting a sweet flavour, thus making coarse or other foods more palatable to the animal fed. This property is rather a drawback than otherwise in one respect, inasmuch as the beans appear as nice to the boy on the farm as they are beneficial to the cattle; they are, in fact, old as sweetmeat. In fattening animals a food in which the respiratory matter predominates would seem to be most suitable, since the muscles or flesh are incapable of increase to anything like the same extent as fat. Respiratory matters in the form of vegetable oil is most favourable for the formation of fat; hence the efficiency of oilcake, although the common respiratory matter, such as starch, sugar, and mucilage, are also,

though probably less easily available for that purpose. We can scarcely give the animal too much nourishment, provided its health is maintained, as we thereby shorten the time of fattening, and thus save the food that would be otherwise consumed in sustaining the system during that period. But when the system is undergoing development, as in young or growing animals, we gain more the advantage of growth than the formation of fat, in which case the mineral elements for which, of course, time to a certain extent is necessary, are particularly required, as well as a due proportion of respiratory and fleshmaking elements. Deficient food, or, what amounts to the same thing, food which does not furnish the requisite quantity of the various nutritive elements required by the animal to meet the wants of its system, is always a loss to the owners of stock, from the fact that the animals cease to make progress and fall back, and thus it requires a much larger proportion of nutritive food to regain flesh than it otherwise would have retained its former condition, and, again, all that food consumed, instead of yielding its proper return, was expended in keeping the animal alive. Moreover, all the time consumed, we might have been making progress. The quantity and quality of food required by animals will be just in proportion to the demands upon its system. An animal has no power to produce anything which nature has ordained that it should, unless the raw materials of the same are supplied in food. It is by carrying out with care and judgment the principles involved in the feeding of animals, that we can expect to dispose of the many kinds of food at our command to the best advantage, and thereby to develop the resources of agriculture, and increase, it is hoped, the profits of farming. I will now make a few remarks on feeding in relation to manure. The question is, What benefit do we gain from the food consumed by our animals in the shape of manure? The value of the manure, of course, depends entirely upon the quality of food consumed. Of the three chief classes of the components of food already described, the carbonaceous or respiratory compounds are lost or used up in the greatest quantity in feeding; the nitrogenous or albuminous compounds in smaller though considerable degree, the mineral matters the least. The office of the carbonaceous principles being to support respiration, a large quantity of those taken in the food are lost as invisible gases in the breath, as I have before mentioned; a further portion goes to the formation of fat, consequently only a small quantity is left in the dung, except that undigested, as woolly fibre. These components of food, or their remains in the dung, are the least valuable as manure, from the fact that plants are able themselves to obtain from the atmosphere the necessary elements required for the formation of these products; hence the addition to the soil of these elements as manure, in ordinary cases, is necessary. The albuminous compounds of food are returned for the most part in the dung in a decomposed state, except after performing their office in the nutrition of the body, that portion retained as animal produce. The mineral elements of food are all returned in the manure, except that portion retained as increase, or otherwise, in animal produce. The mineral elements of food are very valuable as manure, since they have but a limited source of natural replenishment, *i. e.*, from the soil. Phosphoric acid is no doubt the most valuable of these substances, as it occurs but very sparingly in the best of soils; potash again must be considered valuable as manure. The above are the residual products of food that occur in the dung. Decorticated cotton cake, containing such a large per centage of nitrogenous matters, with a very fair proportion of phosphates, is of the highest manuring value of any feeding stuffs. According to Dr. Voelcker's tables the value of a ton of decorticated cotton cake, after being used as food, is estimated at £5 6s. 6d. Mr. Lawes, in a more recent publication, even places it higher, viz., £6 10s.; in fact, highest of all the different articles used as food. Next comes decorticated nut cake, £4 18s.; rape cake £4 0s. 9d.; and then comes linseed cake, £3 15s. 8d.; beans, peas, and lentils, £3 2s.; Indian corn, £1 5s.; wheat and barley, £1 7s. Although estimating the value of feeding stuffs as food alone from their chemical composition, may be considered on the whole somewhat as a doubtful question, there can be little doubt in estimating their relative manuring value, seeing that by for the largest amount of value resides in the albuminous portion, and may be estimated by the ammonia to which it is equal, after allowing for a per centage used up in the increase of the animal.

Mr. J. FORD fully concurred with the lecturer as to the

value of linseed cake as food for stock, but at the same time expressed his opinion that in consequence of the abundance of roots this year, and the high price of cake, not so large a quantity would be used this season. He, however, hoped that artificial food would be cheaper. One thing he could not understand, and that was that turnips were not so good as formerly. They were grown to a great size, but there was not that proof in them as in former years. Whether this arose from the use of so much artificial manure or not he could not say, but turnips now were certainly inferior in quality to what they were years ago. With respect to feeding stuff, he quite agreed with Mr. Spooner that linseed cake was the best, but the worst of it was that it cost so much money, and from this cause he believed that, as there was a good deal of inferior barley, farmers would find it to their advantage to use that. Although linseed cake was good food, yet he thought that cattle did better with a mixture. He wished most heartily to thank Mr. Spooner for coming forward and giving them so useful a lecture.

Mr. H. FOOKES quite agreed with Mr. Ford as to the inferior quality of turnips now as compared with former years. Forty years ago his father fed his sheep entirely on swedes and hay, on land which had been entirely manured with farmyard manure, and it was then considered that every acre of feed would fatten a good ox. It was true that the land then was only fresh broken up. With regard to the relative value of swedes and mangold as food, Mr. Spooner had stated that there was more profit in mangolds, and he believed that for lambs from the month of April mangolds were best, but not before. He (Mr. Fookes) quite agreed with Mr. Ford as to the advantage of using a little cake with other food.

Mr. G. KEYNES considered that the principal thing was this, to have a return on their farms of all that they grew, and he thought they ought to make a good deal more use of corn as food with a sufficient proportion of oilcake. He had not so much opinion of cake as many had. He could not see giving three halfpence per pound for oilcake when they had other food. If they had all the manure it might be best; but he considered that chaff mixed with a proportion of roots was not only much cheaper, but a food on which sheep thrived well, and that the greater the variety of food used was the best.

Mr. SCUTT said he was fattening about 150 sheep. He first gave them sainfoin and rape, and then gave turnips and rape when they did not do so well. The cause of this had been ably explained by the lecturer. He then gave them half-a-pound of cake, but they did not improve much, and he then increased the half-pound of cake to one pound, with some corn mixed with it, and the sheep were going on very satisfactorily.

Mr. EYERS said he bought some culls a short time ago, and now they were worth about £4 a head. He changed their food several times, and he believed that a mixture of food was the best. He should like to have Mr. Spooner's opinion respecting maize as food for horses, whether it would be advantageous to mix it with beans and oats. Maize was at one time very much used for London omnibus horses, but not one-fourth of that quantity was used now.

Mr. SPOONER, in reply, said that maize used in small quantities was very beneficial, but it had an injurious effect if used in large quantities.

Mr. T. FRY wished to confirm what Mr. Scutt had said about sheep. He believed he was £100 worse off than he was a few months ago. He had been feeding his sheep on rape, and then put them into as fine a piece of turnips as he had ever seen. He did not examine them for a few days, as he ought to have done, but when he did he found they had gone back. Indeed, he never saw sheep in so short a time become so emaciated. He directly got some old beans, and cut up some clover hay. This he put into troughs, telling his shepherd to keep two troughs always filled, and since that had been done he could see a marked difference in the sheep. No doubt the sheep deteriorated from not having in the turnip sufficient warmth-producing power. He (Mr. Fry) did not agree with Mr. Keynes that in using oilcake we do not see it in the after-crop, for he had seen places in the same field where it could be distinctly traced where oilcake had been used and where not. There was one thing he wished to call attention to. He did not think they were sufficiently careful to cut hay early enough. It had been the usual practice to commence using hay for sheep at Blandford fair, but he thought it would be better to commence with dry food before that time. Of this he was convinced, that it was best to give some dry food with turnips.

Mr. SPOONER, sen., said, nitrogen, which was so essential and important in manure, was, he regretted to say, becoming very scarce. He saw in the *Journal* of the Royal Society that Mr. Nasmyth, a scientific and learned man, had been contriving an apparatus which, by means of compression, would extract the nitrogen from the atmosphere, but he (Mr. Spooner) fancied that what had been this dream of the philosopher for many years would be a dream many more. He wished that it could be accomplished, and that they might be able to improve the guano. With reference to the ploughing in of the root-crops, a short time ago he was in Scotland, and perhaps in no parts was there finer root-crops than in the Lothians. He inquired there what they did with those crops, and was told that they frequently sold the roots to the cowkeepers, and allow them to have them at £2 per ton lower if they consented to leave the green on the ground, but this they generally declined to do. The green of the crops was nearly as nutritious as the root.

Mr. R. LEWIS understood from Mr. Spooner that the manure from cotton-cake was superior to that from linseed.

Mr. SPOONER: Yes. It is better.

Mr. SPOONER jun., in acknowledging a vote of thanks, said he quite agreed with the opinions expressed by Mr. Ford and Mr. Fookes as to the advantage of combining cake with corn. Linseed-cake must be used in smaller quantities. To feed animals successfully attention must be given to their peculiar nature and condition. The food which might be suitable for one animal might not be for another, and therefore it must be left to the owners' judgment in a great measure as to the food to be given, its quality and its quantity.

PRESENTATION TO A QUITTING TENANT.

A meeting has been held at the ancient homestead on Cauley Farm, part of the Stoneleigh estate, which has for some years past been in the occupation of Mr. Thomas Hands, and has for about three centuries been held by his ancestors. The occasion was that of Mr. Hands quitting the farm, under notice of his landlord, Lord Leigh. The farm servants—upwards of twenty in number—had determined to express their sympathy with Mr. Hands, and on Friday evening they met their employer at the old farm-house on Westwood Heath for the purpose of presenting him with a testimonial.

WILLIAM HYDE, a labourer, who had been in Mr. Hands' employ for many years, said they had met together on that occasion to ask their most worthy employer to accept a small token of their respect: it was a humble gift, but freely given. He expressed sincere regret at Mr. Hands having to

leave them, and concluded by saying that as it had pleased God to call him away from them, they wished him and his wife and family every happiness. He then presented Mr. Hands with an inkstand, bearing the following inscription: "Presented to Mr. Thomas Hands, of Cauley, in the parish of Stoneleigh, by the workmen in his employ, as a token of respect for the kindness he has shown towards them during the many years they have been employed by him. 1871."

Mr. HANDS said: My friends, who have presented me with this handsome testimonial, I am very sorry that the connection which has so long existed between us is about to close, and I think from no fault on my part. It is true I am a plain speaking man, and that from having spoken the truth and made a speech at Leamington, I am about to leave my farm. It is also true that I might have continued the occupation, but

not, I consider, with honour to myself. I hope that the farm will soon be let and that you will still be employed upon it. I sincerely hope that Lord Leigh will have a better tenant, and that you will have a better master than I have been. Many of you have been with me from my childhood, all of you for years, and I fancied till within the last few months that I should have ended my days with you and my children with yours. I assure you there is nothing I could feel more than the sympathy of my men in my time of trouble. I am very sorry to see the good feeling which has existed for so long a time on this estate completely destroyed; but it is a great consolation to me to find that my conduct has met with your approbation, as the handsome present you have made to me fully shows, and I shall be proud to hand down this testimonial to my children, as a mark of your kindness and good feeling towards me. You all know that I have spent hundreds of pounds on my farm since I have held it, in manure and improvements that the general custom of Tenant-Right will not allow me to claim for. I have no doubt I shall be better without the farm, but it is hard to leave it after my ancestors have been on it for so many centuries, and the way in which I have been turned out of it, I feel even more than all the rest. I must again thank you for your kindness, and in conclusion I may say that although I shall no longer be your master I hope we shall continue to be friends.

Mr. RICHARD PARKER said that a great many people were surprised at Mr. Hands being turned out of his farm. He did not wonder a bit after the manner in which the cottagers had been turned out of their cottages and compelled to take others which were not nearly so good, while other persons were allowed to walk into their homes and occupy their garden upon which they had spent so much toil,

The Rev. C. RICKARDS said he had to make a remark about what had been said in reference to the cottagers being turned out. He might say that whatever difference there was between landlord and tenant, so far as the cottagers were concerned, no complaint could be made against Lord Leigh on that score. No man could be more interested in them nor have the welfare of the cottagers more at heart, than Lord Leigh had. He knew that from his own experience. The other day Lord Leigh had asked him if he knew of anybody that was ill. He (the speaker) gave his lordship the names of about half-a-dozen persons, and port wine and gravies were ordered for them. Another proof of Lord Leigh's kindness was that he went round to every cottage once a year. They might question a man's motive, but it was only fair to suppose that Lord Leigh's motive was a good one. Of course he (Lord Leigh) might find other ways to employ his time than going round to his cottagers; and although he might have turned some people out, he (the speaker) thought his lordship had some good end in view—(hisses). He was quite sure that if Lord Leigh had made any mistake it was to be regretted, and as far as it was in his power he was willing to do good in his parish.

Short addresses were afterwards delivered by labouring men, who had been in the employ of Mr. Hands for terms ranging from ten to forty years. All these hands spoke of the kindness of Mr. Hands, and very much regretted that he was leaving the farm.

At the close of the meeting the men were supplied with refreshments, and Mr. French, farmer, of Finham, near Stoneleigh, proposed the health of Mr. Hands in very eulogistic terms, and the men heartily responded to the toast with musical honours.

BOROUGHBRIDGE AGRICULTURAL SOCIETY.

At the 46th annual meeting, as just held, Mr. A. S. Lawson was re-appointed President for the ensuing year, and Mr. Thomas Scott Vice-President and Secretary.

At the dinner Mr. JACOB SMITH read a paper on Grass Lands. He said: In introducing the subject of grass lands, I am afraid I shall not be able to give you much information; but I do so because I hope by bringing the subject forward we may have some discussion, and by that means it may lead men to think the matter over, and so some good may arise; for, although at present the improvement of grass land is very little attended to by many farmers, I feel sure the day is not far distant when it will be much more seriously considered than it is at present, for when we look at the great increase of population, and what is more, the greater increase of meat consumers, we may well ask how these wants are to be supplied; for though the increase of cattle from abroad has been large, still there are many difficulties and much uncertainty attending the importation of foreign cattle. If, then, we have to increase our supply of beef, how is it to be done? Certainly not by adopting Mr. Mechi's idea of ploughing out all our old pastured land. I think in this Mr. Mechi will have very few supporters; but I am sure a great deal may be done by improving these pastures. When we look back at the great advance made within the last 20 years both on the cultivation and the increase of beef and mutton from arable land, it does appear wonderful that grass land should remain very little, if at all improved during the same period. This is perhaps accounted for in a great measure, because the improvement in many ways is not immediate. Then, again, some manures have great value upon some land, upon others none, and in using artificial manures it is necessary to be careful. I will briefly state to you what experience I have had in some of these manures. Bones I have seen applied with wonderful results so marked, that in walking across the field, no one could fail to notice the difference where the bones had been put on—grass, beautiful and rich, where there had not been any, and not a bite for anything to eat; but I put 30 quarters on ten acres in the middle of a thirty-acre field some years ago, and I have never been able to see that they did any good. Lime, too, I have seen great results from in

some fields, and in others a slight improvement the first year, but very little afterwards. Prepared manures, and guano, I have tried and found in a wet summer a great increase, in a dry one none, and I cannot say much for the lasting improvement. I shall now give you my ideas as to the effectual way of benefiting grass land. In the way of manures, I think there is no doubt that good farm yard manure has no equal, it always shows itself, and in mixed farms (by mixed farms I mean those that are partly tillage and partly grass), I think more manure might be spared for the grass land than there is at present. In farms, principally grass, of course farm yard manure is not to any great extent available, and what there is is generally used for the meadow land. In order to improve pastures you must stock properly; grass lands must be stocked with beasts, as sheep are injurious to grass—especially good grass. Some landlords are very particular about tenants taking two white crops, &c., off arable lands, but in my opinion a tenant that stocks grass land with sheep, damages the landlord's property far more. I think you may stock good grass with sheep until it will scarcely grow anything; many people run a few sheep amongst their cattle, but it is bad both for the cattle and the land. Keep horses out of grass if you wish to improve it. I do not say that one or two horses in a field will do much, if any harm, but you see many who have mixed farms and many who have only a small proportion of grass, turning all their cart horses out into pasture fields. They will probably tell you it is only poor land, and well it may be, when grazed year after year with a lot of cart horses. You may take the best field in the country and graze it with cart horses until it is a very poor one; besides cart horses can be so much more cheaply kept in the yards by mowing green meat. Therefore if you wish to improve your grass keep sheep and horses out of it, and stock with such cattle as are best adapted to the nature of the land, and give them a liberal allowance of cake, and you will soon see a marked improvement. Of course, you do not see it the first year, but you see your cattle feed much faster, and every year you will see your land alter, keeping more stock year by year, and the quality of grass wonderfully improved. I have tried it now for some years, and I am quite satisfied with the results. I think, in most years, the cattle

quite pay for the cake, and sometimes more. I am sorry I am not able to give you a quicker remedy. I have no wonderful specific which will transform all the grass land in the country in a year or two into rich pastures, but if my remedy is slow, it is sure, and by using cake you are always increasing the amount of beef for consumption. Some men may say it is all very well for men to do so who feed cattle for the butcher, but it will not do for a man who only breeds. I don't agree with this, as I think no cattle pay better for cake than young cattle. By keeping young calves well, you may make a two years old nearly as good as, with ordinary keep, it would be at three. If so, this is going a great way to an equivalent to making two blades of grass grow instead of one; and so sure am I that there is scope for improvement in grass land that I think we shall soon live to see two blades of grass growing where only one grows now. If by reason of this discussion we help to bring this about, our time will not have been mis-spent, and surely there never was a time when there was such inducement to rear and feed as much stock as we can. I have mentioned Mr. Mechi before, because just now we all, I dare say, know he has been writing letters, advocating the ploughing out of grass. So far from this, I think there is poor, bad land, especially any that is far from the homestead, that would be much more profitably farmed were it laid down to grass, as it would answer well for the rearing of young cattle. For breeding purposes, care ought to be taken that it should be clean, and in good order, where laid down, and liberal treatment used afterwards will greatly assist it after it has been laid a few years. I should strongly advise anyone who has a field of this kind to let it rest for one half-year, that is, neither stock it nor mow it, but let the crop of grass grow. The seeds will shake, the roots will spread, and the land be warmer. The next spring there will be as much keep for stock as if you had the hay crop. I have tried it myself, and I am sure I had more keep on the land in spring than if I had taken the hay and fog as well. It was perfectly astonishing. Since then, the field has been more like an old pasture, and grows more than double the grass. I have now introduced the subject, and I am sure I have left room for plenty of discussion. If gentlemen will give some of their experience, and also their opinions, I shall be in hopes that good may come out of the consideration of the subject.

Mr. FORD said that the management of grass lands opened out a large question. Undoubtedly grass lands were capable of great improvement to make them properly available for the production of beef. He looked forward to the time when every rod of sward land should be brought into thorough grass cultivation. As agriculturists the question was asked them, How were they to provide the nation with beef and mutton? He was not quite sure whether Mr. Mechi was not right in his views with regard to the ploughing out of grass and, as he adopted enlightened ideas on farming. He did not advocate the ploughing out of grass land in a wild and reckless manner, without exercising any judgment, as such a course of husbandry must be regulated according to their knowledge of the condition and capabilities of the land. He considered that a great quantity of land in the country now in grass would be better in tillage, and at the same time he thought that there was a great area of land which ought to be laid down in grass. He did not agree with Mr. Smith as to allowing certain kinds of fields to rest for a time by neither mowing nor stocking them, because, in his opinion, a close, compact sod could not be obtained without cutting the grass. This was an important matter in the procuring of rich grass.

Mr. BENNETT said that Mr. Smith had not alluded to the drainage of grass lands. Where there was a bad description of grass, it could not be improved without the land being drained. He agreed with Mr. Ford as to the ploughing out of certain kinds of land; but this ought to be very carefully done. The grass land of the country might be materially improved by a judicious system of management.

Mr. CALDER said that the price of beef and mutton made the subject under discussion of very great importance, especially at the present time, and if the great demand for beef

and mutton was to be met there must be great improvements made in the condition of grass land. He did not agree with Mr. Mechi in his opinions about the ploughing out of grass lands. For his own part he did not like the idea of ploughing out grass land, which could be greatly improved by a liberal application of manure, and by giving the animals grazing on such land as much cake as they could eat in a reasonable way. From what he knew of grass land great judgment was required in draining it. In the laying down of grass land he should advocate cutting it the first year and avoid eating it off with sheep.

Mr. T. SCOTT said that he trusted the laying down of grass land would not be introduced into the discussion that day, but that some gentleman would deal with it on a future occasion, when it would form the topic of another interesting discussion. After alluding to the effects produced upon lands by the application of lime and bones, he recommended the trying of a small portion of these substances as an experiment before they embarked upon their use in an extended manner. He quite agreed that it was judicious to use linseed and other cakes upon land in preparing their stock for the butcher, as by this plan the grass was improved. He scarcely agreed with Mr. Smith in letting the grass rot upon the land for a season as a means of improving it, because he knew that in some districts especially the grass wanted well eating down. In old pastures they should not put on sheep and horses, and he agreed with Mr. Ford that grass land was improved by cutting, as it made the roots spread, and the crop grew closer and more compact.

Mr. POWELL said that he knew many farmers who applied all their manure to arable land, and left the pastures to providence, a course of farming which he condemned.

Mr. FORD said that sheep eat very deeply into the roots of grass, which were permanently injured, and some kinds of grass were so eaten down as to cause them to die out. Sheep undoubtedly did injury to grass land.

Mr. SMITH entered into some details in justification of the course he pursued with regard to allowing some land in his occupation to rest for a time by neither stocking nor mowing, showing that the plan had answered remarkably well, and that the land had become improved. He quite agreed, however, that old and permanent grass land wanted eating down once a year, but not too bare. He condemned the folding of sheep on grass land, and horses, especially cart horses, did harm to grass fields. He did as little as possible in feeding sheep on grass land, besides which the animals did not do so well on such land. Beasts ought to be kept on grass land. As to the drainage of land it was a great advantage in low wet districts. Wet grass land required drainage, but drainage upon this kind of land was not so much required as upon arable land.

Mr. LAWSON, the Chairman, said that they had had an interesting discussion, and Mr. Smith had dealt with the subject in a practical manner, and to him their thanks were due. He understood, but he did not know whether it really was so, that there was another kind of mischief done by sheep being upon grass land. With regard to newly laid down grass he believed that Mr. Thompson had stated that when sheep were put upon it they gnawed down the best grass to the roots, and defiled it. He thought that the keeping out of sheep from grass land was the line of Mr. Thompson's argument.

Mr. SMITH earnestly hoped that the grass land of this country would become largely and permanently improved, for it was wonderful what it could show in the shape of crop when properly attended to. The greater the amount of grass that was produced the larger the number of head of cattle would be turned upon it, and more dung came back to the land, which consequently went on improving.

Mr. T. SCOTT referred to some grass lands which he knew being worth very little an acre, because they received little or no attention from the occupiers, whereas the same description of land, when occupied in small parcels by cottagers who cultivated it, was worth 50s. per acre when before it was not worth half-a-crown per acre. This fact showed that land, however inferior it might be, was capable of very great and wonderful improvement.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

MONTHLY COUNCIL: *Wednesday, November 1.*—Present: Sir Watkin W. Wynn, Bart., M.P., President, in the chair; the Earl of Lichfield, Viscount Bridport, Lord Chesham, Lord Tredegar, Lord Vernon, Mr. Baldwin, Mr. Barthropp, Mr. Barnett, Mr. Booth, Mr. Bowly, Mr. Cantrell, Colonel Challoner, Mr. Druce, Mr. Brandreth Gibbs, Mr. Hornsby, Mr. Bowen Jones, Colonel Kingscote, M.P.; Mr. Leeds, Mr. Milward, Mr. Pain, Mr. Randell, Mr. Shuttleworth, Mr. Thompson, Mr. Torr, Mr. Wakefield, Mr. John Wells, Mr. Wells, M.P.; Mr. Jacob Wilson, and Dr. Voelcker.

Sir A. K. Macdonald, Bart., Woolner Lodge, Liphook, was elected a Governor of the Society.

The following members were elected:—

- Bell, Robert, Mallgate, Brampton.
- Beswicke-Royds, C. R. N., Pyke House, Littleborough.
- Bonehill, C. G., Bickford Grange, Penkridge.
- Booth, E., Whitelock, Trent Park Farm, New Barnet.
- Campbell, Arthur J., St. James' Place, Fermoy, Ireland.
- Carruthers, G. Brockbank, Westbourne Terrace, Lancaster.
- Cawley, W. Payne, Ashby St. Ledgers, Rugby.
- Downing, John, Ashfield, Fermoy, Ireland.
- Du Plessis, Gustave, Château du Plassi, par Mettray, Indre et Loire, France.
- Ellis, P. P., Herbrandstone Hall, Milford Haven.
- Grant, Colonel W. L., 13, Victoria Street, S.W.
- Hurst, Robert, Roehdale.
- Jowitt, Thomas, The Old Weir, Hereford.
- Keir, Captain G. Lawrence, 33, Pembroke Road, Kensington, W.
- Lascelles, F. Henry, Mayfield, Rowledge, Farnham.
- Lenthall, E. Lylin, Besseleigh Manor, Abingdon.
- Lenton, W., jun., Oundle.
- Norman, George, Dinnaton, Swimbridge, Barnstaple.
- North, Charles, The Hall, Roughtam.
- Page, Joseph, Winnerton House, Kidderminster.
- Parker, T. Townley, Charnock, Chorley.
- Peterson, A. T. T., Drmndnar, Lymington, Hants.
- Williams, Robert Ap Iugh, Bodelwyddan, St. Asaph.

FINANCES.—Viscount Bridport presented the report, from which it appeared that the secretary's receipts during the past three months had been duly examined by the committee, and by Messrs. Quilter, Ball and Co., the society's accountants, and found correct. The balance in the hands of the bankers on October 31 was £673 15s. 4d., and £2,000 at deposit. The quarterly statement of subscription and arrears to September 30, and the quarterly cash account, were laid on the table. The arrears then amounted to £1,509. The committee recommended that 28 members in arrear of their subscriptions be removed from the list of members.—This report was adopted.

JOURNAL.—Mr. Thompson (chairman) reported that the committee requested the instructions of the Council in reference to the President's offer of a silver cup for the best managed farm in the South Wales district, but that they did not recommend the offer of a second prize. They also reported that the cost of the farm prize competition of 1871 was as follows:

Prizes offered by landowners and local committee	...	...	...	...	£250
Society's prizes	...	...	...	...	100
Society's expenses, including advertising, inspection, and report	...	...	...	...	225
Total	...	...	...	...	£575

This report having been presented, a conversation ensued, in which Lord Bridport, Mr. Randall, Mr. Cantrell, and Mr. Bowly advocated the offering of a second prize, while Mr. Thompson and Mr. Jacob Wilson defended the recommendation of the committee, on the ground that the special circumstances of the district did not require it. Finally, it was moved by Mr. Rowly, seconded by Mr. Cantrell, and carried by 11 votes against 8, "that a second prize, of the value of £50, be offered by the society."—Subject to this amendment the report of the Journal Committee was received and adopted.

CHEMICAL.—Mr. W. Wells, M.P. (chairman), reported that, in accordance with the resolution passed at a previous Council meeting, the opinion of counsel had been obtained on the questions then raised, and a letter had been written by the secretary in the terms recommended; but to this letter no reply had as yet been received.—This report was adopted.

GENERAL, CARDIFF.—Lord Vernon (chairman), reported that a correspondence had been held between Mr. Randell (at the request of the committee) and Mr. Corbett, the Steward of Forage for the Cardiff meeting, in reference to the quantities of forage and roots required for the ensuing exhibition, and that the committee recommended the purchase of the quantities which were likely to be required. This report was adopted. The President announced that in the course of a few days there would be a conference between the authorities of the London and North-Western and of the Great Western Railway in reference to the fares for passengers, stock, and implements, in connection with the Cardiff meeting. The Honorary Director and the Secretary were thereupon instructed to draw up a memorandum of the concessions which the Society was desirous of obtaining for its members, visitors, and exhibitors.

IMPLEMENT.—Colonel Challoner (chairman) reported that, with reference to the engineers' bill for additions to the Society's plant, they recommended that the Secretary be requested to inspect the plant with the consulting engineers, and ascertain whether some of the apparatus specially supplied for the Wolverhampton meeting might not with advantage be disposed of, and carried to the credit of the account.—This report was adopted.

SHOWYARD CONTRACTS.—Mr. Randell (chairman) reported that the whole of the works connected with the showyard at Wolverhampton were satisfactorily completed, and that the Society's portable buildings are now safely deposited within the intended showyard, at Cardiff, under the new contract with Mr. Penny, who is entitled to receive £361 9s. 3d., the final balance of the account for works at Wolverhampton. It was also recommended that the plan produced of the Cardiff showyard be adopted, subject to any modification which the Honorary Director may find necessary.—This report was adopted.

STOCK PRIZES.—Mr. Milward (chairman) reported that the committee had arranged a draft of the stock prize-sheet for the Cardiff meeting, and that they recommended that the Secretary be directed to prepare a proof, and send a copy to each member of the Council previous to their next meeting in December. This report was adopted.

SELECTION.—Mr. Thompson (chairman) reported the following recommendations of the committee:—

1. That Mr. E. Holland be elected a trustee of the Society, in the place of Lord Berners, deceased.

2. That Sir A. K. Macdonald, Bart., be elected a trustee of the Society, in the room of the late Sir Thomas Dyke-Acland, Bart.

3. That Mr. M'Intosh, of Havering Park, Essex, be elected a member of Council, to fill the vacancy caused by the death of Mr. Clayden.

4. That the Hon. W. Egerton, M.P., be elected a member of Council, to fill the vacancy caused by the election of Mr. B. T. Brandreth Gibbs as a Vice-President.

This report having been adopted, it was moved by Mr. Thompson, seconded by Mr. Shuttleworth, and carried unanimously, that Mr. Holland be elected a trustee of the Society. On the motion of Lord Bridport, seconded by Mr. Torr, Sir A. K. Macdonald, Bart., was unanimously elected a trustee of the Society. It was then moved by Mr. Milward, seconded by Colonel Kingscote, M.P., C.B., and carried unanimously, that Mr. M'Intosh, of Havering Park, Essex, be elected a member of the Council: and, on the motion of Mr. Wells, M.P., seconded by Mr. Randell, it was unanimously resolved that the Hon. W. Egerton, M.P., be elected a member of the Council.

VETERINARY.—Major-General Viscount Bridport (chairman) presented the following report:—The Veterinary Committee have had under consideration the letter of the Principal of the Royal Veterinary College, dated July 17, stating that a reply to the communication of the Royal Agricultural Society would be sent after the next meeting of the "General Purposes Committee" of the College. The committee now recommend that the Secretary shall write to the governors of the College, stating that the Society has been anxiously awaiting such reply, and further to request that the same may be communicated not later than December 1 next, in order that it may be considered at a special meeting of the Veterinary Committee to be held previous to the next monthly Council. Mr. Torr, having called the attention of the committee to a disease prevalent amongst, and fatal to, lambs in various parts of the country, and also to a resolution of the Lincolnshire Agricultural Society, requesting him to bring the subject under the notice of the Council of the Royal Agricultural Society, the committee reported that they considered the subject of sufficient importance for this to be done, and that they had therefore requested Mr. Torr to take this step at the present Council meeting.—This report having been adopted, Mr. Torr submitted the following extract from the minutes of the general meeting of the Lincolnshire Agricultural Society, to the consideration of the Council:—

"The committee appointed at the last meeting of the Council are of opinion that the prevailing disease amongst lambs ought to be thoroughly investigated by competent authority.

"They, therefore, recommend that Mr. Torr be requested to bring this subject under the notice of the Council of the Royal Agricultural Society, at their meeting to be held on Wednesday next, and be requested to report to the Council of this Society on November 10 next.

"That in the event of the Royal Agricultural Society deciding not to take action in the matter, that the Council of this Society be empowered to nominate a committee to investigate the subject, and to expend such moneys in the investigation as may be found necessary.

(Signed)

J. H. THOROLD,

"October 27, 1871."

"Chairman.

It was thereupon moved by Mr. Thompson, seconded by Lord Bridport, and carried unanimously—

"That the thanks of the Council be given to the Lincolnshire Agricultural Society for their communication, and that Professor Simonds be requested to make a thorough and immediate examination of the nature of the

disease and the circumstances under which it most commonly occurs, and to give suggestions for its treatment and prevention."

The President having then called attention to the importation of foot-and-mouth disease through the medium of Irish cattle, his statement was confirmed by Mr. Thompson and Colonel Kingscote; it was, therefore, moved by Colonel Kingscote, seconded by Mr. Torr, and carried unanimously, "That numerous complaints having been made of the unhealthy state of the Irish cattle imported into England, it is resolved that the Secretary be instructed to write to the clerk of the Privy Council, calling the attention of the Government to the subject."

Lord VERNON then moved the resolution, of which he had given notice, slightly altering his terms, as follows:—

"That a special meeting be appointed to consider the whole question of the receipt and expenditure of the Society, and the possibility of securing equal results at less cost."

In advocating the appointment of this committee, Lord Verron gave a sketch of the causes which had led to a continual increase in the expenditure of the Society for many years, more particularly in connection with the annual shows. He particularly noticed the increase required of late years in accommodating exhibitors and visitors, and the expenses attending the trials of implements and the exhibition of stock on so large a scale; and while indicating generally several directions in which it was possible that inquiry might result in economy, he expressed his conviction that no body of men could be more vigilant than the Council in controlling the expenditure of the Society in accordance with the policy which was decided upon from time to time. He concluded by moving the appointment of the committee, suggesting that the following noblemen and gentlemen should be invited to act as representatives of some of the standing committees of the Council:—*Finance*:—Lord Bridport, Colonel Kingscote, and Mr. Davies. *Showyard Contracts*:—Lord Vernon, Mr. Randell, and Mr. Shuttleworth.—*Stock Prizes*:—Mr. Dent, Mr. Milward, Mr. Torr, and Mr. Jacob Wilson.—*Implement*:—Lieut.-Colonel Wilson, Mr. Booth, Mr. Ransome, and Mr. Thompson. Lord Bridport, in seconding the motion, expressed his belief that there was no cause for alarm at the expenditure incurred by the Society of late years, for although it was undoubtedly large he considered that it had produced very good results, and he was not of opinion that the Society should lay by a large sum of money for the use of a future generation. At the same time, he thought that investigation might be beneficial without curtailing the usefulness of the Society. Mr. Thompson, in supporting the resolution, expressed his conviction that the control of the finances of the Society of the present time must meet with the approval of all members of the Society; but as all old societies have a tendency to run in grooves without taking sufficiently into account the changes required by altered circumstances from time to time, he thought that Lord Vernon's committee might point out some improvements, which would otherwise not be accepted.

Letters were read from winners of farm prizes requesting certificates of their success, and the Secretary was instructed to prepare a document suitable to such occasions.

A letter was read from Messrs. Eastons, Amos & Anderson, announcing the retirement from the firm of Mr. J. C. Amos, and that in future their designation would be Eastons and Anderson.

The date of the general meeting in December was fixed for Thursday the 7th, at 12 o'clock.

THE SMITHFIELD CLUB.

COUNCIL MEETING, November 1st, 1871.—Present: The Marquis of Exeter, the President, in the chair; Lord Bridport, Lord Tredegar, Vice-Presidents; Messrs. C. S. Bigge, T. C. Booth, J. N. Beasley, T. Duckham, J. Druce, Brandreth Gibbs (Hon. Sec.), J. Giblett, R. Hornsby, R. Leeds, E. W. Moore, R. J. Newton, W. Sanday, C. Stephenson, T. L. Senior, W. Torr, and Jacob Wilson.

The minutes of the last Council Meeting were read and confirmed.

The report of the Stewards on the detention of the animals destined for the country in consequence of one having been attacked with foot-and-mouth disease at the last Show having been read and adopted, the Hon. Sec. was authorized in reference to the licence from the Privy Council to take the necessary steps to secure as far as possible the recommendations of the Stewards being carried out. The particulars will be communicated to exhibitors and made public as soon as finally determined upon.

The Council appointed the usual Committee in reference to the arrangements for cattle conveyances and their being disinfected under the superintendence of a properly appointed officer.

Mr. Joseph Stratton, of Manningford Bruce, Marlborough, was elected a member of the Council in the place of the late Mr. Richard Stratton.

The Council prepared the House List of the eight members recommended for election on the Council at the next General Meeting, in the place of the eight who retire by rotation, and who are not eligible for re-election for one year.

Lord Tredegar, Vice-President, was elected President for the year 1872, in the place of Lord Penrhyn, who had signified to the last meeting his inability to act, and had at the same time presented £100 donation to the funds of the Club.

The proposition of the Agricultural Hall Company in reference to the implement catalogue was agreed to, viz., That the separate catalogue of implements be discontinued, but that in lieu there shall be added to the stock catalogue an index giving, 1st. The name, address, and trade of each exhibitor or firm; 2nd. The number of the stand; 3rd. A plan of the galleries, showing the position of each stand, and its reference number; also, 4th. The name, address, trade, and number of stand of each exhibitor or firm on the ground floor.

The reply of the Agricultural Hall Company to the Council respecting the ventilation of the Pig Hall was read.

The Chairman of the Agricultural Hall Company engaged to see that the matter of ventilation in the Pig Department should be seen to, and, as far as practicable, remedied.

It was resolved that the Hon. Sec. be requested to invite the butchers purchasing cattle at the Club Shows to send an account of the dead weights for publication, and that the name and address of each butcher complying with this request be published in conjunction with his return.

Authority was given for the Silver Cups, &c., to be ordered, as usual, of the Club's silversmiths, Messrs. Thomas, of Bond Street.

A letter from Mr. Robert Wortley, suggesting that no animal exhibited at Birmingham should be admitted to the Club's Show was read, and the Council determined

that it was too late to entertain this proposition under existing circumstances.

The following were duly elected members of the Club: The Earl of Aylesford, Packington, Coventry.

Jeremiah James Colman, M.P., Carron House and Easton Lodge, Norwich.

Earl Cowper.

R. B. Baxendale, Kimpton, Welwyn, Herts.

John Seaman Postle, Smallburgh Hall, Norwich.

Hedworth Barclay, Eastwick Park, Leatherhead.

Charles Dorridant, Aldershot Park, Aldershot.

Charles Whitehead, Barming House, Maidstone.

W. A. Hope, Wellingborough.

Thomas Latham, Wittenham, Abingdon.

John Pears, Mere, Lincoln.

Walter Scott, Glendronach, Huntley, N.B.

John J. L. Lubbock, Catfield Hall, Norfolk.

John Gervis Sharp, Broughton, Kettering.

John Carter Clayden, Barnet, Herts.

Joseph Stratton, Alton Priors, Marlborough.

W. de Charr, St. Stephens, Canterbury.

Col. Kingscote, M.P., Kingscote, Wootton-under-Edge.

Lord Burghley, Burghley House, Stamford.

James Messenger, Reading.

The thanks of the meeting were voted to the Marquis of Exeter, President, for his conduct in the chair.

BATH AND WEST OF ENGLAND SOCIETY, AND SOUTHERN COUNTIES ASSOCIATION.

The usual meeting of the Council was held on Tuesday, October 31st, at the White Lion Hotel, Bristol. In the absence of the Duke of Marlborough the chair was taken by Major Allen, M.P. There were also present: The Marquis of Bath; Messrs. J. D. Allen, J. Best, J. Townshend Boseawen, C. Bush, R. H. Bush, Thomas Danger, A. F. Milton Druce, Charles Edwards, Mark Farrant, Henry Fookes, Jonathan Gray, J. D. Hancock, Meade King, J. E. Knollys, J. Lush, H. A. F. Luttrell, H. G. Moyses, R. Neville, William Rigden, W. B. Simonds, M.P., Arthur Thyune, J. S. Turner, H. Williams, W. Smith (Official Accountant), and J. Goodwin (Secretary and Editor).

DORCHESTER MEETING, 1872.—The Council resolved that this meeting shall commence on Monday, June 3rd, and having approved the Stock and Poultry Prize Sheets, they were ordered to be forthwith printed and circulated. The amount offered in prizes exceeds that of any previous year by £143, irrespective of local premiums. For Devon, Shorthorn, Hereford, and Sussex cattle, in addition to the prizes heretofore offered, there is a new class for heifer calves above six and not exceeding twelve months old. For the first time, also, Jersey and Guernsey cattle are separately classified. There is also a class for dairy cows. The sheep classes remain the same as last year, with the exception that Devon Long-wools take the place of Kentish sheep. As a means of encouraging the horse show the Council have resolved again to reduce the entrance-fee. In the pig classes a separation between black and white pigs of the small breed is introduced, the same prizes as heretofore being offered for pigs of the large breed and Berkshires. In the Stock classes all entries must be made by the 17th of April, and in the Poultry classes by the 13th of May.

Among the special conditions affecting the exhibition of Stock are the appointment of two Inspectors to examine sheep on their admission to the show-yard with instructions to report to the Stewards any cases in which sheep have not been really and fairly shorn bare.

The Council resolved henceforth to reduce the preliminary money payment required from towns where the Society's meetings are held, from £900 to £800; at the same time offering a much larger sum in prizes.

Among the new members elected was Col. Aleock, of Euniscorthy, Ireland.

THE HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.

The first monthly meeting of the directors of this society for the season was held on Wednesday, Nov. 1, Sir James Gardiner Baird, in the chair.

Before proceeding to the business of the meeting, the CHAIRMAN reported the death of Mr. Russell, Pilmuir. In referring to his connection with the society, Sir James stated that in 1856 Mr. Russell was named by the society a member of the Council on Agricultural Education, and he held that office and acted as one of the Board of Examiners from that period till his death. Besides contributing various papers to the society's Transactions, he acted as editor of that publication from 1860 to 1866. He was appointed a director of the society in 1867, and his term of office would not have expired till January 1872. The society was also indebted to Mr. Russell for acting as a member of various committees. Sir James Baird then moved—"1. That the death of Mr. Russell, Pilmuir, having been communicated to the directors of the Highland and Agricultural Society of Scotland, they resolved to record in the minutes their deep regret for his loss, and their sense of the obligations which the society owes to him as a director and an examiner in agricultural education. 2. That the board direct that a copy of this resolution be transmitted to Mrs. Russell, with their respectful condolence with her and family under so painful a bereavement." The resolution was unanimously adopted.

At a meeting of the Inspecting Committee on Implements, held at Perth during the show, it was resolved that the implement left for them to select for special trial should be potato diggers. The following is the report by the committee: "The Local Committee of Superintendence of Implements in the Showyard of the Highland and Agricultural Society at their last exhibition at Perth having resolved to give the exhibitors of the potato diggers an opportunity for competitive trial, intimated this to all the exhibitors in the showyard. On Saturday, the 30th September, the trial came off in a field, on the farm of Hilton, near Perth, kindly granted to the committee by Mr. Thomas Richmond, the tenant. The field was dry croftland, deep soil, and free from stones. The crop of potatoes was first-class, being comparatively free from disease; but as the crop had been planted after lea there was here and there a good deal of unbroken turf intermixed with the soil, which, together with the strong crop of potato tops, tested fully the machines exhibited, and their capabilities of working under difficulties was fairly tried. The members of committee of Superintendence were Mr. Richmond, of Balhaldies; Mr. Ross, Bachelton; Mr. Wilson, Fairmount Villas, Perth; Mr. Gardiner, Chapelbank; and Mr. Elliot, Lighthood. The committee, after careful examination and full consideration, were unanimously of opinion that the diggers exhibited did the work remarkably well. The machine exhibited by Law, Duncan, and Co., appeared to be more complicated, and some time was occupied in adjusting it, the work at first performed being imperfect; it made good work, however, after being taken aside and properly adjusted. Even if it had done its work equal to the others, the price, £16, in the opinion of the committee, would have told much against it. All the other machines did their work well, inasmuch so that the committee came to the conclusion that they ought not to select any individual machine for special commendation. The machines exhibited by J. Bisset and Sons, James Mollison, and James Robertson in particular, did their work remarkably well, and although the committee do not feel themselves justified in selecting any particular machine and give it precedence over the others tried, they would be pleased if the directors of the society would intimate to the exhibitors the approval by the committee of the machines exhibited; and further, the committee consider the directors ought to call the attention of the public to potato diggers, as there are many districts in the country where they are comparatively unknown, and to recommend them for general use on the recommendation of the committee, as the members of committee were of opinion that the work performed by the machines exhibited was in every way

superior to what could have been done by either a single or double mouldboard plough in the common way, the diggers laying the potatoes on the surface of the ground in a ready form for gathering, and taking them clean out of the soil, as very few came to the surface where a grubber was afterwards put across the land from which the potatoes had been raised. The committee, therefore, can with confidence recommend potato diggers to the public, and to all farmers who cultivate potatoes upon anything like a large scale. The machines are easily drawn, a pair of horses working them without difficulty.

The directors agreed to award the medium silver medal to each of the exhibitors of potato diggers who attended the trial, and to record their thanks to the committee for carrying out the trial and for their report.

Letters from Mr. Wilkin, Tiawald Downs, recommending greater encouragement for long-wooled sheep, and from Mr. Harley, Rosebank, suggesting money premiums instead of medals for poultry, were referred to the General Show Committee.

At the meeting of the directors on the 1st of February last a special committee was appointed to consider and report on the propriety of recommending the adoption of registers throughout the country. At a meeting of this committee held on the 12th of July, Mr. Irvine, of Drum, reported that the subject of hiring markets had been before the directors in 1849 and 1860, when reports had been drawn up and published in the society's Transactions. The queries issued in 1860 were submitted to the committee, and after careful revision it was resolved that they should be recommended to the board to be again circulated among some of the leading farmers in each county in Scotland. The queries are as follows: 1st, How are farm servants, male and female, including those for house or dairy work, engaged in your district? 2nd, If hiring markets exist, do they work satisfactorily, or the reverse, in the way of obtaining good servants? 3rd, Is attention paid at hiring markets to the previous character of servants, or are they generally engaged irrespective of character? 4th, Do country tradesmen—such as millers, smiths, wrights, &c.—engage servants at hiring markets, and do any other parties attend them for a like purpose? 5th, Is it chiefly the younger class of servants who attend these markets, and are they regarded as holidays? 6th, Is earnest-money given when a servant is engaged, and if so, is there any disadvantage from the practice? 7th, Are hiring markets productive, directly or indirectly, of evil in your district? 8th, Are you of opinion that hiring markets are susceptible of improvement, or that they should be abolished? 9th, If susceptible of improvement, what means would you employ? 10th, If they should be abolished, what means would you employ, and what substitute would you suggest? 11th, If servants are obtained in your district without hiring markets be pleased to specify the means, whether by a register, by certificate of character, or otherwise? 12th, Does your system work well? 13th, Do any registers exist in your district, and are they much used? 14th, Be good enough to furnish any suggestions or information not embraced in the foregoing queries. The queries were approved, and ordered to be circulated.

On a report from the Finance Committee, the directors resolved to set aside £1,000 for a building fund, with the view at some future period of obtaining a more suitable hall for the meetings of the society.

A meeting of the committee in charge of the chemical department was held on the 25th of October, to report on two remits from the directors.

The first was a motion made by Sir Thomas Buchan Hepburn, "to consider how far it may be possible or desirable to prepare a short account of the present state of chemistry as applied to practical agriculture." After various explanations had been asked and given, the committee approved of the motion; but as further consideration as to the manner in which it can be carried out was deemed necessary, it was agreed to adjourn the meeting to a future day.

The second remit was a motion made by Mr. Scott Skirving,

Camptoun, and had reference to the sale of manures and feeding stuffs. The minute bears that the subject had been carefully considered by the committee, and that it had been resolved to recommend the directors to instruct Dr. Anderson to publish in the reports of the directors' meetings the names of those selling manures and feeding stuffs, with a guaranteed analysis differing materially from the analysis made by him in the laboratory.

The board approved of the minute, and it was remitted to the committee to consider the discussion as to the chemical department, which took place at the general meeting on the 21st of June. Sir James Gardiner Baird was added to the committee.

It was reported that the special committee on the improvement of land had held a meeting on the 25th of October, when it was resolved to print and circulate among the members of the committee a statement on the subject by Mr. Elliot, Laighwood, and to hold another meeting in January.

The Marquis of Tweeddale invited the directors and the special committee on Steam Cultivation, to attend a trial of Fisken's apparatus which is to be in operation next week on

his lordship's farm of Yester Mains. Several members of the board signified their intention of being present.

A letter was read from Mr. Malcolm Macgregor, S.S.C., sending an excerpt from the minute of meeting of the trustees of Professor Dick, containing the election of Mr. Thomas Walley, M.R.C.V.S., Manchester, to the chair of Cattle Pathology in the Edinburgh Veterinary College.

The board approved of the appointment, and instructed the Secretary to intimate this to the agent for Professor Dick's trustees.

Various communications from the Privy Council for Trade as to the stations where water should be provided for cattle sent by rail, were remitted to the special committee on the subject.

It was remitted to the Committee on Office-bearers to suggest the list for 1872; to the Committees on District Shows and on Cottages to revise the awards for 1871, and consider the applications which have been lodged for 1872; and to the Committees on Premiums for Essays and Reports to read and report on the papers lodged in 1871, and to revise the list for 1872.

FREEDOM OF CULTIVATION.

The following is the paper read by Mr. RUSTON at Wisbeach: Perhaps there is no document extant which is regarded with so much real conservative veneration, and whose text has been so literally adhered to as the old skeleton lease, which has been so scrupulously preserved and so jealously cared for in nearly every lawyer's office, and has been handed down as a kind of heir-loom from generation to generation. Its formulae and its covenants have been repeated with the most verbatim exactness decade after decade. It is a curious old document, heavy with age, and revered for its antiquity. Its style of composition drives one's thoughts back to the times of agricultural infancy, and its verbosity is a painfully wearying infliction. It contemplates no agricultural progression, its covenants of to-day are to be the settled, unalterable obligations of the future, as they have been the sure and binding terms of the past. There is an utter absence of the conception that science and practical agriculture can ever successfully combine in largely augmenting the capabilities of production, but there seems the implied idea that agriculture has reached its zenith, and that the cultivation of the soil must be held in with bit and bridle, lest unrestrained liberty should result in exhaustion, and landlord and tenant sink in one common ruin. Now we want to look at this subject for a few minutes, just to see how far these restrictions are wise, and how far they may be advantageously relaxed. It is not our intention to discuss the merits and demerits of leases, or the advantages or disadvantages of yearly tenancies, with sufficient and satisfactory Tenant-Rights. Both these systems of hiring have their advocates and their opponents, and both have in them that which is good and that which is evil; but in which the good, and in which the evil, most largely preponderates, I must leave to every man's individual judgment to decide. My object is rather to plead for greater liberty in cultivation, whether the hiring be for a term of years, or only from year to year. We want to break the spell and charm of these old stereotyped covenants and conditions. They have long enough, as relics of antiquity, held in captivity minds otherwise strong and enterprising, and have placed hindrances innumerable in the way of agricultural progress and advancement. Let us blot from our minds all memories of the past, and starting *de novo*, and taking an intelligent and thoughtful view of the present, and the probabilities of the future, seek to shape our farm agreements according thereto. We shall then be conferring a boon alike upon owners and occupiers, and upon the country at large. For increase of production without a corresponding exhaustion of the soil must be a national blessing. With a population daily increasing, it appears of the utmost importance that every possible effort should be made to increase production in order to meet the enlarged requirements of the community. The acreage under cultivation cannot be largely increased, and the yield per acre, in many in-

stances, cannot be very considerably altered. It has been said that the man who makes two blades of grass grow where only one grew before is to be looked upon as a public benefactor. And so he is. And we may, regarding this as the enunciation of a principle, claim a rich meed of praise for the man who by the judicious application of capital, and the skilful management of his farm, if not double, can largely increase its produce. We don't wish to say hard things of those who place impediments in the way of the successful accomplishment of so desirable a result. We rather wish to invite their attention to the evils consequent upon the restrictions imposed, and to ask their co-operation in seeking their modification or removal. There is, doubtless, a growing conviction of the necessity of relaxing to some extent the stringency of existing covenants, and of giving more freedom and scope to enterprise and intelligent occupiers; hence, we now and then see a breach of covenant amongst the better class of tenants disregarded, and allowed to pass without remonstrance, or in familiar phrase, "winked at." We would, however, prefer seeing the obnoxious covenants removed than their breach unheeded. It is neither wise in principle nor sound in morals to make laws and not enforce obedience to them. It tends to encourage conduct which, in the abstract, we are bound to condemn, and which, if manifested in all the business relations of life, would effectually destroy all confidence, and would consequently be an unmitigated evil. The last quarter of a century has been fruitful of such mighty changes, and such rapid agricultural development (very unlike the slow development of the jelly-fish to the monkey, and the monkey to the man), that all the relations between landlord and tenant require revision, and claim serious and immediate attention. Steam cultivation, the enormous consumption of artificial food, and the almost incredible quantities of artificial manures supplied every year to the soil, necessitate fresh rotations of crops, and altogether altered modes of industry, and call for new forms of agreement as between owners and occupiers of land. This seems to us so self-evident a fact as to be patent to every one, and to require no argument to enforce it. As we have already intimated, the yield per acre of the cereal crops grown upon a farm which is highly and adequately cultivated cannot be very considerably increased. Already the state of cultivation is such, that any effort to produce larger crops will, in favourable seasons, be fraught with evil, and result in loss. The increase will be in the bulk of straw, but with this there will be a corresponding decrease in the yield of grain. We need only remind you of the harvest of 1869 in proof of the correctness of this assertion. One of the greatest fears experienced by the modern farmer who cultivates his land highly is that the first thunder shower in June will prostrate his luxuriant crops, and seriously reduce their money value.

And all this because he uses too much cake, and is too generous in his application of his manures. What then must be done? What is the remedy for this state of things? Is his style of cultivation to be lowered that he may with greater prospect of profit to himself manage his farm in harmony to those stringent and unalterable covenants under which he occupies? Or shall those covenants be relaxed, and the privilege of taking additional and varying crops be conceded, encouraging a more free and extended, instead of a diminished and restricted, use of all those fertilizers which enrich the soil, and when applied with judgment, under right and favourable circumstances, benefit alike the owner, the occupier, and the consumer? We say, encourage high farming, give greater freedom of cultivation, and let the land everywhere teem with plenty. Make more meat, meat is dear, animals must pay for feeding now, are all utterances with which our ears are quite familiar. But the practical question is, how can more meat be made? and if made, what will be the result? To make more meat implies the use of more oilcake and other feeding agents, and the extensive use of these implies greatly enriched manure, and this manure, to be a source of profit to the farmer, implies an increased acreage of money-paying cropping, which implies the removal of restrictions and increased liberty of cultivation. Surely it has not come to this that agriculture must quietly fold her arms—do as Lord Russell said a few years ago it was our privilege as a nation to do, “rest, and be thankful.” Shall the rolling tide of agricultural progress be stayed and dammed back because antiquated covenants and deep-rooted prejudices render its onward flow unprofitable? Which shall yield? Shall progress? or shall the restraints to progress? Shall intelligence or prejudice triumph? These are questions thoughtful men are presenting, and are shrewdly observing what are signs of the times, that they may try to puzzle out what the answers shall be. There was a time when the idea of additional cropping was the occasion of the gravest apprehensions; and the possible, yea the probable, exhaustion of the soils was a huge bear which terrified many. But these fears are gradually subsiding, and we should rejoice to pronounce their funeral oration; but they are not dead, only dying; every now and then we detect signs of life. But science is making rapid strides, and day by day disclosing the futility and groundlessness of such fears, and in companionship with practice (an alliance at one time deemed incompatible) is teaching us how possible it is to increase production, and yet to retain the fertility of the soil. I need only refer to the experiments which are being made year by year by Mr. Lawes, of Rothamsted, as an evidence of the truthfulness of this. Probably some of you may have seen these, and others may have read or heard of these; but be this as it may, they clearly indicate what may be done, and show the decided advantage of high cultivation, conducted under the guidance of practical and scientific knowledge, and how surely it results in profit to the occupier, without loss to the owner. Many land agents and many landowners are intelligently and thoughtfully weighing these matters, and are preparing to encourage and facilitate agricultural progress. We commend the subject to the attention of all. To say there are no difficulties in the way of a liberal extension of privileges is to assert what is not true, and to say that these difficulties are insurmountable is, we conceive, not the less untrue. Were all tenants good farmers, and fed their lands bountifully, and cultivated them wisely and well, the great hindrance to increased liberty would be removed. But so long as estates are encumbered with slovenly and grasping tenants, who, regardless of consequences, are ever seeking to take from, and ever unwilling to add to the soil, allowing their cupidity and avarice to control all their operations, vainly imagining that such a system is to their advantage, and deluding themselves with the notion that in proportion as they impoverish the soil they enrich themselves—we say that as long as this state of things continues so long will there be an argument to be employed in opposing concessions so urgently needed. But the argument, however skillfully it may be used, is not a sound one. It cannot be wise to punish the good and discourage all progress, and set aside all advancement, and crush all spirit of enterprise, on the ground that some are unworthy. We entertain far too high an opinion of the intelligence and ability of those who occupy a position between the owner and the occupier, a position so honourable and responsible, as to suppose that they cannot devise some way of encouraging good tenants and high

cultivation, and of repressing and restraining the evil practices of bad ones. It is not for us to assert dogmatically how and in what way this shall be accomplished. Suffice it to say we believe in its practicability and are deeply impressed with its necessity. To put the matter briefly, our position is this. It is of the utmost national importance that the land should be made to produce all that the discoveries of modern science and the most skillful practical cultivation can possibly make it yield, and that everything that prevents the realisation of this should be at once and forever removed; that by liberal management greatly increased produce may be secured without any corresponding exhaustion of the soil; that increased production consequent upon high cultivation implies better rents to the owner, larger profits to the occupier, cheaper food to the consumer, and increased wealth to the nation; that the main obstacle to the enjoyment of this universal good is the system on which lands are let, and the restrictions which are imposed. We therefore, in conclusion, plead for a full and intelligent re-consideration of the terms on which land is let, and their adaptation to the exigencies of the times. The speaker concluded by moving “That it is desirable that all lands should be made to yield a maximum amount of produce, having regard to the continued fertility of the soil, and that whatever hinders the realisation of this must be regarded as a national evil, and is opposed alike to the interests of both owner and occupier, and requires to be at once removed.”

MELPLAISH AGRICULTURAL SOCIETY.

MEETING AT BRIDFORD.

The exhibition was one of the largest ever held under the management of the Society. For the best bull, cow, and offspring of any pure breed, there were sent some of the Devons of Mr. John Pitfield, Symondsburry, and the prize fell to the lot of that breeder. His bull, the Duke of York, is a moderate-sized well-proportioned animal, with many excellent points, and his sire and dam were first-prize winners at the Leicester show of the Royal Society. Mr. A. J. Pitfield, of Eype, showed a much larger bull than the Duke, and was the only competitor against his brother in this class. Mr. Clement Davy, of Horn Park, Beauminsters, was represented by a Hereford, which was successful in the class for bulls irrespective of breed or age. In the dairy-cow class animals were shown by four competitors, Mr. J. Pitfield again achieving an easy victory. He had the award of £2, and also received high commendation; a cow sent by Mr. Sprake was likewise commended. Mr. John A. Smith, of Bradford Peverell, had entered; but was not represented. For the prize offered for two-year-old heifers, Mr. J. Pitfield's Devons were in the fore, his brother Alfred being highly commended. Mr. T. Hussey, Denhay, Symondsburry, won the laurels for yearling heifers, Mr. John Pitfield being highly commended. The latter, as extra stock, but not for competition, showed three Devon cows; he also sent a two-year-old cart colt, and a cob which had previously been a prize winner. Amongst the sheep that were penned none attracted more attention than those of Mr. George Miller, of Bradpole, and Mr. George Pitfield, of Netherbury, both of whom won in several classes. Mr. Robert Fooks was likewise successful in two classes, while Mr. J. S. Nichols, formerly of Melplais, and now of Backland, near Lymington, in Hampshire, took the prize for the best pen of Down ewes, two, four, and six teeth. Downs are not great favourites in the Bridport district; but Mr. Nichols' have size, symmetry, and purity of breed. Mr. John Pope, of Symondsburry, also showed some prime Downs. There was a good collection of pigs; indeed, this section had never been surpassed at any previous show of the Society. Mr. Walden, of Came, showed in the sow-pig class, and two of his were the pick of the entry; but the third spoilt their chance, the prize consequently going to Mr. Thomas Hussey. Mr. John Davey, of Yonder, gained the award offered by Sir Molyneux Nepean, doing so against considerable competition. A pig of the Fisher Hobbs' breed, sent by Mr. J. S. Nichols, was much fancied, and Mr. William Mansfield, of Portisham, was also one of the prize winners. The hunters mustered half-a-dozen in all, Mr. N. M. Loggin winning the prize.

THE GREASLEY AND SELSTON AGRICULTURAL SOCIETY.

In some of the classes the entries were not so numerous as might have been anticipated; but the absence of stock from some farms was attributed to a fear of the foot-and-mouth disease. As far as the animals shown were concerned, however, they were noticeable for their healthy appearance and condition.

PRIZE LIST.

HORSES.

Horse adapted for hunting purposes.—First prize, £5, Mr. Pidcock, Nottingham; second, £2, S. T. Jackson, Watnall.
Hack or roadster.—First prize, James Widdowson, Hucknall; second, S. T. Jackson, Watnall.

Cart mare, with foal at foot.—First prize, Mr. Annable, Watnall; second, Barber, Walker, and Co.

Cart foal.—First prize, Barber, Walker, and Co.; second, H. Alcock, Linby.

Two years old cart gelding or filly.—First and second prizes, E. Godber, Hucknall

Yearling cart gelding or filly.—First prize, Barber, Walker, and Co.; second, H. Alcock.

Mare or gelding adapted to agricultural purposes.—First and second prizes, E. Godber.

CATTLE

Cow in milk, that has had a calf since April 1st.—First and second prizes, J. C. Musters, Annesley Hall. Highly commended: Mr. Winson, Watnall; H. Alcock.

In-calf cow.—First prize, H. Alcock; second, T. Attenborough, Moorgreen.

Heifer under three years of age, calved or in calf.—First and second prizes, H. Alcock.

Beast under two years.—First prize, T. Alcock; second, H. Alcock.

Beast under one year old.—First prize, H. Alcock; second, Mr. Chambers, Watnall.

Bull, two years old and upwards.—First prize, J. Widdowson; second, H. Alcock.

Bull, under two years old.—Prize, J. C. Musters (nine months).

SHEEP.

Three long woolled ewes, having reared a lamb.—First and second prizes, H. Alcock.

Three long woolled theaves, having reared a lamb.—First and second prizes, H. Alcock.

Five longwoolled ewe or wether lambs.—First and second prize, H. Alcock.

Long woolled ram, of any age above a shearling.—Prize, Mr. Winson, Watnall.

Long woolled shearling ram.—Prize, Mr. Annable, Watnall.

Long woolled ram lamb.—First and second prizes, Mr. Evans, Moorgreen.

Short woolled ram, of any age.—First prize, Mr. Mellows, Papplewick; second, J. C. Musters.

Three short woolled ewes, having reared a lamb.—First and second prizes, Mr. Mellows.

Three short woolled theaves.—First and second prizes, Mr. Mellows.

Five short woolled ewe or wether lambs.—No award.

PIGS.

Boar.—First prize, J. C. Musters; second, Mr. Porter, Hucknall.

Breeding sow, pigged or in pig.—First prize, Mr. Bradbury, Nuttall; second, H. Alcock.

Gilt.—Prize, J. C. Musters.

ROOTS.

Crop of Swedish turnips, four acres and upwards.—First prize, Mr. Bonser, Bobber's Mill; second, W. Banner, Watnall.

Crop of Swedish turnips, one acre and under four.—No award.

Crop of mangold wurtzel, three acres and upwards.—First prize, Mr. Bonser; second, Mr. Rcek, Nuttall.

Crop of mangold wurtzel, one acre and under three.—First prize, T. Alcock; second, W. Houghton, Nuttall.

EXTRA STOCK.

Two heifers.—Highly commended: Mr. Widdowson.

THE MONMOUTH AGRICULTURAL SOCIETY.

PRIZE LIST.

HORSES.

Entire cart horse.—Prize, £5, no entry.

Cart mare and foal.—Prize, £3, T. Derrett, Mardy, Usk.

Three years old cart colt or filly.—Prize, £2, T. Derrett.

Two years old cart colt or filly.—Prize, £2, H. Williams, Llandenny.

Yearling cart colt or filly.—Prize, £2, I. Theyer, Walford.

Entire horse calculated to produce hunters and chargers.—Prize, £5, T. C. Hallen, Raglan, Wolsley.

Brood nag mare in-foal, or with foal at foot.—Prize, £3, W. Powell, Blackwood.

Three years old nag, colt or filly.—Prize, £2, T. P. Brown, Weirend.

Two years old nag, colt or filly.—Prize, £2, T. P. Brown.

Yearling nag, colt or filly.—Prize, £2, W. Powell.

CATTLE.

HEREFORDS.

Stock bull, two years old and upwards.—Prize, £5, W. Evans, Llandowlas (Monaughty 3rd).

Yearling bull.—Prize, £3, J. James, Amberley.

Bull calf under twelve months old.—Prize, £2, J. Haynes, Llanrothal.

Pair of cows in-milk, or within three months of calving.—Prize, £2, J. James, Amberley.

Pair of two years old heifer.—Prize, £2, T. P. Brown.

Pair of yearling heifers.—Prize, £2, W. Evans.

SHORTHORNS.

Bulls two years old and upwards.—Prize, £5, J. A. Rolls, The Hendre.

Yearling bull.—Prize, £3, no entry.

Pair of cows in-milk, or within three months of calving.—Prize, £2, J. A. Rolls.

Pair of two years old heifers.—Prize, £2, J. A. Rolls.

Pair of yearling heifers.—Prize, £2, J. A. Tippins, Rockfield.

Bull, cow, and offspring, the calf to be under twelve months old at the time of exhibiting.—Prize, £5, W. Evans (Herefords).

Pair of two years old steers.—First prize, £2, J. James, Amberley; second, £1, not awarded.

Pair of yearling steers.—First prize, £2, W. Evans; second, £1, not awarded.

SHEEP.

(Short-wools, including cross breeds.)

Pen of four yearling wethers.—Prize, £2, A. Armitage, Dadnor.

Pen of four wether lambs.—Prize, £2, J. B. Sainsbury, Highgrove.

Pen of four ewe lamb.—First prize, £2, A. Armitage; second, £1, not awarded.

Pen of four yearling ewes.—First prize, £2, A. Armitage; second, £1, J. B. Sainsbury.

Pen of four breeding ewes.—First prize, £2, N. G. Price, Llancillo; second, £1, A. Armitage.

Ram.—Prize, £3, C. J. Smith, Bryant's Court.

(Long-wools, including cross breeds.)

Pen of four yearling wethers.—Prize, £2, no entry.

Pen of four wether lambs.—First prize, £2, W. Brown, Lewston; second, £1, not awarded.

Pen of four ewe lambs.—First prize, £2, W. Brown; second, £1, not awarded.

Pen of four yearling ewes.—Prize, £2, C. Kearsey, Glewston.

Pen of four breeding ewes.—First prize, £2, I. Theyer; second, £1, C. Kearsey.

Ram.—Prize, £3, C. Kearsey.

PIGS.

Boar under two years old.—Prize, £2, C. Kearsey.

Breeding sow and litter of pigs, the latter to be under three months old.—Prize, £2, J. B. Sainsbury.

Breeding sow in farrow.—Prize, £2, J. A. Rolls.

AN AMERICAN AGRICULTURAL SHOW.

TO THE EDITOR.

SIR,—I have some recollection of reading in *The Mark Lane Express* some eighteen months or two years ago an interesting description of a Canadian farm in the possession of a Mr. Brown, and was much pleased with the account, at the same time regretting that American agriculture was not more frequently discussed in the English Papers, knowing it to be generally interesting to the farmer. Since that time I have read a lecture delivered before the Farmers' Club by Mr. James Howard, M.P., descriptive of things in America, which everyone, and especially tenant farmers, ought to read. I was far from thinking at that time that I should one day participate in the pleasure of seeing a little of American agriculture as it is, and attending one of its shows; but the opportunity has since presented itself, and having been pleased with what I have seen I resolved to write a description, as far as lay in my power, for the benefit of friends in England, knowing it would be interesting to them. On reflection I concluded to send you a brief account, asking you to kindly publish it in your next issue of *The Mark Lane Express*, at the same time I regret my inability of writing a very elaborate description of things at the show, on account of having no papers or catalogues as a guide.

The city of Cleveland, in which this show was held, is situated on the river Cuyahoga and shores of Lake Erie, numbers one hundred thousand inhabitants, and does an immense manufacturing business in iron and other goods, also oil refining, thousands of barrels coming weekly from the State of Pennsylvania for that purpose. It possesses numerous lumber yards, vessels being solely employed in conveying lumber from the Saginaw District, State of Michigan, to the city. Railway companies run trains from all parts of the United States to one dépôt: hence it possesses great facilities for trading with all districts. The ground on which this annual show is held was bought by a company styling itself the Northern Ohio Fair Association, at the rate of one hundred dollars per acre, and consists of, I believe, about one hundred and fifty acres. A part is laid out as a race-course, one mile in circumference, with grand stands and stables, situate on one side of the St. Clair-street, but connected by a bridge with the show grounds. The first show took place in October of last year, and although the weather was very unfavourable it was well attended, and the scheme seemed to be a successful one.

Tuesday, September 12th, was the first day of the show this year, and the following morning promising a favourable day, I started for the grounds, with a three-quarters of an hour's walk before me. I was able to shorten my journey I afterwards found by crossing lots; and having no apprehension of being overhauled or molested by game-keepers or police on suspicion of trespassing in pursuit of birds or vermin, I availed myself of the privilege, and after emerging upon the St. Clair-street, and wading through a sea of sand and dust, I reached the gates, paid down my half-dollar greenback, and procured my ticket and admission. And here I encountered a strange medley of sights and sounds. From one side could be heard the clanging of hammers; from another the noise of hand organs; showmen, who rented places on the ground, used their lungs as if they were to be employed no more; and organists ground their organs

as if fearing that all the music would eke out of them if one note did not tread rapidly on the heels of the other; cocks crowed from the poultry department, ducks quacked, sheep bleated, cattle lowed, horses neighed, donkeys brayed, pigs grunted, steam engines whistled, the machinery groaned, a few children bawled, and occasionally the police united their stentorian voices with the wild discord. There appeared to be everything to excite the attention of the visitor, and as the day advanced I found the crowd increase, and the medley grow more interesting. The first sight which attracted my attention whilst strolling down the avenue was the fire engine, horses, and hose cart; the latter is a kind of windlass mounted on wheels, round which the hose is secured, and which, drawn by one horse, accompanies the engine. This steam fire engine, of elegant workmanship, was despatched from the city as a remedy in case of fire, and as it glittered in the morning sun it certainly resembled a massive piece of plate for brilliancy, being constructed of burnished steel, brass, and copper. I may as well add, that in American cities the fire department is conducted admirably, alarm boxes being placed in every locality, from which alarms by the aid of electricity is sent to the fire engine stations immediately a fire breaks out. Passing on I came to the poultry department, and here found over one hundred coops, filled with cocks, hens, geese, and gobblers, that kept up a continuous noise, making the woods resound with their shrill voices. Mr. Ford, of Ravenna, Ohio, a noted fancier, had the largest collection of poultry on exhibition, composed principally of light and dark Brahmans, Dorkings, Black Spanish, Silver Spangled Hamburgs, Japanese Bantams, and many varieties of Poland. There were also several coops of Ronen and Bremen geese, Aylesbury ducks, and other imported breeds, and a pair of English ferrets—a curiosity generally unknown here. I next observed, a short distance from the poultry department, a number of bulls, which had been lead out and hitched to the trees, undergoing their accustomed morning ablution, a certain amount of sponging and combing, which produced a refreshing effect, which they apparently enjoyed. I regretted very much to find that the arrangements in the stock department were incomplete, the cattle standing in the pens without any certificate of ownership, breed, age, or weight; the only information attainable being the ominous word "taken," chalked on the boards, having reference, I presume, to the reservation of pens. The breeds were principally Shorthorns and Herefords, some of these very fine, with a good sprinkling of Ayrshire, Sussex, and Devons, and also some good cross-breeds. The Shorthorn and Hereford bulls called forth admiration, and two Shorthorn steers (weighing 3,000lbs. each) were universally admired. The fat stock were very creditable, some heifers in particular, which would stand a chance at Smithfield next December. The cattle were mostly clothed up to protect them from the attacks of troublesome flies, and produced the effect of perfect ease and comfort, and freedom from restlessness. On turning to where the pigs were on exhibition, I was amused somewhat on beholding a pig being groomed by a coloured-boy, and, judging from the contented grunts and comic grins, the performance appeared gratifying to both parties, pig and nigger too. The breeds of pigs were principally Berkshire, Poland, and China, and cross-breeds, some from Indiana being well worth seeing. The sheep were mostly

all horned breeds, with the exception of some imported; among the latter were some apparent West Country downs and weighty Southdowns. It was my impression before coming to America to find no good stock here, but have since found that the generality of stock and cows resemble those in England for weight and size, and I have had during my sojourn here opportunities of seeing some great big-framed working cattle, which if fattened as in England would turn the scales with a heavy vengeance. Commonly pigs in this locality are white-haired breeds. I sincerely hope that as the Northern Ohio Fair Association get into better working order, they will have all lists, certificates, and catalogues made out by the second day of the show as at the Smithfield, and other of the Old Country meetings. Proceeding to the machinery department I encountered an apparent infernal machine mounted on wheels, and designated a road-steamer. It was built at Painesville, Ohio, situated 30 miles from Cleveland, from which place it had arrived the preceding day, doing the distance in seven hours. There is just cause I fear to attach the epithet of "infernal machine" to American boilers, judging from the numerous recent boiler catastrophes, prominent among them being that of the ill-fated steamer Westfield of New York, when nearly one hundred lives were sacrificed. The majority of the boilers at the show, I observed, were leaking more or less, one especially at the base of the steam dome, and at several rivets. The road steamer was also bubbling away at the junction of the fire-box with the boiler, the engineer a patentee coolly remarking it could easily be remedied, by the application of a caulking iron. There may not be anything serious in these leakings, but as I before observed the frequency of boiler blow-ups produce a different opinion and confirm the belief that proper care is not taken in their construction. To return to the road-steamer: it was a locomotive boiler placed on four wooden wheels of about 8 ft diameter, the two nearest the fire-box being the steering wheels, managed by a complicated contrivance, and so arranged that the man at the wheel sat with his back to the direction the engine was going. The propelling power was obtained by means of a leather belt running from the fly-wheel to the pulley-wheel on a shaft secured to the carrying gear and immediately in front of the smoke-box door. At the extremities of this shaft were cog-wheels, acting in a circular cogged-rack placed in the inside of the felloe of the carrying wheels; there was also a contrivance for transmitting power from the main-shaft to the driving shaft by means of endless chain and studded wheels, on the same principle as Green's lawn-mower, but owing to the breaking of this chain, whilst in motion, a young man had received serious injury in the arm, and the appliance had lost favour, being used only in wet weather. The engineer was stationed on a platform fixed between the fore and hind wheels, his lever of reversing gear being secured to the side of the boiler in a horizontal position, working in a slide, and secured in its required position by a common thumb-screw—rather a temporary arrangement. The engineer informed me it was used principally for thrashing, but generally competent to do farm-work, ploughing included, by attaching ploughs behind it. It could propel itself up any hill or on any road, where a Yankee team (two horses) could draw 15 or 20 cwt. Price of engine complete 1,500 dollars. Whilst looking on, I mused on the probable results of a competitive trial with one of Messrs. Aveling and Porter's or Garrett's traction engines, and was interrupted in my train of thought by hearing a young man exclaim, "I say, mister, will your machine catch bugs?" and receive an answer that it did not possess the ability of catching them, but probably might be the means of destroying them after being taken. The inquiry uttered in so hurried and unexpected a

manner produced a laugh, but we were immediately assured he was perfectly in earnest, having just inspected an invention for removing the bugs which infest the potato vine commonly known as the Colorado bugs, which of late years have been crossing the continent of America in an easterly direction at an annual rate of 60 miles. I afterwards examined this machine, a patented invention, and was convinced of its utility for the designed purpose. It consisted of two pans slung between two wheels, which was pushed between two rows of potatoes, causing a pan to be on each side of a single row. A flat brush was attached to the frame of this machine, receiving an oscillating motion by means of a belt worked by one of the carrying wheels to a small pulley. The motion of the brush would certainly have a tendency to remove any insects on the potato haulm, providing it stood erect; and it appeared impossible for the bugs to fall otherwise than into the pans. It required little exertion to propel it. After leaving the road steamer, I inspected an engine and machine in motion, manufactured by Gaar, Scott, and Co., Richmond, Indiana. The barn works, consisting of thrashing machine and elevator combined, was considerably smaller and lighter than an English machine, and was working well. The distance between the engine and machine was three times as much as I have been accustomed to see in England, the belt driven crossed and so slack that it nearly touched the ground, the length of belt, I presume, making up for slackness, and producing sufficient tension on the wheels. The engine, said to be ten-horse power, apparently five or six, was very well got up, the cylinder being stationed on the right, and completely on the side of the boiler, and the shaft across the front of the smoke-box end and door, where a seat and foot-board was also fixed for the convenience of the teamster, the horses being driven with reins and in double harness. In referring to their catalogue of machines, I find they give a series of letters from different States. One man says in writing from Montana territory, in 58 days they got out 34,000 bushels of grain, principally wheat, and on one occasion in nine hours 1,105 bushels; another writing from Shenandoah Valley, Virginia, states that in the season, ending November 29, 1869, they had thrashed 26,000 bushels of wheat and 4,590 bushels of oats. An extract from an Albany agricultural paper notifies that an eye-witness timed the men without their knowledge, and found that in one minute they thrashed 2 bushels and three pecks of grain, well cleaned and ready for market. In writing from McLean County, Illinois, a person states that in one day they thrashed over 1,000 bushels of wheat. Letters from other States speak strongly in its favour also. Price of engine and machine, 1,700 dollars. A gentleman standing by said, "I remember when we used to cut our grain with the sickle, and paid half a-dollar a-day, but when the cradle came up they all said the working man would be ruined, and then when machines were invented they all said, it would raise the devil, and so it has, I think, for you can't get a man under two dollars a-day now." I next proceeded to the legion of mowers and reapers on view, and could but think that a purchaser would be similarly circumstanced to the boy in the cook shop, who found himself among so many delicacies, and hesitating which to begin first. It is certainly a hard matter to tell which is the best machine, each one possessing good points in various parts, and in fact, in some instances, the advantages possessed by one machine over another is often very trifling. Some claim to be the lightest in draught, another strength and durability, whilst another maker insinuates that it is impossible for any machine to compete with his for general capabilities and superior workmanship. I noticed that every machine had excellent arrangements for passing obstructions, as stumps and stones, and it was

very remarkable the pitch to which the knife-plate could be elevated, the knife being in motion at the same time. I have had opportunities this summer of seeing the "Buckeye" mower at work, and am convinced a better kind of machine for all kinds of ground cannot be desired: it is strongly put together, well arranged in detail, and does its work well. It has had trials afforded for testing its mettle, having been frequently run into stumps, and the shock resulting has been sufficient to fetch the horses off their legs, and all this without serious injury. I was struck with the novelty of a machine on exhibition, named the Eureka, manufactured at Ploughkeepsie, New York State, which presented the singularity of having the knife-plate directly between the two carrying-wheels, the extremities of the plate resting on two small wheels, the knife being worked by a capital arrangement on the principle of the eccentric. This machine lays claim to absolute direct draught, can cut anywhere where two horses can walk, and with a 5 feet bar with greater ease than a 4½ feet on an ordinary side-cut machine; one horse only walks in the standing grass, a long neck yoke and whiplap-tree being used, and the grass which has been trodden down on one bout is cut on the return, the other horse being on the cleared track. It is worthy of notice that the position of the grass after being cut by this machine is almost erect, and consequently dries in a very short time. Persons from all parts of the States who have tried it, speak in its praise as an excellent machine. There were large collections of ploughs and harrows and other tilling implements on exhibitions, also some good seed-drills: one especially I noticed as superior to any I have seen here or in England. The grain was worked by an ingenious contrivance, consisting of fluted wheels worked by a rod, which distributed it with the greatest precision and regularity. A tool for digging post-holes was also to be seen and experimented with. The digging part was a steel cylinder 8 inches in length, and, I think, about 6 inches diameter. Down this cylinder or scroll was an opening to allow of expansion whilst being struck into the ground, a long handle being fixed at one end. One hand only is necessary for working this tool, as it freely cuts its way into light sandy ground free from stones, and the dirt rising into the inside of this spring cylinder is held tight in the same, and is brought to the surface, when a jarring tap causes it to drop out. There was also a good display of waggons, very different from those in England. The Yankee waggon is drawn by two horses abreast, and the carrying gear is of similar construction to the English timber carriage, but of course very much smaller. For carrying dirt, stones, &c., dumping boards are used: these consist of a number of boards two inches by four inches in thickness (handed at the ends), which form the bottom; for the sides, boards about one foot to 16 inches in width, and end boards the same. When the load is to be deposited on the ground the end boards are removed, and the dumper and teamster remove the bottom ones in rotation, and the load drops through. If manure is to be loaded on the waggon the dumping boards are taken off, and a box is fitted on in their place. A team numbers two horses. One person, who is the teamster, looks after and drives them; the harness is similar to the English double, and no matter what the load is, the driver always rides. I must not forget to mention that for the purpose of carrying hay, straw, &c., a frame or rack takes the place of the box or dumping boards: there were to be seen excellent designs for dumping waggons. After viewing other things out of doors, too numerous to mention, I entered the power hall, and inspected numerous grist mills, and other machines at work. There were also inventions for soap and paint mixing, tapping nuts, and ornamental wood cutting, all in motion. Near this

building was the temporary printing establishment of the *Cleveland Leader* newspaper, whose presses at the time of my visiting them were engaged in printing circulars and cards, and also an apparent sheet of their issue, which were gratuitously distributed, but which on inspection proved to contain but little more than advertisements, with a brief notice that the fair was open and the weather was favourable—an assertion by no means false, judging from the appearance of the grounds. There was also a small paragraph respecting a rival newspaper, the *Cleveland Herald*, which read as follows: "All day Sunday the full force of the *Herald* printing establishment was employed in erecting a striped umbrella on the fair grounds, under which the office has to be exhibited. On Monday the establishment was brought out on a wheelbarrow from the city, and on the evening it was ready for exhibition. Visitors are requested to inspect it this morning if it has not been stolen away during the night." So much for Yankee literary rivalry. Near to this building was the telegraph office; also the fruit hall, containing specimens of apples, grapes, and peaches in abundance. The floral hall also contained sights worth seeing, splendid foliage plants, trees, ferns, &c., being on exhibition. There were also other buildings, containing works of art and science, all intensely interesting to the visitor. In the afternoon the trotting matches took place. And now I must draw this to a close. I regret that I have no better information to forward you, but hope to have the opportunity on a future day. It would be useless to do more than allude to the probable results of these shows on American agriculture: doubtless they will promote a superior system of farming, a greater attention to the rotation of crops, and less slovenly habits, so characteristic of the American farmer. He will profit immensely by being brought into contact with men of science and ingenuity, and also by seeing new methods and ideas of doing things, and the comparison of the results with those they have been accustomed to, will have a tendency to promote a greater methodical arrangement, so requisite in successful farming.

Before concluding I would say to all tenant-farmers not well fixed, who have long been hoping for better things—"Come Westward;" listen no longer to the talk about game-law compromises, Tenant-Right compensation, &c. Your choice here is an extensive one, for millions of acres are requiring cultivators. Become possessors of your own free lots, and thereby make provision for approaching old age. Entitle your children, as citizens of the United States, to become freeholders and future landed proprietors. Remember that every five years of your tenancy you have been paying a rental sufficient to purchase a good farm here. Your rates, taxes, tithes, &c., might have assisted you in purchasing stock, which would have consumed the produce devoured and destroyed by your landlord's vermin, and your crops have been continually blighted, owing to the presence of wide-spreading hedgerows and worthless, unsightly timber, which you dare not and your landlord will not remove. Here is perfect freedom, Tenant-Right, and no game-laws. Taxes amount to a nonentity, and no intriguing, avaricious, semi-clerical landlord questions the right of propriety of a tenant-farmer enjoying his roast turkey dinner, or listening to his daughter's performances on the piano.

In the wise orderings of Providence, America with its millions of acres of fertile plains, its richly watered valleys, and timber-growing districts, its mines of wealth, was discovered to man at a time when greatly needed, and became peopled by the most ingenious, enlightened, and persevering of the Anglo-Saxon race. And now the country, after 250 years of steady progress, numbers 40 millions of inhabitants, and, owing to its fertility and

enterprise, has become the great corn-producing country of the world.

Nations may learn whilst studying America that true greatness and glory cannot be established by force of arms and territorial aggrandisement; it is only by founding their Governments on the lasting basis of free-

dom, peace, truth, and justice, in the defence of which the sons of this free and highly favoured country would sacrifice all they possess, and if needs be their lives also.

I am yours, &c.,

WM. A. UNDERWOOD.

East Cleveland, Ohio.

THE LAMB DISEASE.

A large number of agriculturists belonging to Devon and Cornwall met together at the Plymouth Guildhall to take into consideration the lamb disease.

The CHAIRMAN, Sir Massey Lopes, Bart., M.P., in opening the proceedings, pointed out that the object for which they were assembled together was one of considerable importance; it concerned not only the interests of agriculturists, but equally those of the community at large, because they must all agree that when a disease prevailed amongst their cattle and sheep it must enhance the price of meat. Therefore there was not a single man or woman in the country who was not in a large degree interested in all events preventing, if possible, a recurrence of this as well as other diseases, which he was sorry to say were now raging throughout the country. They had met there to consider more particularly the lamb disease, but he could not help saying just a word or two with reference to two other diseases which were now rapidly spreading. It was a serious fact that the foot-and-mouth disease at this moment existed in no less than 73 British counties, and he had been informed officially that at the present time there were 25,000 cattle suffering from it. This was a very serious matter, and required that the most careful attention should be paid to it. They all knew that pleuro-pneumonia and the foot-and-mouth disease had been imported into this country by foreign cattle, and he strongly felt, as he always had done, that Government had not been sufficiently alive to the injuries and dangers that were inflicted upon agriculturists by these two diseases. Furthermore, he was of opinion that every head of cattle imported into this country should be slaughtered at the port of entry, and he looked upon the twelve hours' system of inspection to be a humbug, a delusion, and affording no security whatever. Lamb disease was not, however, an imported disease. It had existed in the districts throughout Devon and Cornwall, more or less, for many years past, and he thought they had very properly met together to give it their consideration, and he sincerely trusted that they would arrive at some practical result. They should consider the cause of the disease, and the preventive measures which were most likely to avoid a recurrence of it, and seek to obtain information as to treatment. Years ago some Cornish agriculturists subscribed together and gave £30 for the best essay on lamb disease. The prize was taken by Dr. Crisp, whose opinion was that it arose from parasites in the lungs, and recommended good and generous diet as a preventive. Mr. Crisp further thought the turning of lambs into clover or coarse grass when dew was upon it was very likely to bring about the complaint, and that the disease was in some measure owing to the land being overstocked with sheep, to the exclusion of other kinds of cattle.

Mr. TUCKER (Molenick, St. Germans) read a short paper on the disease in which he said that it was not infectious, or indigenous to the land. There was no doubt that the disease had prevailed in the country from time immemorial, appearing in the same form, and as fatal as at present. With every August came the disease. Greater loss has been sustained in Cornwall from it than from any other disease combined to which sheep were liable. The highest authorities were agreed that it was a parasitic disease. Through these parasites the lungs were prevented from oxidising the blood; hence great debility, and always diarrhoea before death, this being the effect of debility. He knew of no means of removing these parasites with safety to the life of the animal. But he believed much could be done by preventive means. One great mystery of the disease was, that while on one farm it was known, on a farm with the same soil it was not known. This was proof that it had its origin in some local cause, and he believed that lamb were annually liable to it when fed on certain pastures, and that

a single field or a small portion of land often diseased a large flock. Experience pointed to old and broken land, especially where the pasture was coarse from want of drainage. Here they wanted science to distinguish between healthy and unhealthy pastures, and if such could be done it would be a great boon to the farmers of this country. If they took their lambs entirely off pasture land, he thought they would hear very little of this disease.

Mr. BICKFORD (Veterinary Surgeon, Totnes) followed with a short paper also, agreeing that prevention of the disease should be their first object. But he must confess that the measures just recommended would not, at all times, avert these calamities. Each season seemed to give birth to its special disease among their domesticated animals; but while foot-and-mouth disease, pneumonia, and cattle plague were eminently infectious, the disease among lambs was neither one nor the other, but a parasitic disease. The effect of the disease was a direct loss of blood, reduction of vital action, and an insufficient conversion of food into blood for the repairs of the body. It was certain that the disease would not be so widespread as it is were it not for the great antipathy farmers had to administer medicine to their flocks. As a rule, sheep were most unsatisfactory patients, due in a great measure to the character of the disease which generally prevailed amongst them, and the resistance they usually offered to its effects; but the prevailing disease among lambs was a specific disease, which could be rendered perfectly harmless if treated at the outset by a specific remedy. This he impressed strongly upon them. Parasites were undoubtedly taken in with food. If veterinary surgeons received more encouragement from agriculturists there would not be so much loss of life among our domesticated animals as at present. There was a remedy to this disease.

Mr. PAGE was disappointed with the papers read because they gave them no specific remedy. His remedy would be to leave the disease to Mother Nature. They must invigorate the system as far as possible, and let the lambs run along with the ewes till August, after weaning. If they did this, he was certain the lambs would be well.

Mr. PRATT thought the disease arose from the absence in the soil of the necessary constituents to keep up a healthy system and healthy constitution in the lamb. Their object should be to supply the deficiency. It was too much the rule to have a disproportionate amount of sheep compared with the horned cattle. They should also plough, use lime freely, and largely admixture grasses, and import a little new blood from the mountains. He knew Dartmoor sheep would not pay, but they should be obtained in order to renew the blood. Field rape would be a most valuable auxiliary in the beginning of August. In allowing sheep to eat a crop after sheep, he believed farmers were doing themselves a great mischief. He proposed a resolution embodying these views.

Mr. DEWDNEY could not agree with Mr. Tucker that new pasture was the best thing for sheep. He had not lost a lamb in the old pasture.

Mr. SOWDEN had always found his flocks thrive better on new pasture. He frequently changed his sheep. It they had rich lambs they should be careful not to allow them to remain in low ground in foggy weather. While with ewes they should give lambs artificial food, and when they saw anything the matter with them they should apply a remedy at once.

Mr. COULTON (Buckfastleigh) thought the disease very insidious. The dry season had something to do with it. He believed the lambs were not born in their usual healthy state. He had taken a great deal of trouble, and had gone to considerable expense, to fathom the disease, but could not. It

affected the consumer, and very much concerned the pocket of the farmer. It was a sort of consumptive disorder in the system. To find out the cause of the disease they must look to the breeding animal.

The CHAIRMAN pointed out that Mr. Bickford had said he knew of a remedy, and asked that gentleman if he could, consistently with his professional duties, tell them of the remedy, but this Mr. Bickford respectfully declined to do.

Mr. SNELL, who said he had a farm in East Cornwall, accounted one of the worst in the county, and had never lost a lamb from this disease, changed diet frequently, sometimes giving the lambs a day in an arish field, a day in clover, and a day in pasture.

Mr. NEHEMIAH STEPHENS believed he had rid the last mentioned farm, which he had before inhabited, of this disease, having sold all the fat lambs off the farm, and thus getting rid of the seeds of the disease. Every gentleman had failed to convince him that he knew either one or the other remedy. If Mr. Bickford had found out a specific remedy, he had no occasion to study any other branch of the veterinary profession.

If he did know a remedy he was cleverer than the profession generally. He had changed lambs as often as most other men. He had tended them so that no other man could tend them better. Had given them every kind of food, and had introduced the different kinds of grass—had tried mustard, rape, white turnips, everything he thought would be beneficial to the lambs—and yet he had failed either to prevent or cure. By generous diet he had waded them through the disease, but they had so depreciated in value that it was just as well as a pecuniary point of view they had died. As regarded overstocking, he would rather overstock with bullocks than sheep. He had imported fresh breeds of sheep, but to no good purpose.

Mr. ROSEVARE advocated constant change.

Mr. THOMAS, veterinary surgeon, had found chlorine gas the best remedy.

This, Mr. STEPHENS said, he had tried, but not successfully; whereupon Mr. Thomas said it ought to be applied by surgeons.

The CHAIRMAN here suggested that the matter should stand adjourned until the next meeting of the Devon Chamber of Agriculture, which was agreed upon.

ECHOES FROM THE AUTUMN MEETINGS.

BEDFORDSHIRE.

At Bedford, Mr. CROUCH, the Chairman, said Societies of this kind had done a very great deal of good during the present century, and even within the last fifty years agriculture had advanced with gigantic strides, whether with regard to the cultivation of the soil or the breeding and rearing of fat stock. To the success of agriculture was mainly owing the great advancement of this country, for without agriculture no commercial pursuits would flourish. Some 25 years ago it was said in the House of Commons by a few men of extreme views—Mr. Hume, he thought, among the rest—that they should not be sorry to live to see the day when not a blade of grass would be grown in the country, for we could get our supplies imported, and the country could be turned into better account than by adhering to agricultural pursuits. That idea has long been exploded. If a bad harvest took place here its effect extended to Europe and America, and the success of our harvest was watched with very great interest, not only at home, but in every corner of every country abroad. The production of meat, however, was quite as important, if not more important, than the growth of corn. At present the price of meat was extravagant, as far as the consumer was concerned, but the demand for it was very great, and so long as the commercial community and our great manufacturing interests flourished that demand would continue, and meat would hold at comparatively high prices. We were suffering now from cattle diseases which were brought here from abroad, but it was to be hoped that in the course of time some way would be established by which these foreign animals might be slaughtered on their arrival, and go into consumption without contaminating our herds; but it was a difficult question. His own opinion was that the restrictions in reference to the foot-and-mouth disease were carried to too great an extent. The harvest of this year was not a very successful one, but in this neighbourhood we should have an average crop, and the farmers hoped they would obtain remunerative prices. The success of the agriculture of this country was a question quite as important to the consumers as it was to the producers, and he thought the latter was rather hardly used when they were spoken of as a selfish set of men, although it must be confessed they grumbled a little occasionally. He had been a guardian for 12 or 14 years, and when he accepted that appointment he did so with the intention of fulfilling its duties as well as he could. It was a very difficult thing to administer the Poor Law, and he was afraid that we were now drifting again into pauperism. He did not think that ought to be the case. Looking at the prosperity of the country, he thought the out-door relief, especially of the able-bodied and those suffering from illness, should be reduced instead of being increased. From the reports of the various Unions of England during the year, it appeared that there was an increase instead of a decrease, and he felt that ought not to be. Although our feelings might lead us to give relief in

doubtful cases, still he thought we must be more strict in carrying out the rules and regulations of the Poor Law Board. When a man once received relief as a pauper he soon lost that sense of self-reliance which should be the first feeling of our labouring population. These were matters which required much thought and consideration.

Mr. W. A. STIMSON referred to the cattle plague. Although it did not become him to speak in the presence of farmers as to the way in which the disease is communicated, still he had seen a short time ago a very forcible illustration of the way in which the disease was propagated in this country. When at Rotterdam lately he had seen a quantity of store cattle collected from all parts of the Netherlands for shipment to England, and after having been exposed in the Rotterdam market with stock from all parts of the country, they were sent over in boats, ill-provided with accommodation, packed like sardines in a box, and provided with little food and no fresh water. If that system was not calculated to bring out a weak spot in a bullock, he did not know what was. He had watched those cattle coming over, and, on reaching Harwich, they remained a certain time in quarantine, after which they were sent to London and thence despatched to all parts of England, so that, if infection was imported, it was at once spread broadcast. It seemed to him that, if we wanted to give the bullocks in England the foot-and-mouth disease, this was a very effectual means of doing so. He thought that, if the farmers of England were only agreed that foreign stock should be brought over in boats which supplied proper accommodation, and that they should remain an adequate time in quarantine, they would be able to force these measures upon Government. Unless they did so, they would have no help against periodical visitations of contagious diseases. A word about the Poor-law. Before they condemned a man for going to the parish for his 2s. 6d. or 3s. a week, when he had nothing to feed his six or seven children at home, they must first of all say to him, "There is your work; go and do it." He was not going into the vexed question of large and small farms, but he knew that there were many labourers over the country, hard-working men, who would work if they could find work to do, and it was a false principle to assert that they had lost their "independence" if they fell back on the parish for relief in such an emergency.

Mr. CHARLES HOWARD alluded to the foot-and-mouth disease. Of course there were differences of opinion as to where it came from, but there could hardly be a doubt that we derive it from our Continental neighbours, and he thought Government was certainly behind hand. Although he knew they had various contending interests in this matter, yet he thought it was due to the breeders and producers of stock in this country that they should be protected from this disease. The present price of meat was to some extent due to the disease which was now decimating our herds and flocks through the introduction of foreign animals, and we should

never be free from the disease so long as these animals were spread throughout the length and breadth of the land. It would be no harm if the fat animals were killed at the port of embarkation; the meat would be much better, and the importers would find it a more profitable course. As for store stock, an extended quarantine would be advantageous to the animals themselves, as was shown from what Mr. Stimson had said, for if while in quarantine they were supplied with proper food and water they would be in a better state than they are now when landed. When farmers talked of these matters, however, they were told that they wanted to return at once to protection. The fact was that it mattered very little to the farmers, for they would have protection in the increased price of the animals left, but it was a question for the consuming classes in the country to take up. Mr. Stimson had remarked that it rested with the farmers of this country to get this question settled, by uniting as one man, but they had never done that yet, and he thought Mr. Stimson was hardly right in his assumption that the Legislature would at once settle the question in compliance with their demands, for there was a stronger interest than the agricultural interest, who were not so noisy as some of those living in large towns. With regard to the remarks in reference to the Poor Law, he thought that question had been somewhat misunderstood; at least his own experience led him to say that it was not the able-bodied men who were relieved, but those men who were overtaken by sickness, and who, he was sorry to say, had not provided themselves with a club; and he thought the Poor Law very properly told those men that they could not expect the same amount of relief given to them as to the man who provided for himself in a club for the case of illness.

CORNWALL.

At Truro, Mr. T. OLVER said they had had very excellent ploughing in the field that day, both with the single and turn-wrest plough. The single plough seemed to be growing into disrepute in that neighbourhood, and many were in favour of the double and the turnwrest ploughs, because with the single plough there was a difficulty when they came to use the reaping machines at harvest. He had long been of opinion that a single plough properly handled was superior to the double plough, but they required skillful management. Some years ago he was requested to act as umpire at a ploughing match held at St. Austell, and he was then bold enough to tell the farmers of that district, who were supposed to be far advanced, that there was not a man in the field who knew how to handle a plough to open a cut and finish it; and he observed that another year he would send a man to show them. He did so, and it resulted in great advantage to the district. In ploughing a piece of ground the most important thing was to get a good seed-bed. It was well known to farmers that the top of the cut, where they first commenced, was generally deeply manured, and that part was prepared to produce a heavier crop than any other part; but, unless the furrows were nicely drawn, instead of producing the heaviest crop, they would find it an indifferent one. Instead of there being a wide space on the top of the cut where seed might be deposited, the two furrows were put close together, and the seed fell off. Then in finishing a cut, they often got large furrows, which interfered with the reaping machine, and they got a large quantity of seed deposited, and the consequence was they got little corn. The plan he had adopted was simply to turn the comb, then sow a quantity of light manure in the furrow, grub it up with the grubber, and they would then find that there would not be the slightest inconvenience passing across these furrows with the reaping machine. He was persuaded that the single plough would lay these furrows much closer than the double plough, because when the furrows were running in opposite directions they could never be laid so closely together as when they followed each other. There had been some indifferent ploughing that day, but he had seen quite as had meetings of much older societies. There was a two-furrow plough on the field, but the judges did not consider its work deserving of a first prize. As regarded these ploughs generally, he had no doubt they were valuable in certain localities, but, as a rule, he did not think they would be found useful in Cornwall. With such horses as Cornish farmers were in the habit of using, it was enough for them to pull a one-furrow plough; and he was persuaded that very little advantage or saving to Cornwall farming would arise from using the two-furrow plough.

Where the land was light, these ploughs might be used to great advantage. Much was said at present respecting the operation of ploughing. There could be no doubt that it was a most important operation, because when land was well ploughed the labour afterwards was very much lessened. Some advocated deep ploughing, amongst others Mr. Mechi, who seemed to be the oracle of agriculture. Few practical farmers, however, followed his advice. At the same time he occasionally threw out some very useful hints; but the misfortune was that they did not apply to all districts alike. A practice suitable at one place would not be suitable at another. He always read Mr. Mechi's letters with interest, but he had no doubt they all considered him the mouthpiece of the Manchester party, and he had no doubt in the world that he was very well paid by that party, and a capital advocate he was for cheap food. They differed sometimes as to how cheap food was to be produced. Mr. Mechi said plough deep; plough by all means by steam. As a practical agriculturist, and, having some experience in Cornwall, he did not hesitate to say that he had invariably found shallow ploughing the most advantageous. Where the subsoil was rich and retentive, and where it was necessary, as Mr. Mechi said, that the soil should be aerated, no doubt, in many cases, deep ploughing would be found beneficial; but where the soil was shallow and the subsoil porous they would find it much more profitable, as a rule, to plough shallow. When they ploughed shallow it was desirable to plough well, and hence the advantage of having such societies as that. Probably good ploughing was more important in Cornwall than in most other parts of England. Cultivating had become general in many places, and, no doubt, where the climate was dry and the land was of a clayey nature, the cultivator might be used with advantage; but where the climate was so humid, and the soil so calculated to produce grass as in Cornwall, their crops would generally be overcome with grass and weeds. Hence, if Mr. Mechi delivered a lecture on agriculture in Northumberland or Norfolk, and then come to Cornwall to deliver the same lecture, the farmers would find him giving very erroneous advice, and would consequently take little notice of his remarks. Another question to which he would refer was, when land should be ploughed. He was ashamed to think that in this age of progress there were many leases throughout the length and breadth of England that dictated to the occupier when and how he should plough his land. It was well known to every practical farmer that seasons had such an influence on their crops that in order to raise the greatest amount of produce, which it was their duty to do, they had frequently to break up the lighter soils. Notwithstanding this he was sorry to say that in eight cases out of ten leases were drawn stating that land should not be broken up unless it had been allowed to be at rest and in grass a certain number of years. As a great deal had lately been said about leases, he hoped these absurd clauses would be removed, because they were a disgrace to the age in which we lived. He was pleased to see a few months ago that an action had been brought by a landlord against a tenant for breaking up land contrary to the clauses in the lease, and that the jury found a verdict for the defendant, inasmuch as in consequence of the dry summers this land was entirely valueless to the tenant in its then state, and he was therefore justified in breaking it up. Then there was the question what land should be broken up. He would fall back again on Mr. Mechi. They must remember that Mr. Mechi was the mouth-piece of the manufacturing and mercantile interest. Mr. Mechi said his object was to produce, if possible, cheap food, in order that the manufacturers might grow rich out of it. Mr. Mechi said a great deal of the land now laid down in permanent pasture should be ploughed. He (Mr. Olver) had no doubt that there was a great deal of land laid down that should be ploughed up, and that would return more than it was doing at present; but then Mr. Mechi spoke indiscriminately, and what he wanted them to do was to plough up their grass lands. They, as practical men, knew that it was possible to expend £10 in the cultivation of an acre of land which would not produce more than £5. Whatever business a man followed he must adopt a system that would be profitable to himself. Mr. Mechi thought food had become dear, and it certainly was dearer than it was likely to continue to be; but he (Mr. Olver) thought it would be a great mistake to break up their old grass lands that had been laid down for many years.

Nature required a long time to put a piece of grass land into good order, and when made they would find the mole and the earth worm at work to keep it in a perfect state, and he would therefore advise people generally to hesitate before they broke up such land. There was a great rage now for reclaiming waste lands; but he would advise agriculturists, as a rule, to be very cautious as to how they meddled with that. He would rather cultivate good land than poor land, and he was convinced that there were thousands of acres in this county that would not pay for cultivation. They might get two or three pretty good crops from certain lands, but afterwards they would dwindle away and the land would become profitless. He would let the merchants and manufacturers cultivate such land if they wished, men whom he would be glad to see more disposed to pay their fair share of the rates of the country. He advised young farmers never to lay out their money in the poor lands of this country, but rather to go to America, where they would probably get a comfortable home for themselves.

DEVONSHIRE.

At Colyton, Captain DICK, the chairman quite agreed with those who thought that the present state of things concerning the labourer could not continue any longer. It was a very intolerable state of things, and the sooner a just and liberal solution of the difficulty was come to, the better would it be for all parties. He heartily hoped and believed that he should see the day when, by giving the labourer more wages, the farmer and landlord would get a larger revenue from the estate.

At Witheridge, Lord PORTSMOUTH for a long time had thought Financial Boards were right and just, and ultimately they would be sure to come. Taxation without representation was contrary to every principle of good Government. He felt very strongly that the ratepayers ought to have a voice in the appointment of those who administered funds raised from the rates. Another point on which he had thought a great deal, was the subject of Local Taxation. He hoped and trusted the Government would take up the question in earnest. It was a very serious question, but he would not go to the length of some, because he thought it would be approached from a fair and impartial point of view. The system of taxation should be based on justice: in fact, the burden should be spread fairly and justly over the whole population as far as possible. There were some things which it would not be practicable to throw on the Consolidated Fund—in which such a course would not be attended with economy. He, however, thought it would increase the efficiency of the police if the ratepayers of the county—who had to pay three-fourths of the cost whilst the Government only paid one-fourth—had some control over them. But now the Government had the entire control, and this made it a matter of taxation without representation, which was contrary to every principle of good government. It would increase the efficiency of the police very much if the force, as in Ireland, was an imperial instead of a county force. What could be more absurd than the county magistrates in Quarter Sessions discussing about the police, and having no power over them? The Chief-constable was not amenable to them, for he held office subject only to the approval of the Home Office. This state of things created a wrong and an injustice. Then as to a malefactor, if a Devonshire policeman had a warrant against a man who chose to go into Somersetshire—or into some borough—that warrant had to be backed by a magistrates of that jurisdiction, causing delay. He thought the ratepayers of the county had a claim to be relieved from taxation over which they had no control. And besides this, the present county police system was cumbersome and unsuited to the days of railways and telegraphs. Coming to another point of local taxation, it was unfair to throw the expense of militia stores on the county rates, because the militia was a part of the defence of the country, and they might just as well ask localities to pay for barracks. Just now in the recess was the time when ratepayers should make their grievances known. If any one looked at the taxation returns they would find there was a considerable surplus. Seeing this, he thought that a tax most oppressive and opposed to the very principle of free trade—the tax on horses and servants—might be abolished. Particularly was it hard that a shopkeeper in rural towns, who was obliged to keep a horse and man to deliver his goods, should

be called on to pay a tax for both. As to throwing the cost of the poor on the general taxation of the country, he did not think that would be advisable, because they wanted the locality to check abuses which would creep in unless the people of the district had an immediate interest in putting them down. No doubt the Poor-law system required amelioration and improvement—which every statute in working out required—but still it had done a great deal of good. He felt that this question of local taxation concerned all and they must in considering it study the good of the whole community and not merely one branch of it, because if they did not they would in remedying one evil create others. He thought there ought to be an end to exemptions. Touching rating, if a man turned game dealer, let his game, and get a profit from it, that man ought to pay a tax for it. If they came to an estate where there was a heavy head of game, and the rent deteriorated, it was not fair that that land should escape taxation. The man would be deriving benefit from the sale of game which eat up the produce of the farmer, and therefore decreased his chance of paying his rent, and decreased the rateable value of the land. Woods and mines also should be subject to taxation; in fact, exemptions of all kinds should be got rid of. He hoped and trusted this great question would be thoroughly dealt with by Parliament, and that they would hold the balance evenly between both interests. It was no use taking the burden off one side and throwing it on the other, because if the agricultural interest suffered the trading community suffered, and *vice versa*. Such meetings as these were the ones where topics should be discussed by the farmers and opinions expressed by the farmers, for only in this way could they make their wants known.

At Broadclist, Sir T. DYKE ACLAND, M.P., the chairman, said, in proposing Prosperity to the Association, its object was to improve the skill and the quality of their workmen rather than to provide anything like a substitute for wages. Many remarks had been made of societies of a certain kind that they brought men up once in about twenty or thirty years to be given a sovereign or two, or a coat or waistcoat, as a reward for faithful service. That was not what this association professed to do. They were not indifferent to the moral qualities of their workmen, but after long observation of the habits of their own people in Broadclist—he did not speak of other places—they were quite satisfied that their workmen needed to have their skill and intelligence developed. If they were to succeed in doing any good in that way they must all work together. It could not be effected by the effort of one master, one landowner, or any individual; it must be the joint work of the whole community. Their happiness was intimately bound up in the happiness of those they employed. There was a great deal of thought being excited in England just now with reference to these questions. Political questions had, no doubt, recently caused a great deal of earnest thought, and led to rapid action. But it seemed as if they were approaching an era when social questions would be uppermost. Landowners and occupiers could not shut their eyes to the increasing power of the working classes of the country, to the increasing tendency of inquiry. As he had said, social questions were growing in their influence among the working classes, and, not only that, the Press was taking up the land question very seriously. Some of those, too, connected with the land had given a great deal of prominence to the land question, and he had warned some of his landed friends that they did not know exactly what would be the effect of the discussions they had raised, that they might lead to consequences that they did not quite calculate upon. It appeared to be rather a growing opinion that in the old time land was held much more in common, even before the feudal times, than people seemed to think, that in other countries that sort of community of interest in the land was only, so to speak, the remains of a system that was, perhaps, universally prevalent in times of which they had no very accurate historical record. Those ideas were laying hold upon the public mind, they were being very freely discussed, unreasoning arguments were sometimes used with reference to them that he thought might possibly tend to mislead unthinking persons very much; but they all pointed to this, to the day of an absoluteocracy, what they called in conversation independence, a sort of idea that a man might do what he would with his own. That might be met by a corresponding saying that property had its duties as well as its rights, but he was quite sure that property had its burdens and obligations as well. If ideas

had any truth in them, by being thoroughly discussed nothing but good could result. But if a caricature of ideas got hold of the popular mind, they knew that it very frequently moved the masses much more than things in which they had a direct self-interest. When the masses got hold of exaggerated ideas, the masses were very apt to crush individuals, as they saw in trades unions, and other combinations, and they had seen fearful results brought about abroad on the same principle. What was, then, their duty—labourers, occupiers, and landowners—in these times? To look the facts clearly in the face, not to be carried away by exaggeration, not to think too much of what might be possibly fanciful. There were two entirely different questions to be considered, although people were very apt to talk as if they were one, which, in his opinion, they were not. The first question was, what system would produce the greatest amount of food for the people? That was an economic question, and must be looked at just like questions of banking, insurance, or any other matter of business. The other question was, what was most for the happiness of the greatest number of the people of the nation? That was a social question, and the two were not the same. He for one could not but feel that in this country the enormous accumulation of wealth in a few hands—he did not speak only of land, but of all property, whether landed or otherwise—side by side with such terrible misery as they saw around them was a very alarming feature of the times. Then came the question of how far that could be dealt with by legislation. He feared some things were too strong for the law, too strong certainly for the power of them as imperfect legislators. It seemed to him, with reference to this land question, as if, more or less, they were on a sort of inclined plane on which they could not very well stop themselves. Land had the great advantage of being a secure property in one sense, and the enormous increase of pecuniary wealth in the country had an inevitable tendency to accumulate land into masses, and of course to raise the value of land. It followed also, of course, that the income or interest derivable from land was very much less in proportion to the increased amount sunk in it. He did not say rents were falling, he knew that not to be so, and he was very much alarmed sometimes to see the extreme competition there was for farms. He did not say that the happiness of mankind was promoted by easy-going ways in any branch of life, but he thought the extreme competition did not arise on account of the capabilities of the land to carry an increased rent. Be that as it might, he thought all those things indicated a considerable necessity for caution on the part of those who had to deal with them.

DORSETSHIRE.

At Bridport, Mr. J. FLOYER, M.P., said Mr. Hastings at the Leeds Congress advocated a plan which I hope I may never live to see carried into operation—viz., that all the relief to the poor shall be given in the workhouse. I believe that would be a fatal thing. If this suggestion had come from Mr. Hastings only, perhaps it would not be necessary that I should mention it to you to-day; but other persons, able men in the House of Commons, have proposed that the same alteration should be effected. And remember this is no party question. I recollect that one member of great ability introduced last session into the House a motion on this very subject; and, although not advocating an absolute and entire withdrawal of the system of outdoor relief, yet he went a long way in that direction. Now, the labourers employed in agriculture are from the necessity of the case the most poor of the operatives of the country, for they are not skilled artisans, and they never can demand the wages of that class of workmen. They are not likely to ever receive any such remuneration. Marrying early, and bringing up large families, they cannot earn a sufficient amount from their labour to enable them to lay by for times of sickness and distress. I have always held that it would be most cruel, and what the agriculturists of Dorsetshire would never approve, to adopt any plan by which those labourers, who, with their families, had worked for them all their lives, would be driven into the workhouse, and cut off from those associations which are just as dear to the poor man as they are to the richest person in this kingdom.

Mr. JOHN POPE said although the season had not been, perhaps, equal in some respects to that of last year, yet he felt bound to say that on the whole they were at present in a better position than they were a twelvemonth ago. If they

looked around them they would find that they had abundant cause for thankfulness. Although there had been a deficiency in the wheat crop, yet the quantity of straw had hardly ever of late been equalled; there was an average crop of barley; oats, peas, and beans were equally good; and although the season had been an anxious one to agriculturists, yet on the whole it had been a beautiful one.

At Shaftesbury, Mr. Gerard STURT, M.P., said, in coming there that day he, through his gaze out of the right-hand side of his brougham, and saw a shepherd, a sheep-dog, a flock of sheep, and a pen. It was rather extraordinary, but this pen was just the size of the lobby of the House of Commons. The shepherd said something to the dog—"Go round them," he supposed. And off he went with his tail up in the air, and away went all the sheep into the fold. Now, he said to himself, why there's Mr. Gladstone, Mr. Glyn, and the Liberal party. Often had he heard Mr. Gladstone say to Mr. Glyn, "Go round them." "Go round them," says Mr. Gladstone; "Bow-wow" says Mr. Glyn; and then they saw a sight that, perhaps, they never saw before—the Lushes, the Seymours, the Groves, and the Seymours again tumbling head over heels into the lobby, just as he told them. Well might he truly say no shepherd in Dorsetshire or Wiltshire, or any other shire, ever had a better or more faithful sheep dog than Mr. Gladstone possessed in Mr. Glyn, the member for Shaftesbury. They must allow him to tell them, as he had often told them at those meetings, how difficult it was to make speeches at agricultural dinners where politics were not allowed. He always noticed that when members of parliament attempted to adhere to this rule they invariably began to flounder. He had read some speeches delivered by his friends the other day, and he confessed he could not help laughing. What said one of them, addressing the farmers, "You don't know how to pay your labourers, you only give them 12s. You ought to give them 14s." "No," said another, "you ought to pay them by tut work." "Not so," said a third, "you ought to pay them by time." "No," said a fourth, "not so, but pay them according to the profits of the farm on which they are employed." If the labourers of Dorset and Wilts were paid upon that system, taking the last two or three years, they would be very badly off. But there was an exception to those speeches, and that was the speech delivered by one whom he believed to be the coming man of the day—Lord Derby. He talked plain common sense, and went straight at all the topics of the day. He touched upon the Game-laws, and he (Mr. Sturt) agreed with what he said in regard to them. It was a very simple matter—they ought to have every tenant on their estates on their side. Preserve hares and rabbits, but make their tenants their gamekeepers. Lord Derby also touched upon other matters which would be a most serious consideration did they not know the common sense of the country. It was a fearful thing to see all the institutions of the country attacked right and left, as they were in a great many parts of London and the larger towns. Lord Derby said that it was stated the agriculturists were behind the times. Now he would put it to them—had not agriculture improved 50 per cent. during the last 50 years? Let anyone only walk round within a mile of the town, and he would see the features of the country almost altered by the energy and industry of the agriculturists. Then, again, it was said no land was to be bought. Well, he was not very old, but he was out of his teens, and he had arrived at a certain age; but how many estates did he not recollect being sold—Milton Abbey, Canford, Piddledown? There always had been land to be obtained, and, what was more, if there was any gentleman present in want of it, and would give him the money, he would be very happy to find him a very nice estate in Dorset himself. One more point with reference to agriculture. He recollect attending a few years ago at one of these meetings, and making remarks about foot-and-mouth disease. He was pooh-poohed at the time by Mr. Glyn, but he maintained that he was right then, and that he was right now. Mr. Forster—and he must admit that Mr. Forster was a really able and great member when he presided over that department—said that if anyone would let him know of a case of the disease he would stamp it out. He (Mr. Sturt) said at the time that was impossible, for until they slaughtered every head of foreign cattle which arrived in the ports of the country, so long would they have that frightful scourge. It was a serious matter, and one that he could speak conscientiously upon, for he had suffered from it, and when

he had asked his agent what it would cost him, he was told £3 per head. That was a very disagreeable thing for him, but still more disagreeable would it be for the tenant-farmer, who had to pay his rent twice a year.

ESSEX.

At Dunmow, Sir BRYDGES HENNIKER said, at the present moment we are labouring under one great difficulty, and that is the Poor Law as it is at present administered. I contend that at present the Poor Law—I allude more particularly to the outdoor relief—is most faulty and most demoralising. We will take for one moment, if you please, the list of prizes which this society offers, because in that we see laid down what we think ought to be a model labourer. We offer, to begin with, prizes for education at school; then we take him at the age, say, of 10, when he ought certainly at the latest to be learning the work at which he has to earn his living—we take him at that age to farm work, for which we offer prizes, and we say, further, that he ought at once to belong to the Dunmow Friendly Society in order to lay by what he can save after he has bought the things necessary for housekeeping—for he is to marry early and have a large family, because we offer a prize for that—if they are brought up with little or no parochial relief he must necessarily keep away from the beer-house; he must deny himself various indulgences of that sort, and if he has brought up his family well and has kept up his subscriptions to the Dunmow Friendly Society, at the age of 65 he will receive something like 4s. a week. Now I will take on the other side, not a model labourer but one, unfortunately, who comes a great deal under our notice. He, up to the present time, has not been to school. He marries very early too—marries somebody equally frivolous and improvident. In all probability they have not even got a bed to lie on, or if they have, they have not paid for it. They have an immense number of children of course, and of course, they say, the ratepayers will keep them. The moment the man gets out of work he goes to the board without the slightest feeling of degradation or shame. He looks upon it as a right to be maintained by the ratepayers; and when these men get aged and able to work no longer, they do as a body look upon it so completely as a right to be kept out of the poor-rates that even if they have children in such a position that they might maintain them they don't think they ought to do it. I contend that this is most improper. I contend that the Poor Law has been taken away from the course which it was meant to follow. The first Poor-law—the statute of Queen Elizabeth—was formed upon the good old principle that the relief shall be given for work done—that unless a man work neither shall he eat. We went away from that. Step by step that principle was lost sight of, and in consequence of the gross administration of the law pauperism rose to such a height as to threaten to overwhelm this country. I daresay there are some here can remember, what I, at any rate have been told, that the poor-rates once amounted to something like 18s. in the pound, this caused the present Poor-law to be instituted, and that was formed upon a good principle too, it was formed upon the principle of the workhouse test. That principle, again, has been lost sight of, and we are again threatened with this overwhelming wave of pauperism. The workhouse test, I can quite understand, has been thought very often to be a cruel one. But I contend there would have been merciful justice in keeping to that principle, and if we had kept to it more strictly we should not have the amount of pauperism we have now. Step by step we have been going out of the right direction, and step by step we must go back again. We cannot go suddenly back, and in attempting to go back there must be cases of individual hardship, but I do say in the interests of a society like this, the interests of those who would wish to see the people improved, that it is perfectly useless to preach providence while the labouring population are brought up with their present ideas about relief, and while the Poor-law is administered in so lax a way as it is throughout the country.

At Freshwell, Lord EUSTACE CECIL, the chairman, said there are people who have the idea that if the whole land of England were made into national property, and if it were divided, say, into 10-acre lots, the position of the labourer would be much better than it is at present. Now, for my part, I believe exactly the reverse. Without capital, without

the knowledge of how to cultivate his land, with a heavy mortgage, in all probability, upon his few acres, I believe that the last state of the labourer would be worse than the first. I do not see that great agriculturist, if I may call him so, my friend Mr. Mechi here this evening, but perhaps if he were, with his love for cultivated commons, he would dispute my point. But Mr. Mechi—and I wish to speak of him with every respect—is a most successful agriculturist in one sense. His success in agriculture appears to me to bear the resemblance of a type of the christian man, that his right hand does not know what his left hand is doing, because it has always struck me that while Mr. Mechi's right hand is adding up his farming accounts, his left hand is creeping insensibly to his till in Regent-street. I know there are others, also, who would perhaps dispute my position with regard to the labourer, and would direct my attention abroad, and say how far superior, in point of prosperity, were the labouring classes on the Continent. But although, as a universal proposition, I should entirely deny this, I will, for the sake of argument, admit that in a certain few localities it may be the case. But there is one thing—I might say two things—which our philosophers and philanthropists, who are not always very practical on these matters, entirely forget, and that is that abroad there is a very great difference of climate, and there is a much greater—and I am sorry to say it—a much greater providence among the peasantry. Where, for instance, can you grow vines, and olives, and tobacco, and fruit, side by side with corn and roots? In what favoured spot in England can it be done with success? And yet I have myself seen this done in the favoured localities of the south of France, Switzerland, and many other parts of the continent. Again, as to providence. No peasant, no person in the position of a labourer at all should ever think of marrying before he could afford the luxury of a wife; and yet how common is it to find a young man rushing into matrimony almost recklessly, how common is it to find a young man suddenly cut down by disease or even by death, and leaving his wife and family a burden to the rates! Well, I should be very glad indeed to see a little more providence on that score in the labourer, because when I come to compare his condition with his fellow-labourer on the continent, I must say that I think it is equal if not superior. And when we read such expressions as we have read lately, namely, that our labourers are nothing better than serfs, I say I perfectly understand the quarter from whence they come, and also the object for which those expressions are used. I am quite certain of this, that in the matter of wage, for instance, that of our labourers will very well compare with that earned on the continent, and I believe that on the whole they earn higher wages than anybody in Europe. I am not now speaking of America and the colonies, because it is well-known that there, although the labourers earn very much higher wages, it is under very exceptional circumstances, and they have to pay very much higher for the comforts, if not for the necessities of life. As to the question of wage I would say one thing more. I am perfectly well aware that in the north a Yorkshire man will earn say 16s. a-week, and that in the south wages are very much less, say 11s. or 12s. a-week; but I think that when we go into the matter we shall find out that if the northerner gets 16s. a-week, he does 16s. worth of work; and that if the southerner, unfortunately, gets less wages, it is because less work has been done; and my belief is that the rate of wages, when fairly compared, is very much the same. But in saying this I do not for a moment deny that we have not arrived as yet at perfection; that there is much to be done, and will be much to be done; and that there are some districts undoubtedly far behind others. And I must attach importance here to the fact that great improvement has been made, especially in the matter of cottage renovation. Throughout the length and breadth of the land, go where you will, you will see this work is progressing, slowly but surely. Legislation may do something for us, but legislation will not do all. I sincerely hope that in the next session of Parliament something may be done, if not by the ministry, at least by my colleague, in the matter of the licensing laws, and I hope something may be done in regard to my pet scheme—if I may be so vain to call it so—the adulteration of beer. I hope that something may be done in the improvement of cottages for the suburban population. But after all's said and done, you cannot make a man either sober or provident by act of Parliament.

Colonel BRISE, M.P., said: A certain class of political economists tell us that if we could abolish out-relief it would be hard to the few but merciful to the many; that one family might suffer severely, but that three families would be kept off the rates; that one should suffer that three may live. I say God help the poor if that is to be the state of things in this country at the present time. And I believe that the evil that would arise would be greater than that you want to get rid of. I believe that the evil would be starvation to many, and would result in an increase of indiscriminate charity, which is a greater evil than the present one you are trying to provide a remedy for. I should imagine that those who look far into the history of our country cannot but see that the present system of our poor laws, demoralising though they may be, and requiring amendment in particular points, may yet have in some way saved us from a great social revolution, such as have overtaken other countries of Europe. I am not going to apply this to the case of our own district. If you want to increase the wages you can do so on the same principle as our political economists recommend with reference to out-relief. If you like to be hard upon the poor, and not to employ them in the winter, you will find that they will not stand that very long; they will leave this part of the country for a more congenial clime. But on the other hand, if you want to preserve and keep a good supply of labour in your district, find employment for the men when employment is scarce; be kind to them then, and considerate towards them at all times, and then I say you will have always a good supply of labourers around you, and it will answer your purpose much better than any harsh treatment. Now I want to say one word more upon the question of relief, and it is on medical relief. I believe there might be very great improvements made in our system of medical relief. I believe the medical men, as a rule, are under-paid, and I further believe that they ought to be paid, not out of the rates but out of the consolidated fund. I do not see how one locality is more interested in the health of the population than the whole country generally. I believe there ought to be more stringent rules laid down by the Poor Law Board as to the visiting and the attendance of the medical men upon the poor. There ought to be some organized system of visiting, and the old and incurable ought to be visited periodically. I believe that the medical officer's duties ought to be confined to visiting and attending upon the poor. At the present time it is a great inducement to a medical man to take a Poor-law district for the sake of the private practice he may obtain in the district, not connected with his duties to the poor. Now I believe this is a bad principle. I believe also that the medicines ought not to be dispensed by the medical man; they ought to be dispensed by the guardians of the poor, who ought to have entire control of the medicine department, by means of a committee or sub-committee, or in some other way, as our friend Mr. Smith and his colleagues, who so thoroughly understand this question, would suggest. I am quite sure of this, we should not have such heavy bills for butcher's meat and wine and beer—which I always regret extremely to curtail in the meetings of the board of guardians—we should not have such heavy bills for these items if we had a different dispensation of medicine to the poor. I believe the medical men themselves are not satisfied with their present position, and I trust before long there will be considerable amendment upon that point. I do not know any class of men who work harder, or who have the same severe and difficult work to perform, and they are very often very little appreciated for their labours.

WANTS.

At Avon, Lord MALMESBURY, the chairman, said, I am, I believe, the senior member of the association, and the oldest man in the room. It has given me this advantage, that I may look back and remember what this neighbourhood was, and the state of agriculture so many years ago—I will say forty years ago—and I wish there were men present as old as myself or older, in order to bear testimony to what I tell you. At that time I do not think there was any part of England that could boast less of its agricultural skill and science than the neighbourhood in which we now live. I recollect perfectly as a young man, before I inherited an estate, walking out shooting in fields where the turnips were about as large as a hen's egg, and there was a great deal more grass than stubble—up to one's knees in fact; there was a great quantity of weeds, and the hedges were blocked up with elm timber;

in short, a great many things were seen which we have heard of but no longer behold. At that time I never should have thought it possible that in 40 years, and I may even say 20 years, such extraordinary improvement should have taken place as we may now witness in this part of the country. This year particularly, perhaps partially owing to the wet season, the crops of roots are something wonderful. I have been a good deal in countries proud of their roots, both mangold and swedes, but I assure you I have never seen such enormous turnips and such fine roots generally, and so regularly and evenly arranged, as I have not only on my own property but in the neighbourhood around. With regard to the stubbles, although it has been a very wet season, they are much cleaner than in former years. Forty years ago mangold was only heard of, not tested, in this part of the country, but the extent to which it is now cultivated proves the great intelligence and activity existing among the tenant farmers of this district. What has given them this, and also that feeling of reliance upon themselves? It is dependence on and satisfaction with those who own the land. Yet I see among the other changes which are proposed, such as those we have lately alluded to, it is said the land laws require to be altered. What do they mean by the "land laws?" They mean to alter that great and noble system of confidence between landlord and tenant which exists in this country, and in no other like it. They wish to interfere, and no longer to leave the landlords and tenants free agents in their respective contracts with one another. I consider it an insult to any intellectual person, to be told that two grown-up men, the landlord on the one side and the man wishing to take a farm on the other, should not be able between themselves to come to a fair agreement as to the time and conditions upon which the one lets and the other takes the land. I see that according to the wishes of these theorists the House of Commons is to make laws for us, and tell us what we are to do with respect to one another—how to arrange estates, and what covenants to make one with the other. Thus the good feeling which now exists among us all would certainly be destroyed, and the consequence would be a retrograde movement in agriculture instead of a progressive one. That has been tried in Ireland, but I do not know whether it will answer or not. I know nothing of Ireland except that the habits of the people are perfectly different as between landlord and tenant from what they are here; but this is what I suppose has started these opinions that such and such laws should be made for this country as have been made for Ireland. Now, I am quite convinced, if such laws as were passed for Ireland two years ago were passed for England, they would be perfectly futile both to the tenants on one side in many cases and the landlords on the other—but less to the landlords than to the tenants. If the landlord does not retain sufficient personal interest and power over his estate, he will naturally not reside on it. He will not look upon it as an heirloom, where he was born and where he means to die. He will not look upon his tenants like so many brothers, as it were, who are to go through life with him, both gaining a fair profit from the estate which belongs to him; but, as we see in France and other countries, he will look upon the estate as a mere investment, and himself not being amused upon it, and having no personal power and interest in it, he will depart from it, and either he will, if he has capital, farm his own estate, under the care of skilful agents and middle men, or if he does not do that he will let it out at once to some public company which would spring up on the speculation of taking large estates and cultivating them to the best profit they could. There would be an end to that invaluable race of men—that class which Lord Derby used to call "the backbone of the country"—the tenant farmers. There would be no longer that feeling which has brought us all together in this room, a feeling which makes the strength of this country, wherever you find it, whatever districts it may be divided into. Therefore, in addressing you as a society who have bent their minds to the mode of agriculture in this particular district, I cannot explain to you how completely the system has succeeded. I see so many faces around me that are young and cannot recollect how different the time was and how very inferior agriculture was twenty-five or thirty years ago from what it is now, and how it has risen under the present laws, and is daily improving. I cannot sufficiently recommend to you a continuance of that system of acting together, consulting together,

and, above all, of being plain and straightforward with your landlord, telling him all the grievances you have, and coming to that common understanding which two Englishmen of common sense ought always to be able to accomplish within half an hour. With respect to this Government or any other—of course I do not allude politically to anything—I have only one prayer to make to them and to the House of Commons, and that is, leave us alone; leave us to our own good sense and our own industry; leave us to the laws regarding landlord and tenant under which we have lived for all time, and I am perfectly certain the system cannot be improved in any way. The landlord and tenant are now both under the surveillance of public opinion, and if they dispute they have what is better than any written law, the custom of the country, to resort to. I believe that has always decided cases in which disputes have taken place, and nothing could be more futile than to decide them by any hard and rigid law which could not be drawn for every part of Great Britain, varying as it does so much in all its customs and mode of agriculture, its climate, soil, and everything else. We hear that farmers cannot prosper without capital. The question is, what is the meaning of capital? In Lancashire its meaning is very different from what it is here; it means a sum of money counted by thousands and tens of thousands, which we, I am afraid, in this part of the country cannot boast of, our capital being our intelligence. Then the variety of tenant farmers is so great, taking them throughout Great Britain. In the Lothians they farm 2,000 and 3,000 acres; so you may take them where they keep the best hunters, and live in great luxury; and from these you may go to poor little farmers on the confines of Dorsetshire, in the New Forest, the Forest of Dean, Exmoor, and such places. You cannot make a general rule for classes that vary so much. Each member of that class, each landlord and each farmer, must judge for himself, and they must be left to arrange their affairs according to their experience of the place, according to the soil they have to break up, and the climate which may smile or frown upon them. But, above all things, leave them alone.

Mr. H. BONE said, the only improvement he could suggest was some alteration in the principle on which tenants held their farms. He believed if the plan of binding down the tenant farmer to a system of culture as in that neighbourhood was continued, they would not very much increase the products of agriculture. Lord Leicester had recently spoken against binding down covenants, and to the necessity, among other things, of giving the tenant thorough security for the capital employed by him, and those were the opinions that ought to prevail. The principle should be carried out that the land should be made to produce the greatest possible quantity of food. It was necessary that every tenant farmer should lay out a certain amount of capital on good security, and the improvements in that neighbourhood which his lordship had alluded to would never have been carried out except for the capital employed by the tenant farmers. If the system now in use in Lincolnshire were adopted in that county there would be as great an improvement on the existing state of things as his lordship had described in comparing the present time with that of twenty-five or thirty years ago.

Lord MALMESBURY said that men of capital were not always easy to pick up. There were men with a certain sum of money, who farmed as much as they could, but he should be very sorry to inquire into the state of their fortunes and their private concerns, to tell them they ought to have so much money to cultivate the farm, and if they could not show that amount of money they could not remain there. Capital was steadily increasing in this country, but if landlords were to "drive by steam," the misery and cruelties that would occur would resemble those that happened in Ireland. It was to his interest that all the farms belonging to his estate should improve, but he should never think of ejecting a tenant because because he had no capital, and could not take to high farming at once. Mr. Bone had not only capital, but also intelligence and activity, but all men were not like Mr. Bone, and they must take human nature as they found it.

HEREFORDSHIRE.

At Hereford, Mr. S. ROBINSON, the High-Sheriff, said, speaking as a farmer, he had formerly entertained a preference for Shorthorns, but since coming into Herefordshire he had been very glad to adopt the Herefords instead, and was now

himself a breeder of them. Shorthorns were very much the fashion in some quarters, and one sometimes heard of their fetching very large prices, but his own opinion of that was that not unfrequently those prices were "fancy" prices, and that the real value of the animals was not represented by the prices which they fetched. The Herefordshire tenant farmers must find it pay to cultivate their own county breed of cattle, because it was with their cattle that they paid their rent. The tenant farmers had succeeded, too, in a remarkable way in holding their own against what were called gentlemen farmers; for, if they did not always stand first, they did not come far behind those who had large means and spared no expense in the production of their cattle. He really thought, therefore, that the Herefordshire breed must be a very good one for farmers. He had found it so, and he did not think he was likely to have to regret his choice; for every year he had been improving. Herefordshire was lucky also in having the class of sheep it had, those sheep being of a stamp and scale peculiarly well suited for the farmer; he could have wished, though, to have seen a larger show in the sheep classes than there had been that day. There was, it was true, a good lot, but he thought it ought to have been better. As to the pigs he could not say much about that department; Herefordshire did not seem to make much way in that direction; certainly, he did not think the pigs did much credit to the soil, but he hoped the Society would be able another year to offer such prizes in the pig classes as should induce a keener competition among the different breeds, because if they could bring good stock into the county of course the county must be benefited. With regard to horses, the reason that there was not a better show in the horse classes was, he supposed, that the Society had not funds enough to offer prizes sufficiently large to induce entries of really good animals.

Sir J. R. BAILLY said those who were set over us had dug out a well-dried crop called local taxation, and they had planted landlord and tenant in alternate rows, and had saddled each of them with half the local taxation. Now, speaking as a landlord, he had no objection whatever to that arrangement, but looking at it from the tenant-farmer's point of view he did not think that they should hastily commit themselves to that apparently favourable arrangement. The price of farms had been increasing year after year; and if a general redistribution of rents were to take place during the present year he did not think it would be altogether to the advantage of the occupier. He threw this out for their consideration, thinking that it was a matter which might well be discussed. He was surprised to hear that the towns paid more to this charge for local taxation than the country; but it must be remembered that if the towns paid more to their rates they received in return conveniences which were not enjoyed by persons in the country. They paid, it was true, to the sewers-rate, for example, and the gas-rate, but they had a fair return for their money; whereas, if they, in the country, wanted a drain they must dig it themselves; and if they wanted light, why they must carry their own lanterns. In regard to this question of local taxation they wanted only what was fair—fair to themselves and fair to their neighbours—viz., that each and every class of property should bear its proper share in the burden of the country.

Mr. MICHAEL BIDDULPH, M.P., with regard to the show, was very sorry, with the High-Sheriff, that it was not a larger one, because, considering the importance of the city of Hereford as an agricultural centre, he did think we ought to have had a larger exhibition. As far as the cattle were concerned he considered it a very good show, but certainly with regard to other animals, and especially horses, he thought that the less they said about it the better. Possibly one reason that may have kept things away, and may so have made the show smaller, was the fact that the foot-and-mouth disease was rife in the neighbourhood. It was spoken very much of in different parts of the world, and he heard with very great regret that this kingdom was not free from it. He trusted that Herefordshire might escape, as it had done, happily, or nearly so, in the case of the cattle plague, and that we might not have to account that among the drawbacks to the farming prospects of the county. The question of larger shows had very often been mooted at these meetings, and as far as he was able to make out, the farmers of Herefordshire were not inclined for the amalgamation of their show; and he must say he thought it was a very difficult question to decide. Naturally, one did not

like to give up one's show and to amalgamate it with other counties, though there were certain advantages to be derived from that which must be obvious to every one.

Sir HERBERT CROFT said he was going to ask them two things. He was going to ask them to arm his colleague and himself with two petitions. The first petition that he wanted was a complaint as to the station accommodation of the city of Hereford. The second petition that he wanted was a petition praying that the provisions of the Cattle Diseases Act might be made to apply to and to include Ireland, which, strange to say, it did not now do. He had received a letter from a very practical agriculturist, wherein the writer asserted that the foot-and-mouth disease was clearly and beyond all doubt imported from Ireland, and saying that members of Parliament must look to it that importation from Ireland be prohibited without delay.

Mr. M. CLIVE, the chairman, expressed his regret that the Society was not in so flourishing a condition as it ought to be, and would be if its objects were more thoroughly appreciated by all classes of the farmers of the county. Their funds, he found, were this year only £13s. 7d. in excess of last year; while the total income was only some £420. He did not think that rapid progress was always the most safe; but he did think that they might have made better progress than this. He was sorry, too, to notice that in some of the classes the competition was limited in the extreme. With regard to amalgamation, of which a good deal has been said of late, he thought the best amalgamation that could take place would be the amalgamation of the different local societies with the county society rather than the amalgamation of the county society with other counties. Let Ross, Ledbury, and Leominster unite with the Herefordshire society, and let the meetings be held at each of those places in turn, giving Hereford, in consequence, of course, of its greater importance, an oftener turn than the other towns—say every other year, and at the other towns in the alternate years in rotation.

The MAYOR of Hereford urged a strong effort towards the raising of further funds, and the making of Hereford—if the amalgamation of the local societies should be brought about—the head-quarters, in the sense of the meetings, though participative, being held there more frequently than at the other towns in the county. As it was, the show was rather a discredit to the county from the smallness of the exhibits; but he hoped that by some or other of the ways that had been suggested it might be made a more worthy one.

Mr. J. H. ANKWRIGT believed the advantages of small societies were enjoyed by only a few, and that if the matter were really taken into consideration, those smaller societies would be even proud to amalgamate with the county society. They had a precedent in the case of Worcestershire, where an amalgamation of all the societies within the county took place, with the result that the subscriptions were in a short time increased five fold, and the entries proportionately.

Mr. JANCEY, speaking on behalf of the committee, must say that they had been alive to the advantages which might be gained by amalgamation with other societies. They had conferred with other societies with a view to inducing them to join our own, so that we might have the show here in certain years and to travel about in other years; but they had been met with the answer, "We will give you so much to come to us, but we cannot come to you." There was not much likelihood of their doing much while a spirit existed like that. He saw that in a speech delivered by the chairman at the Ludlow Agricultural Show that gentleman had expressed himself favourable to an amalgamation of Herefordshire with Worcester and Gloucester, but advised that the Ludlow show could not be given up. But it was of no use getting up a society which was to have any pretensions to being a county society at all unless the small local societies could be got to come in, so that the society might be upon such a basis and on such a scale as that the county might well be proud of it. It was said that more money was to be got. Now it was all very well to say that more money must be had; the committee had not been asleep, he could assure them; they had canvassed diligently, but the money did not come in so freely. He believed it a great thing to have an attractive programme, but to have an attractive programme money must be had, and that was precisely what could not be got.

Mr. J. MORRIS was sorry that in some of the classes there

should have been so few entries, though there were, on the other hand, some few classes which had filled better than ever. He agreed that it was essential that something should be done in the way of infusing new life and spirit into the Society; and he could not help thinking that the best way would be, first of all, to amalgamate the small societies, and then to talk about joining with other counties. As a breeder of Hereford cattle himself, he thought he had nothing to fear for our own stock in competition with other breeds, for whenever we went either to the Royal or to the Bath and West of England, or anywhere else, we well maintained our prestige; while, if we could bring other cattle into the district, we might thereby not only enhance our own position, but improve the funds of the Society also.

Major PEPLOE, one of the judges, said a good deal had been said about the unworthy show that had been made of horses, and what had been said in that respect he cordially and thoroughly endorsed. He would only add that if the farmers of Herefordshire would breed horses with the same care that they did their other stock, there was no reason why they should not do equally well, and with as much profit. Horses were especially scarce at this time; immense numbers had been purchased, not only by foreign Governments for military purposes, but by private persons for horse-dealing purposes, and for sale in Austria, Prussia, and other countries. He would give prizes if others would also. It was the breed of mares which required to be improved rather than that of sires.

Mr. J. BOSLEY expressed a contrary opinion, and suggested that the offer of a prize of £50 for a good sire to travel the country would probably be the best course to pursue with a view to improving the breed of horses in the county.

At St. Weonards, Mr. R. B. MYNORS, the chairman, said they lived in what was called "free trade" times, and with free trade he did not complain as he never was a protectionist. But if free trade was applied to some branches it ought to be applied to all. The principles of free trade were first of all that the raw material should be imported into England free of duty, and then used up here. With that, as he had said before, he did not complain. The second principle was that there should be no tax on articles of British manufacture, and in accordance with that principle there should be no tax on British industry. The Legislature had, therefore, removed the tax on many articles of manufacture which formerly were very oppressive and quite detrimental to the manufacture of those articles. Now he asked them was the same rule applied to agriculture? He said "No." Then he asked "Why?" He felt very dissident to touch on the subject of the malt-tax and make that an illustration of his argument, because that was such a long-vested question. He complained that the matter had not been fairly dealt with by the House of Commons. Colonel Bartelot had certainly done his duty very fairly, but he had not gone fully into the question. Now, the tax had not yet been removed, and he asked why it had not been removed with other taxes on trade. There could be no possible ground for its maintenance. Mr. Cobden, who was the great advocate for its removal, said it ought to be abolished; and since then he (the Chairman) always thought Mr. Cobden was an honest man. He complained that agriculturists had not been fairly dealt with. It was asked whether it was probable a tax that produced seven and a-half millions could be abolished to-morrow. Now, they lived in times when they had what was called a growing revenue. For years, with very rare exceptions, they had had a growing revenue. If they did not understand him he meant that the revenue exceeded the estimate of the Chancellor of the Exchequer. When the Chancellor came to look into his state of finances he found that the revenue had considerably exceeded the estimate, and therefore he made considerable remission in the taxes. In the course of time the Chancellor of the Exchequer had remitted to the country twenty millions of taxes, but "D—l a bit" had the malt-tax been taken off. Every one said that the tax ought to be taken off, and if the Government could not take it off to the full extent why not do it partially? Persons said that if the tax was taken off the agriculturists would get the benefit and not the consumer, but he argued that the consumer would be equally benefited. Persons had always taken a very narrow view of the matter, but all he could say was that if the tax was abolished the British subject would get the benefit somehow or other, and that the tax ought long ago to have been abolished. There might be reasons why it had not been

abolished. If it had related to Manchester the tax would have been abolished long ago. There they had their Chambers of Commerce, and their interests being identical they united together and their voice was heard and felt throughout the country. Agriculturists did not do this, and therefore there was some little blame to be attached to themselves. In order to get some of their grievances taken off they had now their Chambers of Agriculture. These had not been established long, but he was glad to see the farmers interesting themselves in their affairs. But still in the working of these chambers he thought they was very much wanting, if they had one at Hereford, another at Worcester, and another at Bristol all discussing different subjects, instead of acting, as they ought to act, simultaneously with the Chamber in London. That Chamber ought to impart to the provinces questions of importance. The lesser chambers should take their cue from that chamber, and they should act as independent bodies, yet with one voice. This had been a very fruitful year, and when the financial year came round the Chancellor would make the usual remission of taxes; but it remained to be seen whether he would be an honest man. Agriculturists would not get their rights unless they made themselves heard, but there was no reason why the Chancellor of the Exchequer should not do his duty if he was urged to do it. In fact, he was persuaded that they would be listened to if they made themselves heard as one body from one end of the country to the other. He thought there were other pieces of Legislature not quite satisfactory. They had not only the tax he had complained of, but an impost had now been laid upon guns, by the imposition of the ten shilling licence. Now, he wished to know what part of the community would be affected by that tax? The sporting man was not affected, he had always to take out his game licence. The town's-people did not pay. Then who did? The only parties affected would be those who kept a gun for the purpose of shooting a few crows, or anything that might come on their crops. Then, he asked, was not this another rap at the agricultural interests? He had another bone to pick with the Chancellor of the Exchequer: When that personage ultimately yielded to the threats of the match girls, in his celebrated speech he made one very tentative remark. He said that there was one class of the community in whose favour great exemptions were made, and that was the farming class. He instanced the exemption of agricultural horses, and asked why this should be. He could but add for the credit of one of the Chancellor's friends that he got up and remarked that the agricultural horses only represented steam-power, and that they should not tax them because they were machinery. In conclusion, he remarked that with a fair field the agriculturists could take care of themselves. He thought the agriculturists had a right to demand fair treatment, and to demand to be put on the same footing as the other interests of the community.

Mr. WEBB thought the committee did wisely to try and improve the cottages in the neighbourhood, as it had been said a good cottage made a good man. Nothing was more conducive to the cleanliness and happiness of a man, his wife, and home than a good supply of water. Now he regretted to say that many of the labouring classes had to carry their water half-a-mile. Many persons said agricultural labourers' wives should go out to work. How, he would ask, was it possible for them to do so. In many instances they had a large family to look after, and then they had to go half-a-mile to fetch their water. He thought that if they had better cottages they would have a better class of men. As to the evils consequent upon the wretched state and size of some of the labourers' cottages in the present day, there were frequent cases which came to light every day of father, mother, and a family of brothers and sisters all sleeping in one room. He contrasted the wretched cottages of the working man with the comfortable, dry, airy, and warm stalls in which animals were kept. He thought that if it was so essential that beasts and animals should have clean and comfortable places provided for them and a good supply of clean water, how much more so should the human being have these essentials, and not be left, as he was in many cases, far below the beasts of the field. He knew of a landlord in his neighbourhood who had built some good comfortable cottages for his labourers, and he could bear testimony to the fact that the children who were brought up in these cottages were quite a contrast for clean, healthy looks to those brought up in some of the wretched homes by which

they were surrounded. There should be a cottage to every fifty acres farmed, and if these cottages were well built and well supplied with water, the labourer would be very much benefited, while the landlord would get a good percentage on the money he had expended.

At Ross, Mr. C. KEARSEY said that if the farmers gave their men less cider and more wages, they would be a great deal better off. He had not given his men cider as wages for the last six years, and had had no drunkenness on his farm in consequence. As for the amount of wages, he was willing to give his best men 15s. a week, and he knew it would be money in his pocket to do so; but as for the labourer keeping a cow, where was he to get the money in the first place to buy it, and next where was he to keep it, and who was to do the milking and make the butter?

HERTFORDSHIRE.

At Tring, the Hon. H. COWPER, M.P., said several farmers would shut our ports to foreign cattle. It was not for him to say whether this would be wise or not, but he believed it would be impossible. Several members of Parliament had suggested that the ports closed from Germany should be opened. The agricultural members pull one way, the town members another, and Government is often puzzled to know how to decide between the two. The foot-and-mouth disease has been in this country since 1847, and some persons believe that that disease came from foreign parts. That reminded him of General Trochu accounting for the immorality that prevailed in Paris before the war, by saying it arose from English luxury and Italian corruption. But whatever the cause, it was essential that proper care should be taken to ascertain the length of time which the disease might take before it manifested itself. One inspecting officer says the disease can be discovered in eight days. If so, let a quarantine last eight days. Mr. Fowler states the disease couldn't be discovered within three weeks. If so, let the quarantine last three weeks.

Mr. ABEL SMITH, M.P., said his attention had been called to the extent of out-relief: he was no advocate for refusing relief where it might break up homes or send families into the workhouse, that would be increasing expenditure: he would also have the aged and infirm well taken care of; but the able-bodied paupers ought to work hard. He had no pity for the idle vagabond tramps, and he would make them work hard and try to earn their own living: he regretted to see in the Poor-law reports a great increase of vagrancy in the country; and they all ought to try and check it.

Mr. J. K. FOWLER said, when they attempted to defend their flocks and herds from foreign infection they were called protectionists in disguise; but he said defend us from foreign disease, and you are helping to make meat cheap for the people of this country. With regard to the period of incubation of the foot-and-mouth disease, one authority stated that it required ten to twelve days before it showed itself. After further remarks respecting the disease in the locality, and what had been said and done at other meetings about it he added. They did naturally expect that the members for agricultural boroughs, as well as for agricultural counties, would not have deserted Mr. Sewell Read in the House of Commons; and would not have left the House to be counted out when he brought forward the question of cattle disease. He thought it was a great slur on Mr. Read's exertions. Let them hope that at some future day—he hoped not far distant—they would see that most oppressive and disgraceful tax removed—the Malt Tax. They knew its effects in many ways on labourers and others; but he would tell of its effects on cattle feeding. One of the most successful exhibitors of fat stock said he never took beasts to the show without their having one or two sacks of malt, and he said it was one of the best things possible for feed to finish off the animals for the butcher. Now, if only one sack is required, the duty on that is 11s. 4d.; and it was a scandal and a shame if a farmer sent, say only 20 beasts to the market, that he should be taxed above £11 on his own produce, for getting meat into condition fit for the food of the people. That was point to be pressed on the attention of the public.

LINCOLNSHIRE.

At Bourn, Mr. WELBY, M.P., said, respecting the subject of local taxation, he was not clear in his own mind whether it

would be wise on their part to press for any immediate decision on that topic; he doubted if any measure that would at all improve their position would be likely to gain attention at present. There were matters of far greater importance than local taxation which called for legislation; not the least of which was the question of providing proper rules and regulations for the management of coal and other mines, whereby they could, if possible, prevent for the future those fearful losses of life which annually occurred from explosions. Another matter of the greatest importance was the adoption of measures for guarding against the pollution of the air we breathe and the water we drink. No one could blame the agriculturists of England if they were to endeavour with one voice to call for a further revision of the laws relating to the importation of cattle. He considered the present state of things most unsatisfactory, and he believed the time was not far distant when not only farmers but all classes of the community would awake to the fact that the remedy asked for was only fair and just: he thought that fat cattle ought to be slaughtered at the ports of importation, and all foreign store beasts ought to be subject to quarantine for such time as would make it impossible for them to propagate disease about the country.

Mr. DEAN referred to the decision given by the magistrates at Sleaford petty sessions in a charge against his friend Mr. Scales of having in his possession scabbed sheep. That decision was denounced by all who knew the particulars of the case. As a neighbour of Mr. Scales, he could speak to his flock being free from scab; and to show the ignorance of the inspector he had been given to understand that that individual had stated he had never known a sheep to be struck on the back with flies, which was the case with the sheep in question. Mr. Scales had had scores in his experience, and a great many the last summer. The case was sent to Professor Simonds, who, being engaged at the time, put it in the hands of some other Professor, who certified it not to be scabbed. Strange to say, the magistrates were not satisfied with this person's certificate, and called in a veterinary surgeon from Lincoln, whose opinion they acted upon in preference to that given by the Professor, and in opposition to Mr. Scales's own veterinary surgeon, Mr. D. Wyer, a man of great reputation in the profession and of unqualified respectability. He admitted that the law with reference to those cases was a very good one, but he thought the magistrates ought to be more careful in the investigation of such cases. So indignant were Mr. Scales' friends at the decision, that many offered to come forward and subscribe to have the case taken to a higher court.

NORFOLK.

At Yarmouth, Mr. C. S. READ, M.P., said they had, by the blessing of Providence, in that part of the country grown an excellent crop of corn, and had harvested it in capital condition. But he was quite sure they knew—some of them better than he did—that that turn of the tide, that advent of prosperity, did not come one day or one hour too soon. He was talking to an old friend of his soon after harvest, and he said, "Yes, it is a great blessing that we have had a good harvest, and if we could get such another between this and Christmas we should be all right." But let them be thankful for what they had received; and seeing so many employers of agricultural labour present, might he ask them to have a thought for the agricultural labourer, and let him enjoy a little of their increased prosperity? He knew they would say to him that in the winter the days were very short, and whereas the gentlemen in Newcastle had given men nine hours per day, they would soon have not more than seven hours' work a day from their agricultural labourers. That was so; but he hoped they would remember the price of bread is considerably more than the average of the last few years; that meat was exceptionally dear; and that almost any other provision had very much advanced in price lately. Therefore he did hope that during the winter they would pay every labourer who was good for anything 2s. per day. Now perhaps he might be allowed to point to what had been a chief subject of discussion in the press during the autumn—viz., what they were pleased to call "Agricultural Reform." Of course we farmers came in for a good bit of advice; and as they charged them nothing for it, he supposed the advice was worth nothing. But he objected to be lectured as to what they were to grow, and the amount of capital they were to expend in their land. If they were in the days of protection it would be quite right for the con-

sumers of the country to tell them that they did not employ enough capital; did not employ sufficient amount of labour; and did not provide enough for the wants of the country. But now that they had free trade, a farmer had a right to think of himself, and not of the multitude. He must grow that which pays him best; and if he thought grass-land was most remunerative, the country had no right to tell him that he ought to convert it into arable land. He would take the case of the light lands of Norfolk. He thought they had been ploughed too much rather than too little for the good of the farmer. Take, for instance, a large sheep-walk which might be rented at about 10s. per acre. It did not require much labour, nor a great deal of capital, and perhaps the farmer might reap a profit of something like 5s. an acre from the land. It did not grow much certainly, but what right had the country to say, "Break up that sheep-walk, convert it into arable land, employ so much more labour, and grow us corn and more meat upon it." If it paid the farmer best to keep the land as a sheep-walk, by all the arguments of free trade he had a right to do so. Those theoretical gentlemen, those political economists, were always poking these sort of rules upon them, but they never cared about carrying them out. Why, for instance, when they set about the abolition of the law of settlement, did they not abolish it altogether, and say, "Where the tree falls there let it die?" It was because they were afraid that the labourer, who might go into the manufacturing districts, would become a burden to them, and that they would not be able to send them back to their own parishes. Then look at the legislation with regard to the excise duties on malt. Why was that left on when bricks, glass, and papers were set free? Fair play was a jewel, and he contended that the Government had not been fair to the agriculturists. When they pretended to carry out a measure it should be carried out independently of party or individual interest, and they should endeavour to do what was right, not for one class, but for every class of this great nation.

Mr. CORRANCE, M.P., said: The malt-tax was not a party question, for it affected the interests of all. He might enumerate a roll of questions which Mr. Read had fought for, and in connection with which he (Mr. Corrance) had been his humble coadjutor. Local taxation, the administration of the Poor-law, and the Cattle Plague questions were not party matters, but they would, he believed, become so, for sooner or later, they would be adopted by a party, and they who were sometimes blamed for being too much party men—and this had even been said of Mr. Read—were simply in honest good faith advocating the interests of their constituents, and were obliged to adopt one side or the other. However those whom he was addressing might differ in opinion, they would agree with him that if they had no party, yet as agriculturists they had a distinct and definite policy, which policy was to obtain either a partial or complete repeal of the malt-tax, and to endeavour to induce the Privy Council to perform the duties they had undertaken. Agriculturists had interests in local taxation far more than most of them were aware, and when they began to pay the education rate and saw the provisions of the Sanitary Bill, they would begin to realise it. All were agreed upon these points, and he thought Government ought to have the pressure of such gentlemen as he saw around him in order to ensure their due performance. There were other things that the Government ought not to do, and he called upon those who belonged to the opposite party to say so, as it would come better from their lips—let them tell Government honestly this, that the Chancellor of the Exchequer had no business to waste a million of money upon the corn duties, and that he ought not to throw out broad hints for taxing the farmers, because sometimes these hints were unpleasantly acted upon. As a party man, he would say that these were not party politics, but agricultural politics, and he wished all agriculturists on such matters to sail in the same boat together. There was one other requirement that they wanted, and that was more agricultural members. Perhaps he was a bold man to say this in the presence of Mr. Read, but what he desired to convey was that the agricultural members were not sufficiently strong to fight the battles of the agriculturists. The agriculturists were not represented in the proper numerical proportion—there were good and excellent men amongst them, but there were not enough.

At Acle, Mr. C. S. READ, M.P., said this time twelve months I made a few observations upon the tenure of land in this

county, and since then there has been established in London a Land Tenure Reform Association. This society is, to my mind, very wild and very revolutionary. But gentlemen must remember that although this little cloud is no "bigger than a man's hand," in the present aspect of affairs it may become something terrible. It is no use saying to us that things are wild, revolutionary, and visionary. You must remember that those things that were considered wild and revolutionary forty years ago, have been adopted by the strongest Government the country has ever had; and when I tell you what this society proposes to do, perhaps you will say that its supporters are most unreasonable. I think they are. They are all philosophers—learned men. The president is Mr. John Stuart Mill, who tells us that there is no real property in land; that is to say, that the State never actually parts with the land, but that it always has the power to step in and buy it up for the public good, just the same as a railway company has the power, after having got an Act of Parliament, to buy land to make a railway. They also say that we have no right to the increased value of the land unless we happen to make that increase ourselves. Now, I should like very much that Mr. John Stuart Mill should come into Norfolk, to thoroughly agricultural land, and see how much land can be increased in value unless you do something to improve it. But these gentlemen are going to abolish the law of primogeniture; to prevent the accumulation of land in large properties; to insist on the Government buying up large estates as they come into the market, and to let them out to be farmed on the co-operative principle. I am quite sure that, as practical men, you will say, "What stuff and nonsense all this is!" But, you must remember that in these days things are judged theoretically. If a thing is not theoretically right, however well it may answer in practice, the Parliament of this country comes and upsets it. Everybody acknowledged that the Irish Church was no practical grievance, but it was abolished. Everybody has told us that purchase in the army practically worked well, but it is abolished. And so you may go on. Every institution of this country has to be tried on its merits—I even say on its theoretical merits—and, therefore, I contend that unless landlords and occupiers of land are thoroughly united, the time may come—I do not say that it is just now—when we shall find ourselves even in a worse box than we are at present. One grievance that, as an occupier of land, I pointed out this time twelvemonth was that in a great agricultural county like this the occupier of the soil has no right whatever to any one of the improvements that he makes. There is no custom, and unless there is a private agreement, all those things are by law the property of the landlord. I will ask you, as practical farmers, supposing you were to receive notice to quit on next Lady-day, and you were all to leave your farms next Michaelmas, whether you would not leave in the land at least £1 per acre of your property, which I contend ought to be as much your property as the balance that you may happen to have at the bankers. Now, I say that with increased appliances of science, we farm better and we farm more expensively almost every day. It was said to me at Blofield, "The custom of the country which you talk about, namely, the Tenant-Right of Lincolnshire, may be very well for Lincolnshire," but why in the world should it not be right in Norfolk? The wolds of Lincolnshire, where this Tenant-Right is common, are exactly the same sort of land as the greater portion of West Norfolk, and under the system of payment for unexhausted improvements the agriculture of Lincolnshire has wonderfully advanced. We have in Norfolk 830,000 acres of arable land; supposing we strike out 30,000 for very small holdings, another 100,000 for land occupied by the owners, and another 100,000 acres as badly farmed, there are still left 600,000 acres which, unless held under lease, have by law no protection to the tenant. I believe that if the Tenant-Right of Lincolnshire, which is nothing more nor less than compensation for unexhausted improvements, were extended to Norfolk, that you would see it would do more towards the advancement of agriculture than anything else. Landlords say they do not like to grant long leases. There is a great deal to be said for and against this. But I cannot see what there is to be said against compensation to tenants for unexhausted improvements. I was told at Blofield last year that there was no improvement in this part of the country that the tenant made which he could be compensated for. But do not some of you marl? do not some

clay? do not some drain? do not all use a large quantity of artificial food and manure? Do not tell me that you can get these out in six months. I am quite sure that if that gentleman who had made those observations had been a farmer—and it is a lucky job for him that he is not; he has a much better birth than that—instead of a lawyer agent, he would have known very well that farmers have a great deal of floating capital in the land that is at the mercy of the landlord; but of which, be it said to the honour of the landlords of Norfolk, they have not taken advantage. But I say that whenever there comes to be a discussion on the land, this will be one of the things pointed out to show the bad relation which exists between owners and occupiers. For goodness gracious sake, then, let us try to remove that evil before that day comes.

NOTTINGHAMSHIRE.

At Moorgreen, Mr. T. C. NIXON, the Chairman, said there was no doubt at all that this was a very remarkable society. This year they had been prevented from the usual competition of ploughing through circumstances over which the committee, he believed, had had no control, namely, the want of land on the one side, and on the other hand the want of good conduct on the part of the working men last year. The want of land might have been got over, but in the other matter he commended the committee for the prompt and decisive measures they had taken to suppress that vice which he was afraid was sometimes very injurious to the country population—he meant the vice of excessive drinking and quarrelsomeness where there ought to be peace and happiness. They had strongly marked their determination to put down any such conduct in the future, and he trusted it would have the desired effect.

At Bingham, Mr. HILBYARD, M.P., believed it was the truth that there was Dog Bill passed to answer the complaints of certain agriculturists in the Northern parts of England, to the effect that stray dogs were a great nuisance, and they hoped means would be taken to put a stop to them. The police consequently had power given them to take up all stray dogs, and that was the only direct measure that he believed had been passed in connection with agriculture. Under these circumstances all he could do was to go back to, perhaps, the good intentions of the Legislature, and to what they meant to do. He must remind them that for the last two or three years in that room he had expressed a hope that the Government would carry out its promises as to investigating the serious complaint which they made, and which they felt was properly made regarding the local taxation not being adjusted. The Government had promised this and that, and to their great delight, when Parliament met this year they found in her Majesty's Speech that a measure for the adjustment of local burdens was to be one of those placed before them. This sounded just what they wanted, but they were rather taken aback by a paper that was then presented to them from Mr. Goschen's office, giving them statistics of the local burdens in the different countries of Europe, and comparing them with their own. He would give them one instance, and they might judge from that. Take the case of Hungary. It was a country purely agricultural, but they compared their local taxation with that of Hungary, and it led them to infer that their rate was very much lower than that of that country. Of course such was the case, because there was nothing but real property to tax in Hungary. Two measures based upon these erroneous statistics or premises were brought in. They were so unpalatable both to the country and to the House of Commons that they never went to a second reading, and there was an end of their hopes as far as agricultural business was concerned. Another measure mentioned in the Queen's Speech was the Licensing Bill. In that they were all very much interested, in common with every member of the community, for wherever they went they saw the terrible effects of drunkenness in this country. Whether as magistrates or as employers of labour, they knew the evils attendant upon drunkenness, and they hoped, therefore, that by wise stipulations they might be very materially altered. A bill was brought forward, and the provisions were some of them good and others so unjust, that the leading journal stated the bill was perfectly impossible. The measure dropped before the second reading, and they would think that two such big bills being dropped they had little to do.

SHROPSHIRE.

At Marton, General HERBERT said there was no doubt that the tendency of the surplus agricultural population was towards the towns, and the natural effect was that education would teach men how to use implements far more complicated than those they at present possessed, and which may come into use within the next twenty years. The Americans were much in advance of the agriculturists in this country. The agricultural labourers in Cumberland and the northern counties got higher wages than they got here. They were consequently better clothed, better fed, and were capable of doing a better day's work. He thought wages would rise higher; but as the labourer would be better fed, the farmer would be no loser in the end, because he would get a better day's work. Everybody could see that the agricultural labourer, with a large family, should live better than he did live at present. It was their bounden duty to give every child in the empire a good education in a free country like this. They ought to have a fair and full opportunity of obtaining a good education, and he would also add a good religious education.

Mr. E. H. MORRIS said, if they discharged their duty properly, by increasing the home comforts of the labourer, they would do a great deal to prevent that drunkenness which arose from a want of home comforts. The labourer was not naturally a drunkard, but was driven to it by the want of good houses and comfortable homes. A good deal was being talked of at the present time about the wages of agricultural labourers being so low, men getting 9s., 10s., and 11s. per week; but then the labourers had other perquisites that made their wages equal to 15s. or 16s. a week. For his own part, he (Mr. Morris) would rather pay his labourers 15s. or 16s. per week than allow them the perquisites he did.

Mr. BOWEN JONES said, from the report on the prize farms for "the Royal," it was shown that not only did labourers work hard and fare hard, but also that a good deal of hard work was done by farmers and their wives. On the dairy farms it appeared that they commenced work at four in the morning, and were frequently at work till nine or ten at night. He did not know how it was in that neighbourhood, but he could speak for his own, and he was sure they could not get labourers to work so many hours. Farmers scarcely took stock of the hours they and their wives and families worked, and he felt constrained to turn from the report he had quoted to the nine hours system at Newcastle. It was a strange anomaly to him to think that while the labouring classes were deserving a cessation of labour and higher wages, the farmers were working harder than ever. They should not forget the value of the labour of the farmer and his family, but at the same time he hoped the wages of the labourer would increase, as long as it was possible for the farmer to obtain a fair remuneration for his capital and labour. One of the great means to the above end was not only to educate the labourers, but to educate themselves, as all present would admit what a lever education was to every man's progress. He thought a scheme might be devised that the endowments in the county should be added to the middle class schools, so that an agricultural education may be given in them. As to the cattle disease, the highest veterinary authority in the land stated that the foreign diseases imported into the country were the cause of disease to their own herds and flocks. It was therefore of the utmost importance that the foreign cattle should be slaughtered at the port of debarkation. The farmers should show their determination to Parliament, and the work would be done.

SOMERSETSHIRE.

At Hawkchurch Mr. HEAL thought they would agree with him that many things which had recently transpired were very disparaging to the agriculturists. They could not shut their eyes to the fact that so much centralisation increased their taxation, and had a tendency to crush the middle classes out of existence. They knew how considerably their rates and taxes had increased during the last few years. And now they were about to have placed upon them that most obnoxious rate for compulsory education. He agreed with education to a certain extent. But he did not agree with nursing the labouring classes, which seemed to be the aim and object of modern legislation. Independently of acts of parliament, the facilities for education were now so great that every diligent boy had the opportunity to learn. He considered that

an act of Parliament which kept boys in indolence until they were thirteen years of age was highly injurious both to the boys and to the employers of labour. His experience was that boys who went to work in their early days turned out to be the best men. He gave boys of nine or ten years of age 5d. or 6d. a-day, which was a great help to the labourer in the bringing up of his family. But when the boys were highly educated they would become so elevated in their ideas that they would be above doing dirty work. They would say, "Oh, I can read and write, and I shall not do dirty work. I shall be a policeman, or a porter," and would treat the industrious youth who went to work at nine years of age with contempt, although he was worth twice as much as the young scamp who had just left school. There were many labourers who had five or six children under ten years of age. How was it possible for those men, with eight or nine shillings a-week, to send their children to school? Who would have to bear the burden of educating them but the middle classes, who often could not afford to pay for the education of their own children? He felt convinced that that Act of Parliament would be the means of rearing up the offspring of the labourer to indolence. The boys, because they could make a few figures, would scorn to do the work which it was their duty to perform. He did not think that education made the world more honest or more moral. If they traced the crime of the past half-century they would find that most of the murders, suicides, and robberies were committed by people who were educated. And another proof that book knowledge did not make them better was the fact that the more schools there were the more policemen were required to watch over the people. He asked them to look at highly-educated Prussia, where much more crime was committed amongst that supposed-to-be enlightened race than amongst the illiterate working classes of England? The Education Act gave an undue advantage to the labouring class over the middle, and what with Republicanism and with the pernicious influence exercised by the artisans of the great manufacturing districts—who were always fostering a spirit of restless discontent—the middle classes would be ultimately swamped unless they stirred themselves to bring about an altered state of things.

STAFFORDSHIRE.

At Shenstone, Col. DYOTT had heard many things said with regard to co-operative agriculture. He looked upon that as a co-operative society composed of the owners and occupiers of the soil working together for their common good. The two important points which in his humble judgment ought to be principally considered at this time by agricultural associations were, first, the extreme burdens which they had to bear in the shape of rates and general taxation; and secondly, the state of the labour market, which was a matter of pressing importance. The ideas of some as to what should be the hours of work and their remuneration were expressed in a little couplet:

Eight hours' sleep, eight hours' play,
Eight hours' work, and eight shillings a-day.

This really meant four days' work and two days' play in a week, and this was what the operatives in the great hives of industry, or hives of idleness—for they might call them which they liked—were really asking for. The agricultural labourers had not yet reached this point; but his experience led him to this conclusion, that when the employer was in great need of help, as at harvest time, the labourer, instead of lending a helping hand, as he ought to do in return for the benefits conferred upon him, took advantage of the opportunity to extract between 30s. and 40s. from the employer for reaping his wheat. This was a lamentable return to make for what they hoped and believed they were doing for the labouring classes by means of these agricultural societies. He should like to see a different feeling exist when the day of trial came, for he thought that the men should be content with a fair remuneration. With regard to the increase of the local rates, it had been caused, not by the expenditure for the relief of the poor, but in a great measure by the police force. He thought the time had come when the Government ought to be asked to consider whether they should not take the police force under their entire control, and defray the cost out of the national exchequer. The cost of the police force in this country was about £50,000 a year, and if this were transferred from the

local to the imperial taxpayers it would be a great relief to the occupiers of land, while he questioned whether the force would not be better managed than at present. He was one of those who thought that the existing management of the police force was not what it might be. He believed it was susceptible of very great improvement. The tendency now was to increase the force in the direction of the superior officers. Instead of having useful constables with staff in hand, we had to pay for superior officers, very highly dressed, and it must be remembered, too, that this dress was a thing we had to pay for. This he thought was a matter which constables should press upon the notice of candidates at the proper time. With regard to agriculture, he might say that for 25 years or more he had been as much a practical agriculturist as any one of them, and he was not altogether satisfied that the course they pursued was a right one. They were working under what was now called the four-course system, and he had his doubts as to whether it was the right one for them to pursue any longer. It was not the system many years ago, and the crops were then more productive than they now were; formerly the barley produce was almost double what it was now, but then the seed crop was not broken up as it was now under the four-course system, but was allowed to lie about three or four years before it was broken up. He thought they might with advantage consider whether they should not abandon this four-course system and return to one more like that which prevailed fifty years ago, when these very large crops of barley were produced. If they wished for a suitable season in which to begin the change by allowing the seeds to lie down more than one year, they could not have a better one than the present, for in all his experience he had never known so good a prospect for the clover crop. Wheat and barley were good in some respects, but as regarded turnips the less said the better. The gallant Colonel concluded amid loud applause by expressing the deep interest he felt in the success of the Association and in agriculture generally.

Mr. BROWN said they were continually told that the next question which must rise to the political surface was the land question, and while the majority of those who were engaged in the cultivation of the soil were sorely puzzled to know what it meant, every one else appeared to know something about it. There was one class of the community that believed the solution of this subject would be found in the division of the land among the population. How agriculture could be carried on under such circumstances he must leave them to decide. Another section of the same class insisted that the State should take the soil in their own hands, and cultivate it for the benefit of the people. He saw but one advantage which could be gained by such an arrangement—that when the State turned farmer we should hear no more about the foot-and-mouth disease. There was another little cloud rising in the agricultural horizon. In a town in Lancashire a committee had been formed to check the rapacity of the greedy farmer, and their first edict had gone forth to this effect: "Whatever others may do, the inhabitants of this town shall be supplied with new milk at 2d. a quart, skim milk at 1d., and butter milk at 0½ a quart." He believed that their next movement would be to fix the prices of beef and mutton, and this would prove a very serious matter. As to Mr. Mechi's advice, his (Mr. Brown's) counsel was, "Improve your pastures as much as you can, but don't break them up." He recommended as an inexpensive way of improving pasture lands the consumption upon them, especially in the winter months, of cake and other food suitable for the cattle depastured on them. Grass land was necessary for the rearing of young stock. Mr. Mechi said that young stock did not pay, but the same might be said of the juvenile portion of the human race. Moreover, if we reared no calves where would be our mountains of beef. He advocated the migration of labourers from places where they were superabundant to others where their services were much needed, and as to the land question farmers wanted a reasonable assurance that they could not be turned out at six months' notice and lose whatever they had invested in the improvement of their farms. It was the shooting season, and in the face of such a phalanx of landlords and sportsmen it would be dangerous to poach, or he would fire off a barrel at the hares and rabbits. Lord Derby had said that the cause of excessive preservation of game was not sport but ostentation. He did not believe that there was any landlord in that room troubled with this com-

plaint, but he would ask them while enjoying reasonable sport to give their tenants permission within certain restrictions to destroy hares and rabbits.

At Penkridge, Lord HATHERTON said: Possibly some day we shall have a Act establishing County Financial Boards. He was not one of those who would object to such a measure if it were proposed, but he was satisfied that though they might have more talk at such boards the business would not be one whit better conducted, and no greater economy would be practised by those who were sent as the representatives of the ratepayers than by the magistrates of the county. He read the other day a remark made at an agricultural meeting that the police of this county cost no less a sum than £50,000 annually. This might have alarmed some of them, but what were the facts? Any one who read that statement would have supposed that the county police cost £50,000 annually, whereas this sum represented the gross expenditure of the whole police within the county, boroughs included, and on the opposite side of the account nothing was said with respect to the return which was made in the shape of fees for services, payments made by the police for accommodation in their barracks, and for the allowance of one-fourth the cost of pay and clothing made by Government. The real fact as regarded the county police was that the usual expenditure amounted to £24,500 a-year for a population of nearly 700,000. During the year ended the 30th of September last the police rates collected in the county amounted to £22,624. This only showed how figures might mislead persons when the explanation was not forthcoming at the time. With respect to agriculture, he might observe that at the meeting at Walsall last year he intimated his intention of trying the experiment of autumn cultivation for the barley spring crop. He was bound to say that it was a signal failure. Such cultivation might be of great service where the land was very retentive, and where sheep could not be folded so much on the ground during the winter; but on such land as he had—of a poor character—not being compensated for that constant dibbling of the manure by the sheep's foot into the soil. The barley grown on the land cultivated in the autumn was not only later than that which was cultivated in the usual way, but it was a poor crop.

SUFFOLK.

At Ixworth, Colonel PARKER, M.P., felt that the legislature had been, to some extent, remiss in not preventing the frequent introduction of disease by the adoption of more cautious measures with reference to the importation of foreign cattle. It was said that when the foreign ports were opened the poor, as well as the rich, would be able to get meat at a reasonable price, but what was the case now? Beef was 1s. per lb., and that was a thing never heard of before. He hoped that some steps might be taken by the legislature which would be a remedy for the serious evils which now existed.

Lord AUGUSTUS HERVEY, M.P., thought it must be patent to all who considered the subject that the importations of cattle from abroad did not balance the amount of meat which was lost by the diseases which were imported with the cattle, and he considered that the best means that could be adopted to put an end to the state of things which now existed was to have the fat beasts slaughtered at the port of entry, and a sufficient quarantine for store cattle.

Mr. GREENE, the chairman, as to the question of the disease amongst cattle, considered it was necessary that measures should be adopted for the importation of cattle, though he would not for a moment put a bar upon food coming into this country. It had been said and not contradicted, that foreign cattle only formed five per cent. of the food of England, and he asked whether we were not injured to that amount from want of care in reference to the importation. Therefore, though we could have no desire to keep food out of the country, we did desire that it should come in, in a manner so as not to cause as much, if not more injury than it did good. As to the exhibition of roots, he thought the display highly creditable. He could not help thinking that better roots, if not so fine, might be produced by sowing the seed later. He had lately come from Norfolk, and he found that the turnips which were sown early suffered a good deal from frost, and did not appear to recover, whereas the latter sown ones had suffered little, and they were now beginning to grow, and would make good roots. Adverting to the question of deep cultivation, his experience was that on his deeply cultivated land the crops in time

of drought would not fail nearly so quickly as those on his neighbour's land. Many people had an idea that the subsoil was brought to the surface. His plan was to take the cultivator, and cultivate the land 10 or 12 inches deep for the turnip crop; then followed the layer, and he maintained that that suited the drought better than any other system. As to leases, Lord Leicester had stated that he found in the leases of his estate such restrictions as he should not like to be bound by were he a tenant of a farm; and he had endeavoured, with the assistance of his agent, to frame a lease more in accordance with the spirit of the age. He (Mr. Greene) thought there ought to be less restrictions. The more liberty a tenant had, the more his interest was bound up in the land, the better it would be for both parties. A tenant could not farm land long to the injury of the landlord without injuring himself. Some objected to education on the ground that labourers, when educated, were likely to leave the soil and become policemen, or go on to the railway, or into some other employment. He apprehended no such results, provided the labourers had comfortable dwellings provided for them. If the labourer became the more valuable by reason of education, the more important it was to attach him to the soil, and there was no better way of doing that than by providing good homes, with a little piece of land. The Education Bill which had been passed he considered a fair compromise for all parties, but he saw that there was some agitation going on with respect to religious questions. He contended that to give education without religion was like sending a ship to sea without a rudder.

Mr. J. E. RANSOME said: Double-furrow ploughs had a good many advantages, which, perhaps, were not seen at first sight. On light land two horses were usually employed to draw a single plough. That was generally an excess of power which was not really wanted, and if it was possible to divide the two horses into other subdivisions of the two parts, they would not probably use so much power as they now did, but, inasmuch as one horse was not sufficient, two had to be used; but the double-furrow plough, properly made, did not take more than half as much again draught-power as a single plough, and two horses were often sufficient to work a double plough on a light land farm. He was not, of course, speaking of special work done seven, eight, or nine inches deep, but of ordinary ploughing of five or six inches. In the case of mixed soil land, three horses on a double plough were often equal to do the work of four, and there was, therefore, a saving of one horse out of four. On very heavy land, where three horses were employed on a single plough, four horses would generally be able to do the work with the double furrow, and there would then be a saving of two horses out of six. The horses would not be working harder than with the single plough, inasmuch as they took only one half more draught, and it must be patent to every one who considered the subject that there was an advantage beyond any reduction that could be made in the draught of the ordinary plough. Take for instance the single plough which required two horses, in order to make that into a suitable draught for one horse, it would be necessary to reduce the draught one half, and that would not be possible. It might be reduced a fourth, but by putting two together it was possible to effect some of it by using three horses, because then the draught power was exactly equal to the work. Another advantage was there was not so much treading of the bottom of the work. There was also the saving of the men, and the getting over the work at the proper season of the year. There was in the new plough a considerable saving in the draught in some soils by the use of the friction wheel. He might, perhaps, be allowed to point out what the actual money saving effected by the use of double ploughs would be. The ploughing per acre with two horses, putting them at 2s. 6d. each, and the man 2s., with a single plough, would make 7s. per day. That was exclusive of wear and tear of the implement. The double plough, with three horses at 2s. 6d., and the man at 2s., would make 9s. 6d., half of which was 4s. 9d., showing a saving of 2s. 3d. per acre on all the ploughing that was done. It would be found that on an average the whole of the arable land on a farm was ploughed twice a-year, some parts requiring but one ploughing, others three or four, and it therefore made a saving of 4s. 6d. per acre on all the ploughed land. On the other hand, there was no gain if the horses, which had been saved by the use of double ploughs, were standing still, but he took it that on most farms more horses were kept than would be necessary for

the other operations, provided the ploughing could be got over, at the right time of the year, with a lesser number. It would be understood that the basis upon which he went was this, that more horses were used than would be the case if the ploughing could be accomplished at the right time of the year. Supposing, to illustrate his remarks, he took a farm of 300 acres of arable land. He did not think it would be an extreme calculation to say that on such a farm 12 horses would be required, six men, and six single ploughs. If three double ploughs were used, only nine horses and three men would be required to work them, and they would get over the same quantity of work, and there would then be a saving of three men and three horses. These three horses, or at least two of them, might be dispensed with during the greater portion of the year, and perhaps the whole; and the time of the men who would otherwise have been employed in single ploughing would be saved. Taking an average of farms, some light and some mixed, and some heavy soils, an acre per day was accomplished with an ordinary plough, and double this quantity, or two acres a-day might be considered a fair day's work for a double plough. At this rate the ploughing on the whole of the farm would take about 17 weeks per annum. The following calculation would show the saving effected:

Interest on the value of 3 horses at £30, equal to £90, at 5 per cent.	£ 4 10 0
Annual decrease in value, at £2 each	6 0 0
Hazard of loss at 5 per cent.	4 10 0
Annual value of food: 3 horses, at 12s. a-week	93 12 0
Shoeing and farriery, at £1 each	3 0 0
Wages of 3 men, for 17 weeks, at 10s.	25 10 0
Total	137 2 0
Deduct interest on value of 3 double ploughs at £10, at 5 per cent.	1 10 0
	£135 12 0

On 300 acres, this amounted to 9s. per acre. If only two of the three horses could be dispensed with, the saving would still amount to £100, or 6s. 6d. per acre. If they present would consider these figures, they would find that there was something substantial at the bottom of them. Some advocated the using of the spare horses in other work. If the horses were turned to another account and the produce was increased thereby, there would, he thought, still be a saving of the amount he had named. It did not matter to the firm he represented whether they sold single or double ploughs, but it was a matter of considerable importance to farmers, if by the use of double ploughs they could effect such a saving or even half as much as he had named.

SURREY.

At Epsom, Mr. PAGE, the vice-chairman, said the fact is, what they principally required was to be let alone; so far as regarded the farming interest, he believed it would do better without legislation altogether. It had been the rule to impose fresh taxes on farmers from time to time, and the Legislature, like the taskmasters of old, demanded that they should make more bricks with less straw. There was one serious point in connection with agriculture which demanded earnest consideration—he alluded to the diminution of stock in the country. All who are acquainted with the details of farming must know that to meet the increasing wants of the population it must be carried out on a high scale—that is to say, an increased number of stock should be kept on the land to furnish facilities for obtaining larger supplies of manure. Of late years, disease has been imported among our herds with serious effect upon the production of stock, because, in addition to the inroads which the disease made, the breeders of stock were struck with a panic which prevented them from breeding as they used to do because of the risk they run; for nothing is so injurious to a farmer when he has a nice herd of cattle as to see them carried off by disease that might be averted. The Legislature has wisely come to the resolution that the disease is owing to the importation of foreign stock into the country. They have taken some pains to remedy it, but their views are very one-sided—they put in the vent-peg but leave open the bung-hole. They impose most vexatious regulations upon us to stamp out the disease, but at the same time that great offender, Mr. Forster, allows foreign stock from the holds of vessels, reeking

with pestilence, to travel all over the country and spread disease around them. He (Mr. Page) was a member of the Home Cattle Defence Society, and they held that the matter could not be put on a safe footing unless foreign cattle were slaughtered at the point of landing. If this was done, it would tend to lower the price of meat, because the present risk prevents breeding. All the breeders want is security, which they cannot have under the existing regulation as to the importation of foreign cattle. This is a question which affects all classes in the country, for unless something is done the price of meat will be still further enhanced. It had been established by statistics that only five per cent. of the home consumption of cattle is imported; nevertheless, those in high places were willing, by giving an undue advantage to that five per cent., to jeopardise the remaining ninety-five; but when this was represented to the authorities, what was the answer? That the foreigner must not be discouraged, because if he is it will interfere with the supply. If a poor fellow had a cow with a little foaming at the mouth, the magistrates on the county benches were down upon him directly, and, with a good deal of virtuous indignation, fined him £5; yet Mr. Forster takes animals out of the noisome holds of ships reeking with contagion, and gets off scot-free.

SUSSEX.

At Lower Beeding, Mr. HUBBARD, the chairman, said it was sometimes a question with farmers as to which was the most profitable farming, for "corn" or "horu." On considering this question, they must remember the relative value of corn and meat was now very different to what it was one hundred years ago, when it was supposed that a pound of bread and a pound of meat were of equal money value, and he need not stop to point out the difference in the value now, as they knew all about it. Then, again, they had, in considering this question, to remember that the great corn-growing countries of Russia and America, from both of which we drew immense supplies, were extending their growth of wheat to an enormous extent, and particularly so in Russia, a country with which he was much better acquainted than he was with America. But the supply from either of those countries was no doubt practically unlimited, and facilities for transit were now so great that the price of wheat in this country was not likely to vary much. Now, although these countries could produce an abundance of meat as well as corn, the distance was too great for the transportation of fresh meat into the markets of this country, and hence the high and increasing prices which it commands. But whether they farmed principally for meat or for corn, the cultivation of the land must always be a matter of the highest importance to farmers, and good ploughing was always sure to be one essential to the success of the farmer, and they might therefore be said, in giving prizes for ploughs, to have taken one step in the right direction. He should very much like to see in this country more care and consideration given to the well-being of the labourers. He should like to see them better fed, better clad, and better housed than they were. In many parts of the country the dwellings of the agricultural labourer were but wretched huts. A sty might do for a pig, but the labourer who works upon the land should have a wholesome and comfortable habitation. He believed that just round about them they were tolerably well off, but in many other parts they were in a most deplorable condition. It had been given as a reason why farmers did not take more care and account of their labourers that when they were worn out and good for nothing they had no difficulty or expense in replacing them, whilst an agricultural implement or a slave when worn out could not be replaced without a fresh outlay of capital. If they looked into the matter thoroughly, however, farmers, he thought, would see that by not giving greater consideration for the comfort and well-being of their labourers, all the best and most intelligent of them were being taken away from them by the railways to large towns and populous districts. He was very glad to see, however, that both at Shropshire and Westmoreland, where he had lately been, a great improvement had lately been made with regards to the dwellings of the poor. The whole face of the country had been entirely changed by the erection of new cottages on the land, and he hoped soon to see these improvements more general throughout the country, for they might depend upon it that every encouragement possible should be given to those who labour on the land.

WORCESTERSHIRE.

At Alveley Mr. R. WOODWARD said it might be of some little interest to them to know that in the present year—which, as they all know, was not a very productive year—the yield of that wheat, which had been thrashed out in the last two or three weeks, had been 38 bushels (of 62lbs.) to the statute acre. The wheat which gained the first prize went by the name of "Biddle," and he got it four or five years ago from Gloucestershire. That crop of 13½ acres yielded 35 or 36 bushels, which, for the present year, he thought they would not deem a very bad crop. Probably they would not consider it a waste of their time if he went a little into detail as to what their present position was and what were their prospects with regard to the supply of food. They were probably aware that the eyes of the country were very much upon them as agriculturists, and that the Press had taken the matter up very warmly. The *Times* newspaper was very early in the field prognosticating that this or that crop would be a failure, and that this or that crop would be abundant. The *Times* sent round a commissioner (Mr. Sanderson) to examine the crops of the country about the period of harvest time. Probably those present were not all aware of the report which Mr. Sanderson had made to the *Times* as to the result of last year's harvest. It was published in the *Times* some three months ago—about the commencement of harvest. Mr. Sanderson gave it as his opinion that the wheat crop of the present year was somewhat superior to that of 1867, but rather inferior to that of 1860. Many of those present were, he was sure, well aware that the crops of 1867 and 1869 were both very deficient, whereas the crops of 1866, 1868, and 1870 were deemed abundant. Mr. Scott, another eminent agriculturist, published his opinion of the harvest. He had, to some extent, confirmed Mr. Sanderson that the crop of wheat is a very deficient one, and not superior to 1869. What the opinion of those present might be he was utterly unaware, but he was perfectly willing to state his opinion of the crop of 1871. He did not hesitate to say that it was superior in point of yield to that of either 1867 or 1869, although he could not but admit that it was a very deficient crop. The deficiency also with regard to condition was very great indeed. He, however, did not subscribe to the belief that it was as deficient as in 1867 or 1869. Nevertheless he should require a very considerable importation of foreign grain to supply the population of this country with food until the next harvest. He totally differed from the opinion of Mr. Sanderson, that it was an exceedingly bad crop of wheat and a most abundant crop of barley. Mr. Sanderson considered the crop of wheat to be at least 25 per cent. short of the average. He did not think it more than 14 or 15 per cent. below an average crop. Mr. Sanderson believed the barley crop to be 25 per cent. above the average. He had had some little experience of the yield, having thrashed about one-third or one-fourth of his crop. If Mr. Sanderson had informed the *Times* that the barley crop was 10 per cent. above the average of the last four or five years, he would have been much nearer the mark. As to wheat being anything like so deficient a crop as in 1867, he did not believe it. Mr. Lawes, the eminent manure manufacturer, with whom, no doubt, many of them dealt, and whose manures, he understood, were really good, had followed in the wake of Mr. Sanderson and Mr. Scott. He declared the wheat crop to be so deficient this year that he should require thirteen million quarters to carry us on till next harvest. He (Mr. Woodward) did not believe anything of the kind. He thought it probable that as for the last seven years we had imported on an average eight million quarters per annum, we might now be said to require aid to the extent of from seven to ten millions. He felt satisfied, from the information he had from abroad, that if we should happen to require anything like 13 million quarters we should never get them. With regard to the future price of corn—a point on which they might not be inclined to totally disregard his opinion—he thought it would be their own fault if they did not realise for their crop of wheat from 52s. to 60s. per quarter, or, speaking of the Worcestershire bag, from 20s. to 22s. 6d. That opinion he would qualify from the circumstance that the potato crop was said to be going into decay in many parts of the country. He thought that about 8s. a quarter in the price of wheat might for the next six or eight months hinge upon the good keeping, or the decaying of the potato crop. Potatoes culured

largely into the food of this country, and if, during the winter, they decayed and became exceedingly dear, there would be a much larger consumption of bread, and the consequence would be that before they could supplement the present year's crop of wheat by imports to any great extent from America, the Baltic, and South Russia, they might have a rise of even 8s. a quarter in the price of wheat. He had thought it might be *appropos* on such an occasion to give his opinion of the state of the corn market, because this had a very material influence upon the other interests of the country. In fact all eyes were upon the supply of food, and the Press was very forward in making matters known to the people. It was the policy of the Press to make things as smooth as possible lest the public should become alarmed about the deficiency in the supply of food. He need not tell them that the great interests of the country were in a most thriving and prosperous state. They appeared to have emerged from the difficulties that had pressed upon them since 1866. The commercial, manufacturing, and mining interests, were all in a state of great prosperity, consequently there would be an increased consumption of food, and even of luxuries. It behoved all who were interested in agriculture to do their utmost for the common weal. He need scarcely say to any practical farmer that it was a duty he owed to himself and his family, his landlord, and the community at large, to get out of the land as much as he possibly could. At the same time he must not forget, if he extracted from the land a large crop of corn or grass, to put something into that land. It would be as reasonable to suppose that the human frame could endure for a succession of days 16 hours' labour in the 24 hours as that the land could bear overcropping without something being put into it. He therefore urged them not to forget to manure their land; this would afford them the best security for the crops they desired to obain from it. The population of the country, by the last census, was thirty-one millions, and a deficiency of two or three million quarters in the product of wheat was a very serious matter. He did not say but what the country could pay for what it wanted; the surplus of the world came to us. But the greater the proportion of the food of the country which they could produce, the greater would be the wealth and prosperity of the country. That time last year France was desolated by one of the most disastrous wars that ever overtook any European nation. Had the late Emperor been still upon the throne, and that war been avoided, he had not the least doubt, looking to the deficiency in the harvest of France this year, that they would have had at the present moment at least 8s. a-quarter more for wheat, and a proportionate advance in every other description of grain. But in reality the French people were so crippled in their resources from the immense amount of indemnity they had to pay to the Germans that they could not afford to consume the amount of wheaten bread they had been accustomed to, and he did not fear in the foreign markets that competition from a French demand which might otherwise have been experienced. Therefore, he was not sanguine that they could expect very high prices for wheat, although he believed the present price would be maintained, and even increased.

THE STORING OF TURNIPS.

PENRITH FARMERS' CLUB.

At a meeting of this Club, Sir H. Vane presiding, Mr. NEWBY-FRASER, of Hay Close, read a paper on "The Storing of Root Crops," in the course of which he said:

With regard to turnips, of course it greatly depends upon how the farmer intends to consume them during the winter and spring how he will store them; that is whether they are to be consumed in the byres and sheds by cattle, or in the fields by sheep. In my calculation I have always endeavoured as nearly as possible to consume two-thirds of my turnip crop upon the ground by sheep, the remaining one-third being drawn off the fields for the feeding of other cattle at the home-stead; and my plan of storage has been as follows: If the turnips have been intended for hogs, my plan has been to put them into pits containing about three cartloads each, in rows, covering them with a little straw, and above that a layer of two or three inches of soil, allowing an opening in the top of

the pit for any air to escape through that may have been caused from heating, &c. For Swedish turnips that have been sown early, say in May, that have attained to their full growth, and which are intended to be consumed by feeding hogs, I have found no plan succeed so well as this, both for the safe keeping of the turnips, and also for advantage to the hogs themselves, as in average seasons they come out in February and March, clean, fresh, and dry, with very frequently not more than one dozen bad ones out of the three cartloads. If the turnips are later sown and have not arrived at full maturity, I have generally pulled two rows or drills at a time, placed them into a deep fur opened between the two rows by means of the plough, and the returning plough covers them in. By this method I have frequently known turnips add one-third to two-thirds bulk between 1st of December and 1st of March, in addition to which they are taken up sound, sweet, and fresh, with scarcely a rotten root amongst them; and another advantage is, that all cutting and poaching of the land in a wet November or December is thus entirely avoided. I have noticed many farmers simply allow the roots to remain in the field as they grow; run a double mould-board plough between the drills, with a strong deep hold, and thus throw a certain amount of earth around the plants, but this plan I have never adopted, nor do I approve of it, either in theory or practice. The two plans that I have adopted certainly came at the first to a little more expense and trouble, but I am inclined to think that eventually they are much the most profitable, and my idea is that the thing "worth doing at all is worth doing well." If the turnips are intended for consumption by aged sheep, such as two and three-year-old Cheviots or black-faced wethers, fold ewes, clipped hogs, &c., I should not attempt to do anything with them at all; but merely allow them to remain in the field growing, and take their chance as to the character of the winter. I have never had any occasion to attempt the storage of common turnips, having always contrived to get them consumed by Christmas at the latest by both cattle and sheep, so that the foregoing remarks must be taken as applying merely to the Swedish varieties. Next, as to the storage of turnips intended to be drawn off the fields, and consumed by cattle; and here you will forgive me for saying that upon how the turnips are got out of the ground and stored depend in a great measure to the feeding of your cattle during winter. I maintain that all swede turnips intended for cattle feeding ought not to be sown later than the end of May, and pulled and stored not later than the 1st of December, in a clean, dry condition. I never saw anything more forcibly illustrated than this was last winter, for I had about 120 head of cattle tied up feeding for the latter part of November and early part of December, and as a consequence we were only enabled to get some 200 cartloads of turnips led, in a very middling state, by the middle of December, the remainder being backed up at intervals as it was found practicable, the consequence being that my cattle did not thrive nearly so well as they otherwise would have done had the turnips been stored in a dry, clean state; but this was attributable entirely to the exceptional character of the season. In storing turnips for cattle feeding, being well off for turnip houses, I have at the commencement of the season filled them as full as possible, and the remainder I have usually carted and put into long rows at some convenient and suitable place near the farm building, making each pit about four and a half feet wide at the bottom, and about the same height in the centre. When the turnips have been thrown up and placed in proper form, I have had them covered with a slight layer of straw, and above that some two or three inches of earth. In ordinary seasons turnips keep very well this way, and generally come out fresh and green. Another plan I have found succeed very well is that of measuring out a square, say ten yards long by ten yards broad, and throwing up the turnips, cartload by cartload, until they attained to an average and regular height of say five or six feet. When the heap is completed they are left in a nice square, and by throwing on the top of the heap a covering of clean, dry wheat straw, and above that three or four inches of horse manure, I have found them keep uncommonly well.

A brief discussion followed the reading of the paper; and votes of thanks to Mr. Fraser and the chairman brought the meeting to a close.

SHEEP BREEDING AND MANAGEMENT.

BY THE NORTHERN FARMER.

While a well-managed flock pays well every season, affording ample pecuniary encouragement to its owner to preserve a high standard of excellence, by the continual infusion of new blood from the best strains in the kingdom, there are yet years exceptionally good, when the regular breeder makes a large sum over the profit ordinarily gained, by the sudden increase in value of this description of stock. The present year affords an example of this, quite striking enough to draw the attention of all connected with this branch of husbandry, either as breeders, feeders, or dealers. The demand for sheep during the past six months has been unusually brisk, and prices have risen in a corresponding ratio. Now that breeders are making up their stocks for the ensuing season, it becomes actually difficult to purchase any lot with the least pretention to character, without having to give a fancy price for it; and those who are fortunate enough to hold largely, add very considerably to the receipts which might fairly be calculated on, as the result of capital judiciously invested. In former years, when a ran upon sheep occurred, the high prices were principally confined to the best breeds, but of late all descriptions have participated in the rise in value, from the scraggy mountaineer, requiring years to fatten, to the magnificent Leicester, whose native pastures are the park of a nobleman, and whose ripe maturity is attained in the brief period of twelve months. The excellent milking properties of the poorer breeds of sheep, and the valuable offspring they are thus enabled to rear when crossed with a first-class ram, is the principal reason for their gradually assuming a forward position in public estimation: this, coupled with the cheap rate at which till now the ewes could be bought in, and the superior quality of the mutton when of the right age, has apparently kept up a continually increasing demand, which has at length resulted in comparative scarcity, and very great increase in value.

In choosing a flock of ewes to hold over for breeding purposes, there is not the slightest occasion for having them superbly grand, faultless in symmetry, or even of extra large size, as a firmly-built, strong-loined, compact ewe of but moderate bulk, while not being such a large consumer of food, is in general a much better nurse than a big-honed one, a feature in the character of a breeding flock, which can scarcely be overestimated, and which no rent-paying farmer can afford to overlook. Grantly-bred heavy-fleshed ewes are a very unsafe investment when taken from fine soil and dry climate to land and climate slightly inferior. It takes them a full year to become acclimatised, and if not carefully attended to the first winter in the matter of food and shelter, many will die, while a considerable portion will be mere shells when the spring comes round, utterly unable to rear their lambs profitably. On the very same keep, ewes selected more for their thrifty qualities than the grandeur of their appearance, and coming from pastures scarcely so good, will do well from the day they arrive, give no trouble, and make an excellent return in money. The receipts from wool forming a very considerable item in the year's returns, and the present price being very high, those ewes possessing wool of good quality and promise of a weighty fleece will naturally have the preference, and being much sought after will cost more than short-woolled sheep in consequence. A close firm fleece rather than a lengthy open one, should be

the standard aimed at, the former keeping out the drenching rain much better than the latter, and preserving the skin dry and comfortable through a lengthened storm. Moreover, a close fleece is always indicative of a sound constitution, the ewe possessing it seldom being a bad doer.

In the choice of a ram much care should be exercised, as much of the future well-doing of the flock depends on his influence. Whatever his breed let it be pure, and he will, although not distinguished for faultlessness of symmetry himself, yet be able to transmit to his progeny all the good qualities of his race. At present the run on the white-faced breeds is particularly noticeable, the sums realized at recent sales for shearing rams of this variety being something extraordinary. To some extent this preference may be traced to the superior clip of wool which can be secured from the white-faced breeds, and the high value at which it now rates: but undoubtedly the perfection of form which breeders of this class of sheep have attained, and the great weights which they can be fed up to at an early age, is the principal reason for the high position they now hold in the estimation of the public. If possible rams should be purchased from a well-known flock, possessing the best blood, hardness of constitution, good wool, and bone which, while not coarse, is yet of sufficient strength to carry a heavy easement.

Rams overfed, and so loaded with fat as to be incapable of following the ewes with any degree of activity, should be carefully avoided, as they are productive of much disappointment and very serious loss. It is unreasonable to expect that an animal whose appetite has been pampered and stimulated with a variety of fat-producing foods, until the weight of his body has become an intolerable burden, and that has been carefully sheltered from wind, rain, and sun, could possibly prove as useful as one that had been fed altogether in the fields, his food principally grass, merely assisted with a little corn, roots, or cabbage, according to the season, or that his progeny could be so sound and healthy. Cutting off only the points of the wool, and permitting the bulk of a whole year's growth to remain, for the purpose of covering real or imaginary defects in the formation of the animal operated on, is a disgrace to the intelligence of the age, and a blot on the character of those who practise it, which should for ever be wiped out by its immediate discontinuance. With regard to the animal which has the misfortune to be subjected to such treatment, it becomes the very refinement of cruelty—a fact that ought to be quite sufficient to secure its condemnation, even although the motives which prompted it were perfectly pure, instead of being an effort to make more money by giving an appearance of symmetry, which they do not really possess. After all the trouble that has been gone to, it is the eye only that is deceived, as the moment the hand is placed upon the apparently beautifully forward and deep chest, the broad square back, or the well-filled thighs, the truth is ascertained. There is a tell-tale bunchiness of body about the falsely clipped sheep, which can never be attained when clipped fairly, nature refusing to be improved to the extent which some men seem to think necessary. Should it so happen that a purchaser is deceived for the time being, the illusion will be quickly dis-

pelled when the fleece is taken off the following season. Should it be considered desirable to breed crosses purity of blood is quite as necessary by the sire as when the blood is preserved unmixed, the first cross between two distinct breeds being invariably the most valuable. Although excellent results can be obtained by crossing, early maturity, heavy weights, and high prices, yet for the farmer who does not feed off his sheep it is safer to preserve his flock pure, as he can command better prices for his store stock when of a good sort, and his customers are more likely to become permanent, giving him for store stock considerably over what they would make in open market when their value as breeders is fully ascertained. The neat bright head, neck well set on, and general elegance of contour tells well in the sale of a lot of breeding ewes when all are so nearly alike as to look as if they had been cast in a mould. There is another advantage secured when the breed is kept pure, an opportunity being afforded for disposing of a number of the rams for breeding purposes, either as lambs or hoggets, whichever age is most sought after in the district. If the farm on which they are reared is a sound one for sheep, there will be no difficulty in selling a considerable number at remunerative prices. If sold as lambs anything over 50s. each will be good payment, when no expense has been incurred for extra food, and if a good many are sold the average price of the year's lambs will be raised to a much higher figure than could otherwise be reached. Keeping over for another year, and giving a portion of cake or corn, and selling as shearlings is not such a certain mode of making money, it being quite possible that after all the sheep may have to be sold at butcher's price. The reason for this is simply, that they are now beyond the price which the small or middling farmer will give for a ram, and coming into competition with the regular ram breeders, their customers will not purchase from an unknown flock, when for but a few pounds more they can have a sheep whose line of descent can be traced unaltered through many generations. Rams of good blood being now to be had at a reasonable rate, there is not the

same temptation to overwork them as there was in years past, and it will pay to get an extra ram, thereby reducing the number of ewes with each to a safe limit. Forty ewes are quite sufficient, when the price of an extra ram is not a consideration, and the fall of lambs will be greatly improved both in strength and numbers. When the lambs come to be drafted, the presence of a large number of weaklings pulls down the monetary returns most vexatiously, and no effort should therefore be spared in endeavouring to have the entire lot as even as possible. When the ewes are with the rams, it is all important that the food should be abundant, and of a stimulating nature if possible; a run for an hour or two each day on a piece of succulent rape answering the latter purpose exactly. Liberal treatment at this stage has a great influence on the lambing season, the number of twins being greatly in excess of what is usually the case under less favourable conditions. A pint of corn each day, begun a few weeks previous to, and continued through the period of service, is of immense benefit to the ram, and will be well repaid by his hardiness of constitution and unimpaired usefulness and activity. On those farms where the whole of the lambs not required as breeders are cleared off at the age of from four to six months, it is of importance to have them dropped early, February being about the best paying month of the year, providing an ample supply of food has been stored up for their use. If sheltered for the first few nights, until they have fairly strengthened and become familiar with the teat, it is amazing what a degree of cold they will endure, and how much really bad weather they will stand with impunity, and thrive all the time, if the dams have plenty of food. The young grasses and clovers hained up from harvest to lambing time form the best milk-producing pasture the ewes can be put on after lambing, and when grazed thus early the fields are cleared in plenty of time to grow a crop of hay the same season, scarcely at all inferior to what they would have done had they been permitted to remain untouched.

POOR-RATE ASSESSMENT AND CATTLE DISEASE RESTRICTIONS.

At a quarterly council meeting of the Somerset Chamber of Agriculture and County Association of Ratepayers, held at Taunton, Mr. Thomas Baker presiding, the following letter was read from Mr. J. Waller, secretary to the Home Cattle Defence Association, to the secretary of the Somerset Chamber:

Dear Sir,—I read with true interest and pleasure the calm, well expressed, and forcible communication addressed by you to the Lords in Council which appeared in Saturday's *Times*. Such a communication cannot fail to have some weight; but, knowing the influence as I do of foreign cattle importers with the Veterinary Department, I am convinced that it is only by prosecutions and by the purchase and exposure of infected animals passed as sound, and such like practical measures, that anything really effective can be done. Will the Somersetshire Chamber of Agriculture aid us with "the sinews of war" in endeavouring to second their sentiment by the means I have named? By "us," I mean the Home Cattle Defence Association, to whose address, 81, Fenchurch-street, a reply, consistently with your convenience, will greatly oblige, my dear sir, yours respectfully, JOHN WALLER.

The question of subscribing to the funds of the Association named was referred to the finance committee. The secretary, Mr. H. Genge Andrews, presented the following series of resolutions, which were approved and carried:

1. Resolved,—That, in the opinion of this council, the enforcement of effective regulations for preventing the im-

portation of foreign cattle disease, and a radical reform of the basis on which the poor-rate assessment is now levied, are two subjects on which chambers of agriculture should concentrate their agitation between this and the opening of the next session of Parliament.

2. That nothing short of the sale and slaughter of all foreign fat animals, and quarantine for lean stock, at every port licensed for the admission of foreign cattle can have the slightest chance of excluding infection or contagion, where latent in the imported animal.

3. That grants of money from the Consolidated Fund, and such remissions of taxation as the house-tax, are bonuses to the owners of personal property, paid from the national exchequer to enable the House of Commons and the Ministry of the day to avoid the duty of removing the exemption complained of, and of restoring the poor-rate assessment to its original principle, namely, that all persons should contribute to it "according to their ability."

4. That, therefore, no rest can be found for the agitation now raised against the exemption from the poor-rate assessment of income arising from personal property, until such property is made liable to the assessment by an Act of the Legislature.

5. That Mr. Goschen's report on Local Taxation, presented to the Lords of the Council in the last session of Parliament, page 49, has shown that upwards of 16½ millions will be annually collected under the poor-rate assessment when the

education rate and repairs of turnpike roads are added thereto in full.

6. That a large number of legislators and other influential persons, being owners of invested capital and of annual incomes now exempted from the poor-rate assessment, benefit largely by this unjust exemption.

7. That the influence of those who benefit has continued the temporary annual Act of Exemption obtained in 1840, placed many new and heavy charges on the assessment, and increases those heavy charges continually.

8. That, unless the efforts of the owners and occupiers of real property, and of any other property now liable to the assessment, be combined and effectively used to secure, by Act of Parliament, the removal of this unjust exemption, this enormous annual charge of 16½ millions will be perpetuated on rateable and real property, with such unlimited additions to it as the Parliamentary influence of those who benefit by it may from time to time enforce on the Government of the day.

9. That the proofs of the unfairness and injustice of the exemption are—the 43rd of Elizabeth; the reports of the Lords thereon in 1850; the decisions of the Court of Queen's Bench, given by the Lord Chief Justice Littledale; the law of Scotland, founded on the law of Elizabeth; and the annual Exemption Act of 1840, which admits the liability of personal property by an Act of a temporary character, to screen it from the effect of the decision of the courts of law.

10. That, were the assessment once replaced by Parliament on its original basis of equal contribution according to "ability" or "means and substance" equality in taxation would be secured, the anomaly of exemption of large classes of income abolished, and all classes would have an equal interest in establishing and maintaining the best possible mode of administration and control, by central and local authorities.

11. That this council, in conjunction with the Central Chamber and the Local Taxation Committee, under the able presidency of Sir Massey Lopes, will continue to use its utmost efforts to influence Parliamentary constituencies in favour of a radical reform of the basis on which the poor-rate assessment is now levied, in which reform the payers of the rates now levied in towns are more deeply interested than any other owners or occupiers of rateable property.

The hon. treasurer was authorised to apply for payment of the parochial and individual subscriptions reported by the finance committee as being in arrear.

ROSS AGRICULTURAL SOCIETY.

The show of cattle was very limited in extent as compared with that made in previous years. This falling-off is accounted for, in a measure, by the prevalence of foot-and-mouth disease in the district; but there was also another reason for the deficiency, in the fact that at least one intending exhibitor sent his stock too late for admission, according to the rules of the Society, and they had, therefore, to be returned. Of the sheep, Mr. Armitage, who was deservedly successful, regretted at the dinner there were so few to compete with him at the show; but he spoke in praise of the specimens in the other classes shown by Mr. Wigmore, Mr. Kearsey, and Mr. Loveridge. The pigs were not in any way remarkable. The poultry show, a new feature, contained a good collection, contributors hailing from all parts of the kingdom.

PRIZE - LIST.

JUDGES.—Stock: W. Evans, Llandowlas, Usk; R. Keene, Pencraig, Newport; — Porter, Baunton, Cirencester. POULTRY: E. Hewett, Birmingham.

CATTLE.

HEREFORDS.

Bull more than two years old.—Prize £3, G. E. Drinkwater.

Bull under two years old.—No entry.

Two breeding cows and their calves (belonging to the same subscriber), over three years old.—Prize, £2, G. E. Drinkwater. Commended: J. Bennett.

Pair of heifers under three years old.—Prize, £2, T. P. Brown. Commended: J. Bennett.

Pair of heifers under two years old.—Prize, £2, J. Bennett.

SHORTHORNS.

Bull, irrespective of age.—Prize withheld.

Two breeding cows in calf, or with calves (belonging to the same subscriber), over three years old.—Prize withheld.

Pair of heifers in calf under three years old.—No competition. One entry disqualified through being too late.

Pair of heifers under two years old.—Prize, £2, Wm. H. Collins.

ANY BREED.

Lot of breeding cattle, in proportion to the acreage of land in the occupation of the exhibitor.—Prize, £3 3s., T. P. Brown.

SHEEP.

LONGWOOLS.

Pen of ten breeding ewes.—First prize, £3 3s., and second, £2 2s., R. Loveridge. Commended: J. Wigmore, J. E. Jones, E. Price.

Pen of ten yearling ewes.—First prize, £3, J. E. Jones; second, £2, W. Smith. Highly commended: J. Wigmore.

Pen of ten ewe lambs.—First prize, £2, J. Hartland; second, £1, G. Morgan. Commended: A. Webb.

Pen of ten wether lambs.—First prize, £2, J. Hartland; second, £1, A. Webb. Commended: G. Morgan.

Ram lamb.—First prize, £2, J. Hartland; second, £1, J. and F. Wigmore. Commended: F. W. Barling.

Yearling Ram.—First prize, £3, and second, £2, J. Wigmore.

Pen of breeding ewes (occupiers up to 100 acres to show 10, above 100 and up to 150 acres 15, and so on in proportion, *i. e.*, five sheep for every fifty acres or proportion thereof).—Prize, £3 3s., R. Loveridge. Commended: J. Wigmore.

SHORTWOOLS, INCLUDING CROSS-BREDS.

Pen of ten breeding ewes.—Prize, £2, A. Armitage.

Pen of ten yearling ewes.—Prize, £2, A. Armitage.

Pen of ten ewe lambs.—Prize, £2, W. Marfell. Commended: A. Armitage.

Pen of ten wether lambs.—Prize, £2, A. Armitage.

Pen of breeding ewes (occupiers up to 100 acres to show 10, above 100 and up to 150 acres 15, and so on in proportion, *i. e.*, five sheep for every fifty acres or proportion thereof).—Prize, £3 3s., A. Armitage.

PIGS.

Boar pig.—First prize, £2, Rev. W. Holt Beaver; second, £1, Sir Herbert Croft, Bart., M.P.

Sow in farrow or with pigs.—First prize, £2, C. Kearsey; second, £1, J. Hartland.

Pig belonging to an agricultural labourer wholly in the employment of a subscriber, and to have been in the possession of the exhibitor three months prior to the show.—First prize, £1 5s., G. Tansell; second, £1, W. Greenway; third, 15s., J. Seaborn.

EXTRA PRIZES.

One dozen swedes, 5s., A. Webb. Four cross-bred pigs, 2s. 6d., A. Webb. Twelve swedes, 5s., F. W. Smith. Half-bred filly, £3, T. P. Brown. Spaniel, 5s., J. Wigmore. Hunter, 10s., T. Donne, Ross. Ten stock ewes, 10s., J. and F. Wigmore. Three ram lambs, £1, J. and F. Wigmore. Three ram lambs, £1 5s., J. Wigmore.

Sheep dog.—First prize, £1, T. Burford; second, the entrance fees, J. Weavin.

GRAIN.

Four-bushel sack of red wheat.—First prize, £2 2s., C. Kearsey, "Biddle's Imperial;" second, £1 1s., T. P. Brown, "Biddle's Imperial."

ROOTS.

Four acres of swedes, grown with Webb and Co.'s chemical manure, within a radius of 12 miles of the town of Ross.—Prize, £5 5s., G. E. Drinkwater.

Four acres of turnips grown with Webb and Co.'s chemical manure, within a radius of 12 miles of the town of Ross.—Prize, £5 5s., A. N. Dowle.

Two acres of mangold wurzel, grown with Webb and Co.'s chemical manure, within a radius of 12 miles of the town of Ross.—Prize, £5 5s., G. W. Lloyd.

Three acres of swedes, grown within a radius of 10 miles of Ross, with Foster Brothers' phospho guano; farmyard manure may be used, but no other description of artificial manure.—Prize, £5 5s., R. Loveridge.

Three acres of turnips, grown within a radius of 10 miles of

Ross, with Foster Brothers' phospho guano; farmyard manure may be used, but no other description of artificial manure.—Prize, £5 5s., F. W. Smith.

Six acres of swedes, grown in the Ross district with the Herefordshire and South Wales Company's manures.—Only one entry; prize not awarded.

Crop of five acres of swedes, grown with Proctor's turnip manure only, within a radius of 15 miles of Ross.—Prize, £5 5s., Mrs. E. Bennett.

BLOFIELD AGRICULTURAL ASSOCIATION.

The meeting at Acle was one of the best and most numerous exhibitions of stock this Association has ever held. There were some excellent farm horses, and a small show of entire cart horses. Mr. J. N. Waite's Major, brother to the celebrated Honest Tom, won the society's prize of £3. For Mr. Walpole's cup there was an entry of only four mares and foals, all first-class animals. Mr. Robert Gillett's chesnut cart mare, that has often been successful at these shows, was again first in her class. Mr. Mainprice's big bay mare making a very good second. In the three-year-old cart colt class, Mr. Aldous was first, and Mr. R. Gillett second. The animals in this and the two-year-old and yearling cart colt classes were very commendable, and there was a good entry of foals. In the riding class Mr. E. Gilbert's bay was first; and among the riding colts, Mr. Thomas Gillett took the first and second prizes. In the cattle classes, the society's first prize went to Mr. T. W. Jary, for his yearling Shorthorn bull, bred by Mr. Kersey Cooper, a well-grown but somewhat plain animal, with coarse horns and a good skin. The chief feature of the stock classes at the Blofield Association has always been the fat steers or heifers. The prize of two guineas for the best fat steer or heifer went to Mr. S. Goulder for his white Shorthorn heifer, very neat, and well fattened. There was some very strong competition for a cup, given for the best steer or heifer not bred by the exhibitor. In this class, Mr. T. W. Jary showed a bullock of enormous proportions, but the cup went to Mr. J. Squire's deep, level, and evenly-fed Shorthorn. Mr. Squire took both prizes for the pair of steers or heifers for winter grazing. In this class there was a large and good entry. The Shorthorn cows were not particularly attractive; but again Mr. Squire was the winner of both premiums. The sheep were by far the best entry that had ever been seen at this local show; although of these classes the ewes were not remarkable either for quality or size. The pigs, if not numerous, were a very good entry.

PRIZE - LIST.

JUDGES.—STOCK: Messrs. R. Wortley (Suffield), R. Barker (Blickling), and J. Seago (Stoke Holy Cross).
ROOTS: Messrs. W. Slipper, A. Neave, and H. Baker.

HORSES.

Pair of cart geldings or mares.—Prize, the cup, T. W. Jary. The class commended.

Cart stallion.—Prize, £3, J. N. Waite (Major). Commended: C. Tidman (Thumper).

Cart stallion under four years old.—Prize, £2, Messrs. E. and T. D. Gilbert.

Cart mare and foal.—Prize, a cup, T. Gillett. Highly commended: R. Gillett.

Cart mare.—First prize, £3, R. Gillett; second, £1 10s., J. Mainprice.

Three-year-old cart colt or filly.—First prize, £2, J. A. Aldous; second, £1, R. Gillett. The class commended.

Two-year-old cart colt or filly.—First prize, £2, J. A. Aldous; second, £1, E. Gilbert. The class commended.

One-year-old cart colt or filly.—First prize, £2, R. Gillett; second, £1, E. Gilbert. The class commended.

One-year-old cart colt or filly.—First prize, £2, R. Gillett; second, £1, T. W. Jary.

Cart foal.—First prize, £2, J. Squire; second, £1, W. Gillett. The class highly commended.

Riding mare or gelding.—Prize, £2, E. Gilbert.
Riding colt or filly.—First prize, £2, T. Gillett; second, £1, T. Gillett.

CATTLE.

Bull.—First prize, £3, T. W. Jary; second, £2, D. Walker (Vauban).

Fat steer or heifer.—Prize, £2 2s., S. Goulder. Highly commended: J. Squire.

Fat steer or heifer.—First prize, a cup, J. Squire; second, £2, R. R. Kidman. The class commended.

Pair of steers or heifers for winter grazing.—First and second prizes of £2 and £1, J. Squire.

Shorthorn cow.—First and second prizes of £2 and £1, J. Squire.

Polled cow.—Prize, £2, S. H. Benns.

Three-year-old heifer.—Prize, £2, T. W. Jary.

Two-year-old heifer.—Prize, £2, S. H. Benns.

Four steers or heifers.—Prize, £2 2s., J. Squire.

SHEEP.

Top.—First prize, £2, H. N. Brronghes; second, £1, E. Gilbert.

Ten ewes.—First prize, £2, E. and T. D. Gilbert; second, £1, R. H. Gilbert.

Five fat sheep.—First prize, a cup, E. Gilbert; second, £1, J. A. Aldous. The class commended.

Ten lambs.—First prize, £2, E. and T. D. Gilbert; second, £1, D. Bullard. The class commended.

PIGS.

Boar.—Prize, £2, E. Garrett.

Sow.—First prize, £2, J. A. Aldous; second, £1, J. N. Waite. Highly commended: R. H. Gilbert.

Six store pigs.—First prize, £1 10s., R. H. Gilbert; second, 15s., R. Gillett.

ROOTS.

Crop of roots grown upon a farm of not less than one hundred acres in extent, the quality of the land being taken into consideration.—First prize, a silver cup, J. Squire; second, J. Aldous.

CANNOCK DISTRICT AGRICULTURAL ASSOCIATION.

The twenty-fifth annual show took place at Penkridge. The epidemic prevalent affected to some extent the entries in the cattle classes. On the other hand, the horses, both for agricultural purposes and those adapted for hunting, came out very strong. Mr. Nash, of Featherstone, carried off the prize for bulls, having only one other competitor. The class for pairs of milking cows was much better represented, and the prize animals were very good specimens. Mr. Bradburn, who took the first prize in the above class, also exhibited a very nice pair of heifers, for which he received a similar reward. There was a very fair show of Shropshire sheep, Mrs. Beach, of The Hattons, who exhibited in every class, carrying off all the first prizes except in the ram lamb class. The judges were of opinion that it was scarcely worthy of so celebrated an exhibitor as Mrs. Beach to compete at a small district show with animals which had taken prizes at the Royal and other leading shows against what might be termed pasture sheep. About the best class were the ewe lambs, which would have been a credit to any show. In fact, considering the season, they were extraordinarily good. The wether lambs, too, were little inferior, showing plenty of character and breeding. The ram lambs, though the most numerous in number, were not by any means so good in quality as the two preceding classes. The show of pigs was small, but very good. In boars the two Berkshires exhibited by Mr. Wyatt carried off the prizes, the younger of the two being placed first. For store pigs Mr. Byrd, of Littywood, took the first prize with a very nice pen of the small white breed. The roots, as might be expected from the favourable season, were extremely fine. The horses were the strong point of the show. For agricultural purposes the mares and foals were the best class in the yard, and the judges had considerable difficulty in making their selections. The hunting horses, however, made the finest display, both the weight-carriers and those

of lighter frame being represented by exceptionally good specimens.

PRIZE LIST.

JUDGES.—Stock: W. Brewster, Balderton Hall, Middle, Salop; J. Evans, Ullington, Shrewsbury. HUNTING HORSES: E. C. Peake, Rugeley; T. Mansell, Adcot, Wellington.

CATTLE.

Bull.—Prize, T. Nash, Featherstone.
Pair of milking cows.—First prize, W. Bradburn, Wednesfield; second, T. Nash.
Pair of in-calf heifers.—Prize, W. Bradburn.
Pair of stirks.—Prize, T. Nash.

HORSES.

AGRICULTURAL.

Mares and foals.—First prize, J. Thornley, Hednesford; second, J. Sidney, Wobaston. Highly commended: H. Rogers, Wolgarstone.

Two-year-old colts.—First prize, Mrs. Stanley, Yieldfields Hall; second, J. Marson, Acton. Highly commended: J. Goodwin, Otherton.

Yearling colts.—First prize, J. Birch, Pearse Hay; second, R. Swale, Saredon.

HUNTERS.

Weight-carriers.—First prize, E. M. Vaughan, Lapley; second, W. F. Tredwell, Hednesford. Highly commended: E. A. Foden, Teddeslay.

Light-weight carriers.—First prize, H. Rogers; second, B. Gilpin, Wedges Mills. Highly commended: C. Stubbs, Preston Hill; A. L. Vernon, Brewood.

SHEEP.

Ewes.—First prize, Mrs. Beach, The Hattons; second, R. Wyatt, Acton Hill.

Yearling ewes.—Prize, Mrs. Beach.
Yearling wethers.—First prize, T. J. Griffin, Preston Vale; second, G. B. Keeling, Penkridge.

Ewe lambs.—First prize, Mrs. Beach; second, R. Wyatt. Highly commended: F. J. Keeling, Brewood.

Wether lambs.—First prize, Mrs. Beach; second, H. Rogers. Highly commended: H. Rogers.

Ram lambs.—First and second prize, C. Byrd, Littywood. Highly commended: Mrs. Beach.

PIGS.

Sow and pigs.—First prize, J. Birch; second, R. Wyatt. Highly commended: C. Stubbs.

Boars.—First and second prize, R. Wyatt. Commended: W. Drury, Cannock.

Store pigs.—First prize, C. Byrd; second, R. Gilbert, Penkridge.

ROOTS.

Collection.—First prize, C. Stubbs; second, J. Lees, Drayton; third, F. Byrd, Dunston.

Crop of swede turnips.—First prize, G. B. Keeling (24 tons 15 cwt.); second, C. Stubbs (23 tons 16 cwt. 8lbs.)

Common turnips.—First prize, C. R. Keeling; second, R. H. Masfen, Pendeford.

Mangolds.—First prize, J. Brawn, The Bosses; second, E. Rowley, Norton Causes.

SALE OF MR. M'COMBIE'S POLLED STOCK AT TILLYFOUR.

Mr. William M'Combie, M.P., Tillyfour, has disposed of his stock of polled Aberdeenshire and Angus cattle. From his celebrity as a breeder of stock, it was expected that a large number of dealers would turn out to the sale. And such indeed, was the case, for the morning trains brought large numbers of purchasers to Tillyfour. The stock for sale looked exceedingly well; but a thorough agriculturist, with a keen, defective eye, could observe a considerable falling off in the quality since the days when Mr. M'Combie took such a prominent place in the prize lists of northern cattle shows. The fact that Mr. M'Combie has in his possession about one hundred medicals and cups, which were awarded to him for his proficiency in cattle breeding, gives evidence that his stock was at one time more than ordinarily superior; but of late years the animals have scarcely been so pure in blood. In fact, the pedigree of the animals is not what might be expected in a herd once so famous. There is yet, however, in

the Tillyfour herd a number of those fine old cows which took high honours at Southern shows; and we are doubtful if better models of animals could yet be found in the North. There could not have been round the ring less than 600 people. The sale commenced with the cows, of which there was a fair show. Most of the animals looked well, but fears were entertained by purchasers that some of them were not in proper season; and this fact had, no doubt, an effect in lowering the prices in some degree. Good figures were, however, realised, but it may be stated that the cows sold cheaper than any of the other stock. The Marquis of Huntly purchased the finest cow, which was an animal of good substance and long pedigree. Two years old heifers realised excellent prices, the first animal on the list having been purchased at 60 guineas. The biddings for this class of stock was very keen. The yearling heifers were a first-class show, and some of these sold at high prices.

COWS.

Elf, calved 1865.—Lord Airlie, 37 gs.
Rosie, calved 1866.—Mr. Ross, Anniesby, Kincardine O'Neil, 27 gs.

Flora, calved 1869.—Lord Cawdor, 30 gs.
Myra, calved 1868.—Mr. Williamson, Caskieben, 25 gs.
Daisy, calved 1869 (and bull calf).—Mr. Stevenson, Tillyfour, 33 gs.

Edith, calved 1865.—Mr. Walker, Ardhunchart, 37 gs.
Dido, calved 1867 (and heifer calf).—Mr. Paterson, Mulben, 45 gs.

Dora, calved 1868.—Marquis of Huntly, 49 gs.
Deceit, calved 1866.—Mr. Martine, Aberdeen, 31 gs.
Lady Magg, calved 1868.—Mr. Adamson, Balquharn, 33 gs.
Hopeful, calved 1867.—Mr. Todd, West Braekla, Kinross, 30 gs.

Mina, calved 1868.—Colonel Farquharson, Invercauld, 31 gs.
Rachel, calved 1868.—Mr. Walker, Auchnafairn, 29 gs.
Haida, calved 1859.—Mr. Adamson, Balquharn, 32 gs.

TWO-YEAR-OLD HEIFERS.

Grace.—Marquis of Huntly, 60 gs.
Rarity.—Dr. Robertson, Indigo, 26 gs.
Mysie.—Colonel Ferguson, Pitfour, 32 gs.
Kindness.—Mr. Simpson, Tarwathie, Strichen, 22 gs.
Sophia.—Mr. M'Combie, Easter Skene, 23 gs.
Diana.—Mr. Adamson, Bocharn, 25 gs.
Joan.—Mr. Adamson, Bocharn, 30 gs.

YEARLING HEIFERS.

Calved April 14, 1870.—Earl of Airlie, 28 gs.
Calved August 2, 1870.—Mr. Stephen, Conglass, 28 gs.
Calved May 3, 1870.—Mr. Bland, Camphill, 15 gs.
Calved August 12, 1870.—Sir George Macpherson Grant, 40 gs.
Calved May 16, 1870.—Mr. Barclay, Auchlossan, 19 gs.
Calved June 1, 1870.—Mr. Stevenson, Tillyfour, 42 gs.
Calved July 9, 1870.—Mr. Manson, Kilbean, 23 gs.
Calved April 30, 1870.—Col. Ferguson, Pitfour, 21 gs.
Calved May 7, 1870.—Mr. J. Smith, Campfield, Kincardine O'Neil, 17 gs.
Calved August 16, 1871.—Mr. Smith, Cividley, Keig, 15 gs.
Calved 1870.—Mr. Bland, Camphill, 18 gs.
Calved 1870.—Mr. J. Burness, Harthill, 20 gs.

THREE-YEAR-OLD BULL.

Prince of Wales.—Dr. Robertson, Indigo, 36 gs.

BULL CALVES.

Calved January 7, 1871.—Mr. M'Kenzie, Glenomick, 33 gs.
Calved March 9, 1871.—Sir G. Macpherson Grant, 56 gs.
Calved March 26, 1871.—Mr. Hunter, Whitehill, Strichen, 25 gs.
Calved April 5, 1871.—Mr. Adamson, Balquharn, 28 gs.
Calved April 14, 1871.—Mr. Bland, Campfield, 25 gs.
Calved April 27, 1871.—Mr. M'Combie, Easter Skene, 21 gs.

HEIFER CALVES.

Calved December 16, 1870.—Mr. M'Combie, Kenmay, 28 gs.
Calved January 19, 1871.—Mr. Paterson, Mulben, 29 gs.
Calved March 30, 1871.—Mr. Stevenson, Tillyfour, 19 gs.
Calved March 12, 1871.—Mr. J. A. Pearson, Johnston Lodge, Laurencekirk, 19 gs.
Calved April 5, 1871.—Mr. Walker, Portlethen, 15 gs.
Calved April 22, 1871.—Mr. Manson, Oakill, Oldmeldrum, 25 gs.
Calved June 4, 1871.—Mr. Shaud, Bittencurrie, Banchoy, 18 gs.

SALE OF THE HON. COL. DUNCOMBE'S SHORTHORNS,

AT WARESFLEY PARK, HUNTINGDONSHIRE, ON OCTOBER 20.

BY MR. THORNTON.

The herd at Waresley Park has been quietly improving the stock of the immediate neighbourhood and the Westerdale estates in Yorkshire, for more than a quarter of a century. Unknown to the outside public or frequenters of the showyards, it yet produced many very superior animals, and eleven years since, when sixty-two head averaged close upon £30, the purchasers found that they had obtained animals which left excellent stock. A few cows were added to those remaining, which, by the way, were retained for supplying the house with milk. One, Larkspur, came from Mr. Crawley's sale, another, Calistra, from Mr. R. Dudding's, and a third, Geraldine, as well as Telltale, from the Bushey Grove stock; but by far the larger portion of the herd had been reared from the old foundation, and the most numerous family came from the Countesses, a tribe which had been obtained from Tyneside quite thirty years back, and which was full of the good old Jobling and Angus blood. There was also a large family of the Warlaby Fame tribe, but the crosses had not been of the same strain; as indeed, the bulls used had always had some Bates' blood. Cleveland Lad 3rd, one of the earliest, was a son of the sire of Grand Duke; Sylvester, bred by Lord Feversham, at Duncombe Park, was by Glo'ster, a son of Lord Ducie's Duke of Glo'ster; and then followed Volunteer, a son of Marmaduke, who was by Duke of Glo'ster also. Very few bulls had been purchased of late years, the best reared being used. A change, however, being considered necessary, General Wetherby, a good useful roan bull, was brought from Gloucestershire. He was bred at Kingscote, and got by Second Duke of Wetherby, out of one of the Georgiana cows. His calves were very full of hair and of nice colours, but they seemed to want a little more natural flesh. Many considered them a trifle small: they certainly had none of the coarseness that may now-a-days be seen in some of the more fashionable strains, but their uniform appearance, the pretty character, especially in the heads and horns, their excellent quality and good milking properties, made them very taking, and certainly, for the district, very desirable cattle. Mr. Barnett took the chair at the lunch, and his brief speeches were models of what should be done on these occasions, when business is the real object of the company. About 300 assembled round the ring-side, and despite the showers which fell at the beginning of the sale the biddings were very general, in many cases two bidders running for lot after lot. The old cows were very good, and as most of them were in a good breeding state, Capt. Reed was fortunate in obtaining such a good lot of animals as the beginning of a herd, lot 3, Sally, being being a particularly good animal and an excellent breeder. The prices were very even for the first ten cows. Mr. Ladds bought one of the Fame cows, Queen of the Mist, said to be the best milker in the herd, very cheap at 42 gs.; and lot 11, of the same tribe, a sweet-looking fine cow, goes to Australia at 63 gs. Patty 3rd, a true Shorthorn, as an old Lincolnshire breeder styled her, went very cheap at 55 gs.; and Selina, who had calved in the morning of the sale, was reserved by leave of the company as a cow for the house. Mirabel, a white Fame heifer, was bought by Messrs. Dudding, at 45 gs. and Mr. Greenwood secured some very useful lots for Mr. Banks Wright. The heifers were a very nice lot: perhaps the plum of the herd was Sugar Loaf, a very beautiful red heifer with a little white

on her quarters, but her sweet head, nicely curled horns, and grand quality of flesh were very taking: she was purchased for Mr. Dangar, to go to Australia, at 50 gs.—the top price of the sale. There was rather a preponderance of white animals; and it was quite noticeable to observe the want of competition when a white entered the ring as compared with the other colours. The younger members of the Fame tribe were purchased by Mr. Rose, of Norfolk, who is just starting a herd; and Mr. J. Gambie, also took several symmetrical lots of fine quality into the same county. The first two bulls made only a few guineas over market price, but the yearlings went at good paying figures. Although a good hairy lot, many of them wanted broader backs; still, as a whole, they were better than is generally seen in a large herd. Mr. Grosvenor Hodgkinson, M.P., gave 50 gs. for the thickest, and a very promising roan yearling; Francis 1st, very like making a winner, goes to Mr. Brown, in Northamptonshire, for 45 gs. The two last calves were not brought forward.

COWS AND HEIFERS.

Larkspur, roan, calved February, 8, 1859, by Welcome Guest (15197).—Capt. Reed, 32 gs.
Geraldine, red, calved November 7, 1860, by Great Mogul (14651).—Mr. C. Baynes, 38 gs.
Sally, red, calved July 27, 1862, by Volunteer (19087).—Capt. Reed, 39 gs.
Mulberry, red, calved February 16, 1863, by Volunteer (19087).—Capt. Reed, 41 gs.
Windsor Lass, roan, calved May 9, 1863, by Royal Butterfly 5th (18756).—Mr. H. B. Wright, 43 gs.
Silk, red, calved March 26, 1858, by Sylvester (15364).—Earl of Cawdor, 36 gs.
Satin, roan, calved November 25, 1863, by Volunteer (19087).—Mr. H. B. Wright, 40 gs.
Lavender, red, calved December 30, 1863, by Confederate (19493).—Mr. W. Trethewy, 49 gs.
Calistra 2nd, roan, calved March 10, 1864, by Volunteer (19087).—Mr. Edwards, 35 gs.
Queen of the Mist, red, calved April 16, 1864, by Volunteer (19087).—Mr. W. Ladds, 42 gs.
Sugar Plum, red and white, calved August 21, 1864, by Hypocrite (19996).—Capt. Reed, 37 gs.
Girl of the Mist, roan, calved May 21, 1865, by Hypocrite (19996).—Mr. H. Grant, Australia, 63 gs.
Patty 3rd, roan, calved July 25, 1865, by Hypocrite (19996).—Major Fanning, 55 gs.
Windsor Queen, white, calved March 29, 1866, by Sailor Boy (22825).—Capt. Reed, 40 gs.
Tit-for-Tat, white, calved September 18, 1866, by Sailor Boy (22825).—Mr. T. Watson, 36 gs.
Mirabel, white, calved April 4, 1867, by Sailor Boy (22825).—Messrs. Dudding, 45 gs.
Spray, white, calved November 25, 1867, by Sailor Boy (22825).—Mr. H. B. Wright, 42 gs.
Calistra 4th, white, calved December 21, 1867, by Sailor Boy (22825).—Mr. J. Gambie, 35 gs.
Sarsnet, roan, calved January 10, 1868, by Sailor Boy (22825).—Earl of Cawdor, 49 gs.
Soft Soap, roan, calved February 15, 1868, by Sailor Boy (22825).—Mr. T. Topham, 47 gs.
Countess of Windsor, white, calved May 21, 1868, by Cantab (23507).—Mr. Banks, butcher, 42 gs.
Hyacinth, red, calved June 26, 1868, by Cantab (23507).—Mr. S. Armstrong, 33 gs.
Queen Mab, red, calved October 8, 1868, by Cantab (23507).—Mr. T. Rose, 51 gs.
Sylph, roan, calved October 20, 1868, by Cantab (23507).—Mr. W. Ladds, 40 gs.
Lily of the Valley, white, calved November 20, 1868, by Cantab (23507).—Mr. G. Brown, 40 gs.
Mountain Dew, roan, calved February 5, 1869, by Cantab (23507).—Mr. T. Rose, 50 gs.
Sally Lum, red, calved March 3, 1869, by Cantab (23507).—Mr. S. Armstrong, 30 gs.
Songstress, roan, calved March 31, 1870, by Cantab (23507).—Dr. Willis, 30 gs.

Sugar Loaf, red and white, calved April 17, 1869, by Cantab (23507).—Mr. W. Dangar, Australia, 80 gs.
 Windsor Pride, roan, calved April 22, 1869, by Cantab (23507).—Mr. C. P. Tebbutt, 36 gs.
 Tartlet, roan, calved June 8, 1869, by Cantab (23507).—Mr. C. P. Tebbutt, 26 gs.
 Camelia, white, calved September 30, 1869, by Cantab (23507).—Mr. J. Parker, 32 gs.
 Water Witch, red, calved February 15, 1870, by General Wetherby (24026).—Mr. T. Rose, 36 gs.
 Sunflower, red, calved February 26, 1870, by General Wetherby (24026).—Mr. J. Parker, 41 gs.
 Duchess Wetherby, roan, calved June 20, 1870, by General Wetherby (24026).—Mr. S. Beattie, Canada, 40 gs.
 Duchess Wetherby 2nd, red, calved July 15, 1870, by General Wetherby (24026).—Mr. J. Parker, 35 gs.
 Duchess Wetherby 3rd, roan, calved September 11, 1870, by General Wetherby (24026).—Earl of Cawdor, 40 gs.
 Duchess Wetherby 4th, white, roan ears, calved November 28, 1870, by General Wetherby (24026).—Mr. J. Gamble, 25 gs.
 Duchess Wetherby 5th, white, calved November 28, 1870, by General Wetherby (24026).—Mr. J. Gamble, 30 gs.
 Sweet Brier, red, calved January 16, 1871, by General Wetherby (24026).—Mr. G. Underwood, 31 gs.
 Erica, red, calved February 3, 1871, by General Wetherby (24026).—Mr. G. Tilcock, 21 gs.
 Heather Bell, white, calved February 28, 1871, by General Wetherby (24026).—Mr. T. Rose, 30 gs.
 Maid of the Mist, roan, twelve years old, by Admiral (14064).—Mr. T. Rose, 61 gs.
 Petroleuse, red, calved March 3, 1871, by General Wetherby (24026).—Capt. Reed, 27 gs.
 Patty 5th, white, calved March 13, 1871, by General Wetherby (24026).—Mr. S. Armstrong, 25 gs.
 Windsor Belle, red roan, calved March 21, 1871, by General Wetherby (24026).—Mr. F. Curtois, 24 gs.
 Firefly, red roan, calved April 6, 1871, by General Wetherby (24026).—Mr. F. Curtois, 23 gs.
 Duchess Windsor, roan, calved Aug. 2, 1871, by Windsor Lad (27823).—Mr. T. Rose, 22 gs.

BULLS.

General Wetherby (24026), roan, calved in May, 1865, by Second Duke of Wetherby (21618).—Earl of Gawdor, 46gs.
 Windsor Lad (27823), roan, calved May 11, 1867, by Sailor Boy (22825).—Mr. G. Armstrong, 46 gs.
 Duke Wetherby 3rd, red, calved February 3, 1870, by General Wetherby (24026).—Mr. W. Trethewy, 47 gs.
 Mosquito, red, calved March 9, 1870, by General Wetherby (24026).—Earl FitzWilliam, 35 gs.
 Windsor Boy, white, calved March 14, 1870, by General Wetherby (24026).—Mr. Hartley, 47 gs.
 Etonian, roan, calved May 28, 1870, by Windsor Lad (27823).—Mr. H. Franklin, 37 gs.
 Duke Wetherby 4th, red, calved July 3, 1870, by General Wetherby (24026).—Mr. D. M. Brown, 26 gs.
 Duke Wetherby 5th, white, roan ears, calved July 14, 1870, by General Wetherby (24026).—Mr. Webb, 35 gs.
 Splendour, roan, calved Sept. 6, 1870, by General Wetherby (24026).—Mr. G. Hodgkinson, M.P., 50 gs.
 Duke Wetherby 6th, roan, calved Nov. 24, 1870, by General Wetherby (24026).—Mr. C. Ellis, 30 gs.
 Windsor Prince, white, roan ears, calved Nov. 7, 1870, by Windsor Lad (27823).—Mr. A. Brown, 34 gs.
 Duke Wetherby 7th, white, calved Nov. 30, 1870, by General Wetherby (24026).—Mr. D. Hartley, 24 gs.
 Randolph, red and white, calved March 2, 1871, by Mr. Pawlett's Rubens.—Mr. Campion, 15 gs.
 Warrior, roan, calved January 11, 1871, by General Wetherby (24026).—Mr. J. Barnes, 21 gs.
 The General, red, calved February 6, 1871, by General Wetherby (24026).—Mr. G. Brown, 33 gs.
 Francis 1st, white, calved March 10, 1871, by General Wetherby (24026).—Mr. D. M. Brown, 45 gs.
 Earl of Windsor, white yearling.—Mr. D. Gunnell, 30 gs.
 Sponsor, roan, calved March 18, 1871, by General Wetherby (24026).—Mr. D. Willis, 31 gs.
 Marshal, roan, calved May 8, 1871, by General Wetherby (24026).—Mr. G. Paris, 18 gs.
 Field Marshal, white, calved July 11, 1871, by General Wetherby (24026).—Mr. R. Ellis, 11 gs.

Don Quixote, red and white, calved June 20, 1871, by General Wetherby (24026).—Mr. Millard, 19 gs.
 Balmoral, red and white, calved August 1, 1871, by Windsor Lad (27823).—Mr. C. Ellis, 12 gs.
 Aurelius, roan, calved Sept. 2, 1871, by General Wetherby (24026).—Mr. G. Armstrong, 9 gs.

The following is a summary of the sale:

43 Cows averaged	£40	3s.	3d.	.....	£1,927	16
23 Bulls averaged	£32	0s.	0d.	.....	736	1
71 Averaged	£37	10s.	4d.	£2,663	17

At the finish of the sale, Mr. Thornton said that it concluded the season, and was probably the last sale that would take place in England this year. Before separating, he wished to remark that it had been a year unprecedented in the history of Shorthorns. Upwards of fifty sales had taken place, and about £100,000 had changed hands for pure-bred animals by auction, and that, too, at a time when the country was full of disease. This herd and Mr. Ladd's, recently sold in that district, had realised an average of nearly £10 a-piece for close upon 200 head, a fact that should impress young farmers that well-bred stock could be reared on a light-land district and be made to pay. He earnestly hoped that they would breed more cattle than they had done. People were for grazing, chiefly because it was a quicker return, but the country required more stock to be bred in it, both of cattle and sheep, and in producing more stock we should decrease the demand and value of foreign cattle, and so get the country into a healthier state. The high price of meat was the best proof of its scarcity, and the more there were bred the better for the country, and for auctioneers too. The demand for our pedigree cattle was continually increasing. Animals were leaving the country almost weekly for Australia and America, a few animals had been already bought up for Germany, and at the present moment there was a French agent in England buying bulls for the new Government. Mr. Thornton strongly advised the use of good bulls upon common country cows, adding "look well to the pedigree, but do not, on any consideration, sacrifice flesh and substance to too much blood."

SALE OF MR. R. W. REYNELL'S SHORTHORNS IN IRELAND.

This sale had been postponed since the dispersion of the Westland and Castle Grove herds in August last, on account of the foot-and-mouth disease. The stock having become healthy were announced for sale by Mr. Thornton at Killynon, Killucan, Co. Westmeath, on Tuesday last, the 24th instant. In addition to the small herd of Shorthorns, a few Hereford bulls, some sheep, fillies, and pigs were also advertised. The weather being everything that could be wished a numerous company attended. The stock having, however, but a local reputation there was an absence of buyers from England and Scotland as well as from the south of Ireland. Notwithstanding the severe attack the cattle came out in good condition; only one animal was lame, and there was an abundance of fine hair and natural flesh that is not often seen. For five-and-twenty years Mr. Reynell has bred the stock from his friends, the late Mr. Holmes' and Mr. Barnes' herds, Westland bulls having for the last three or four generations been used. The cows went at reasonable prices to local bidders; but for the heifers, which were very choice, there was excellent competition. Mr. Cox, of Anstralia, bought a very handsome red in-calf two-year-old by Mr. Barnes' Duke of Leinster, out of a half-sister to the dam

of Bolivar, for 50 gs. A very symmetrical white heifer with splendid forequarters by Royal Prince (27384), a bull hired by Mr. Torr, of Aylesbury, went for 53 gs. to Mr. W. Barnes. The gem of the sale was a beautiful roan hairy January calf, by Lord Spencer (26738), which, after sharp competition between Mr. Shirley Montgomery and Mr. Stowell Garnett, fell to the latter for 80 gs. Mr. Garnett also bought the Pauline family and two or three other good heifers. There was no trade for the bulls, the spring being the great season in Ireland, and the seven reduced the £35 average for the cows and heifers to £32 2s. for the entire herd of 28 head. There was still less competition for the Hereford bulls, which had been bred from the best of Lord Berwick's, Mr. Price's, and Mr. Burlton's blood; several white faces were not sold, and 20 gs. was the top price for a good two-year-old bull by Sir Harry (2767), out of a cow from Mr. Price. The sheep were chiefly large good hoggets, and 131 averaged 57s. each; but the pigs were mere suckers, though pure Berkshires, and very good-looking. A sow and her litter of four fetched £11 10s.; and seven little pigs, a week old, ultimately went for nearly £2 a-piece. The sum total of the sale was £1,521.

THE SMITHFIELD CLUB SHOW.

(FROM A SUPPLEMENT TO THE LONDON GAZETTE.)

At the Council Chamber, Whitehall, the 11th day of November, 1871, by the Lords of Her Majesty's Most Honourable Privy Council. Present:—Lord President; Mr. Hammond. Whereas the Lords of Her Majesty's Most Honourable Privy Council have by a licence bearing even date with this order licensed the Metropolitan Board of Works, as the local authority for the metropolis under the Contagious Diseases (Animals) Act, 1869, to hold under the direction of the Smithfield Club, at the Agricultural Hall, in the parish of Islington, in the metropolis, on the 4th, 5th, 6th, 7th, and 8th days of December, 1871, the exhibition and sale of cattle and other animals, commonly known as the Smithfield Club Cattle Show (and in this order referred to as the show); and whereas the licence provides for the appointment of a pass master to the show, and of two veterinary surgeons for the show; and whereas it is necessary that further provision be made for the regulation of the show: Now, therefore, the Lords and others of Her Majesty's Most Honourable Privy Council, by virtue and in exercise of the powers in them vested under the Contagious Diseases (Animals) Act, 1869 (in this order referred to as the Act of 1869), and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows:—

1. Words in this order have the same meaning as in the Act of 1869.

2. Cattle that have been in the metropolis for more than seven days before the opening of the show shall not be admitted thereto, and cattle brought to the metropolis for the show shall be taken direct thereto.

3. No cattle shall be admitted to the show without a licence for the purpose from the Commissioner of Police of the metropolis, or of the City of London.

4. Each animal before admission to the show shall be examined by the veterinary surgeons for the show, or one of them; and if on such examination any animal is found to be affected with any contagious or infectious disease, it shall not be admitted to the show.

5. If any case of cattle plague occurs in the show the council of the Smithfield Club shall cause all the animals in the show to be forthwith slaughtered, in pursuance of the condition to that effect contained in the licence.

6. If any case of foot-and-mouth disease occurs in the show the following regulations shall have effect:—

(1.) The animals affected with foot-and-mouth disease shall be slaughtered in the metropolis, and for that purpose shall be moved to a slaughterhouse, with a pass of the pass-master of the show.

(2.) The animals not so affected may be moved and dealt

with as if a case of foot-and-mouth disease had not occurred in the show.

7. If any case of contagious or infectious disease other than cattle plague or foot-and-mouth disease occurs in the show, the animals in the show shall be liable to be dealt with as if this order had not been made.

8. If no case of contagious or infectious disease occurs in the show, cattle exhibited in the show may be moved (in accordance with the provisions of this order, and not otherwise), as follows:—

(1.) They may be moved out of the show for slaughter in the metropolis.

(2.) They may be moved out of the show, and then alive out of the metropolis.

9. Cattle moved out of the show for slaughter in the metropolis shall be moved only with a pass given by the pass-master of the show to the owner or purchaser desirous of moving the same.

10. All cattle exhibited in the show and not moved out of the metropolis shall be slaughtered in the metropolis on or before the 21st day of December, 1871.

11. Cattle moved out of the show and then out of the metropolis shall be moved only in manner and subject to the conditions following:—

(1.) There shall be a licence of the Commissioner of Police of the metropolis for the movement.

(2.) Such licence shall only be granted on a certificate of health signed by one of the veterinary surgeons for the show, and a certificate of the pass-master of the show of the cattle having been exhibited in the show.

(3.) If the cattle are moved out of the metropolis by railway, they shall be conveyed in properly constructed cattle vans, without stopping, to the railway station, and there be transferred from the van directly to the railway truck.

(4.) If the cattle are moved out of the metropolis otherwise than by railway, they shall be conveyed, without stopping, from the show out of the metropolis in properly constructed cattle vans.

(5.) Provided that if any cattle being so moved, while in the metropolis, come accidentally or otherwise in contact with any cattle not having been exhibited at the show, they shall not be moved out of the metropolis, but shall be slaughtered in the metropolis.

12. If no contagious or infectious disease occurs in the show, animals (other than cattle) exhibited in the show may be moved out of the show and out of the metropolis as if this order had not been made.

The schedule contains the following forms:—

(1.) Pass for slaughter in case of foot-and-mouth disease.

(2.) Pass for slaughter in case of healthy cattle.

(3.) Licence for movement out of metropolis with certificates annexed.

13. Any dung of animals, and any hay, straw, litter, or other thing commonly used for food of animals, or otherwise for or about animals, shall not be moved out of the show without a certificate of one of the veterinary surgeons for the show, certifying that the thing moved has not been in contact with, or being used for or about any animal affected with a contagious or infectious disease, or that it has been properly disinfected.

14. Where the licence of a commissioner of police is required under this order, the commissioner is hereby empowered to grant the same, and the commissioner may at any time, if he thinks fit, revoke any licence granted by him.

15. Licences, certificates, and passes required under this order shall be in the respective forms given in the schedule to this order, or to the like effect.

16. This order shall have full effect notwithstanding anything in the Metropolitan Contagious Diseases (Animals) Order of August, 1869, or in any other order of the Privy Council.

17. If any person or body does anything in contravention of, or fails to comply with any of the provisions of this order, such person or body shall be deemed guilty of an offence against this order.

EDMUND HARRISON.

SEWAGE AS A FERTILIZER OF LAND, AND LAND AS A PURIFIER OF SEWAGE.—Mr. Bailey Denton will read a paper on this subject at the Society of Arts on the Wednesday in the Smithfield Show week.

THE CENTRAL CHAMBER OF AGRICULTURE.

A meeting of the Council and deputed members of provincial Chambers was held at the Salisbury Hotel, Salisbury Square, on Tuesday, November 7, under the presidency of Sir M. Lopes, M.P.

The SECRETARY announced that the Shropshire Chamber had doubled its subscription to the funds, and that the Duke of Rutland, the Earl of Leicester, and Lord Leigh had become life-members by the payment of £10 each. A few new ordinary members were then elected.

The CHAIRMAN stated that at the meeting of the business committee, the previous night, it was unanimously agreed to recommend the Council to pass the amended articles of association *en bloc* without resuming the discussion at the 27th which stood adjourned from the 3rd of May last. In this view he himself quite concurred, though of course it was open to any gentleman to object to the proceeding.

Mr. C. M. CALDECOTT (Warwickshire) then moved the following resolution, as prepared by the business committee: "Considering that the rules proposed by the committee appointed on December 7th, 1870, are calculated to meet the views of the majority of the Chambers of Agriculture, particularly with respect to the power of making laws and the equalization of the voting power in proportion to numerical membership and money contribution to the Central Council, this Council accepts those rules as now submitted to it." In making this proposal, Mr. Caldecott observed that, so far as his Chamber was concerned, it was perfectly satisfied with the rules as they stood, with the single exception of the 27th, which related to the constitution of the business committee. The number of members was much too large for a working committee, and the new rule constituting a committee to consist of the Chairman, Vice-chairman, and seven members, would, he believed, be a great improvement. One complaint of the associated Chambers at a distance was that they had not the representative power at the general meetings which they ought to have. That power would, however, be given them by the new rules, so that the objection was practically done away with, and they would have a hearty union established between the Central Chamber and the great northern districts. The code had been amended by a committee which might be said to represent all opinions, and had carefully weighed the objections urged against every proposition. He thought, therefore, the Council might take the rules upon the responsibility of that committee, and try them for the next twelve months, at the end of which period, if they did not act well, they might be further altered.

Mr. T. WILLSON (Olney) seconded the motion for reasons similar to those adduced by the proposer.

Mr. D. LONG (Gloucestershire) moved, by way of amendment, to expunge the 27th rule recommended by the committee, and to restore the original rule, which provided that the Business Committee should comprise the Chairman, Vice-Chairman, and twenty-four elected Council members, with power to add to their number from the deputed members, and which arrangement, he contended, had not been found inconvenient.

Mr. GENGE ANDREWS, in seconding the amendment, objected to placing the Council so entirely in the hands of a small committee, as the new rule would do. Nothing, indeed, could be more inconsistent with the independence of the Council, who, in the end, might find themselves hampered by a mere clique; besides, the new rule directed that the committee should meet previous to every Council meeting to prepare resolutions and arrange all matters for the consideration of the Council; and if the committee were to meet for these purposes the evening before the Council meeting he did not see how it would be consistent with the twentieth rule, which required that the subjects to be considered in Council should be included in an agenda forwarded to each associated Chamber fourteen days before the day of discussion.

Mr. C. S. READ, M.P. (Norfolk) was as desirous as any one to see the committee composed entirely of representative men, and there was no reason why that should not be the case.

For who were to elect the seven men? Fifty-six members appointed by the district Chambers and eight members only appointed by the Central Chamber. If the fifty-six could not control the eight, surely they ought to be able to do so. All the committee had to do was to arrange the business for the following day.

The amendment of Mr. Long, on being put to the meeting, was negatived by more than two to one; but another proposal from the same quarter, to the effect that four at least "of the seven committee men should be deputed members," was, after being seconded by Mr. Corrance, M.P. (Suffolk), agreed to. With this emendation, the twenty-seventh rule was accepted; and the resolution moved by Mr. Caldecott was then adopted.

The following report from the Local Taxation Committee was laid before the Council by Sir M. Lopes, Chairman of that body:

LOCAL TAXATION COMMITTEE REPORT, NOVEMBER, 1871.

The Local Taxation Committee in presenting their Report feel that it is an appropriate time to issue a summary of their proceedings during the past nine months, and refer to the progress they have made during that period towards the attainment of the objects they have had in view. In the first place the Committee feel much satisfaction in calling attention to the vast amount of increased interest which is being taken by all classes in the subject of Local Taxation Reform. This is evidenced to some extent by an analysis of the present state of the Committee as compared with its condition at the commencement of the Session. The names of the Committee are printed with this Report (together with a list of subscriptions already received and promised up to this date). At the beginning of the Session ten only of the Committee were members of the House of Commons; at present eighty-three of the General Committee are members of the Legislature. Many other influential persons, who have been led to see the importance of the subject through the efforts of the Committee, have also added their names to the list. The Committee feel that they are entitled to congratulate their friends and themselves on these results. Three years ago, when this subject was first introduced by the Chairman in the House of Commons, there was comparatively little sympathy or response. Now it seems to be very generally admitted that great grievances exist, and that it is imperatively necessary that some remedies should be applied, and that the whole subject should receive full, fair, and impartial consideration. It will be in the recollection of many that last autumn the Committee, at the suggestion of their Chairman, drew the attention of the Magistrates at Quarter Sessions to the small control which they exercised over the County Rates, and which are generally supposed to be under their exclusive and independent control; whereas 80 per cent. of the total expenditure is, by statute obligatory, levied for national purposes. The Magistrates were asked to consider whether it would not be advisable for them to petition the Legislature against this anomaly. The Committee are glad to be able to state that this suggestion met with great success, and early in the Session a large majority of Courts of Quarter Sessions adopted the course suggested, and forwarded petitions to the House of Commons. The Committee subsequently deemed it advisable to appeal to the Ratepayers generally, through Boards of Guardians; and here again the result justified their sanguine expectations. It appears from the thirty-second report of the Select Committee on Public Petitions, that 274 petitions (very numerous signed) have been forwarded to the House of Commons, praying for a reform of the existing system of Local Taxation. Numerous petitions were also presented, praying that certain clauses in the Army Regulation Bill, which would not only continue, but very much aggravate the system which makes the County Rate chargeable with all expenses connected with Militia Storehouses and billeting, might not pass into law. On the 28th of February the Chairman brought the subject of Local Taxation under the consideration of the House of Commons, in the following motion: "That inasmuch as many of the existing and contemplated charges on the Local Rates are for national purposes, and that it is neither just nor politic that such charges should be levied exclusively from one description of property (*viz.*, houses and land), this House is of opinion that it is the duty of the Government to inquire forthwith into the incidence of Imperial as well as Local Taxation, and take such steps as shall ensure that every description of pro-

erty shall equitably contribute to all national burdens." This was the first occasion on which those of the Committee who are members of the House of Commons, felt themselves justified in pressing for a division. The result was highly gratifying; for though in a minority, yet the number of their supporters was sufficiently large to justify the course which had been taken. The committee have reason to know that that number would have been considerably increased had Government met this motion by a direct negative; but, owing to their moving the previous question, the Chairman was precluded from making a reply, and many members who sympathised with the motion voted with the Government; a distinct promise having been given by Mr. Goschen that he would introduce a Bill dealing fully with the whole subject. It is also worthy of notice that the House was more than ordinarily full on this occasion, and that, amongst the 195 members who voted in the minority, there were many who usually vote with the Government, thus proving that the question is not regarded from a party point of view, an object which has been steadily borne in mind by the committee from the very beginning, and which they deem most essential. Full and corrected copies of the reports of the various speeches in this debate have been printed and widely circulated among Chambers of Agriculture, Boards of Guardians, and other local bodies who are interested. Numerous well attended and influential meetings have been held in various districts of the metropolis for the discussion of the subject. The following resolution has been on each occasion unanimously adopted: "That as many of the charges now defrayed from the poor-rate are national in their object, it is neither just nor politic that such charges should be levied exclusively on one class of persons and property, and that this meeting, fully recognising the great evils attendant upon Government interference with local matters, deem it expedient that a petition shall be prepared for presentation to Parliament, praying that all national charges shall be transferred from local to imperial taxation, and that in all future legislation on this subject the principle of local control over local affairs shall be distinctly recognised." It is thus made very evident that the ratepayers (householders and others) are becoming alive to the injustice under which they suffer, and it is to be hoped that other large towns will follow the example of the metropolis, and convene meetings for the discussion of this most important subject. The committee have strenuously exerted themselves to oppose all clauses in the various bills brought before Parliament during the present session, which, if passed, would have increased the charges upon ratepayers. These bills are enumerated below, and a few remarks are appended, pointing out what appeared objectionable in them, and also giving the results which have been obtained by the efforts of the committee and their friends:

1. The Rating and Local Government Bill,
2. The Local Taxation Bill (Both withdrawn).
3. The Clauses in the "Army Regulation Bill" relating to Militia Barracks and Storehouses (defeated).
4. Clause 18 in the "Elections (Parliamentary and Municipal) Bill" (defeated).
5. Municipal Corporations (Boroughs, &c., Funds) Bill (withdrawn).
6. Prison Ministers' Bill (withdrawn).
7. Registration of Voters Bill, No. 1,
8. Registration of Voters Bill, No. 2 (Both withdrawn).
9. Pauper Inmates Discharge Bill (passed).
10. The Vaccination Act (1867) Amendment Bill (passed).

The committee would here remark, that in the case of these ten bills, which, either in whole or in part, they considered prejudicial to the interests of ratepayers (inasmuch as they would have imposed increased burdens upon them) their opposition has been effective, with the exception of the Vaccination Act Amendment Bill, and the Pauper Inmates Discharge Bill. These two Bills were carried through the House at the very close of the session, when the great majority of members had left town, and when full or fair discussion as to their merits was utterly impossible. The committee consider they are entitled more particularly to congratulate their friends on the withdrawal of Mr. Goschen's two bills (the Rating and Local Government Bill, and the Local Taxation Bill). This result has been mainly due to the active exertions of the various Chambers of Agriculture as well as other ratepayers. As soon as these bills were introduced the committee published an analysis of them in connection with the report previously issued by Mr. Goschen. They succeeded in pointing out the numerous fallacies which abounded in this Report, and the general incompleteness and inaccuracies of the returns on which they were founded, and consequently the injustice of the conclusions to which the Bills were intended to give effect. Their effect would have been to promote discussion and discord between Owners and Occupiers; and it was palpable that their tendency was to divide these

common interests, and so to weaken the opposition, formidable as long as it was united, of these two classes. With regard to the "Army Regulation Bill," Lord George Hamilton (one of the members of the Committee), in the House of Commons, opposed Clause 7, by which the Government proposed to transfer the power of granting Commissions in the Militia from Lords-Lieutenant to the central authority, but at the same time to continue and extend the system which charges the County Rates with all the expenses of Militia Storehouses, and building Militia Barracks. In the Division which followed Lord George's motion the Government gained a bare majority of two in a full House. The Committee have published and widely-circulated a full and corrected report of this debate, together with an analysis of the Division List, and there is reason to believe that the Government will not persist in their attempt to increase Local charges in this direction. The Committee determined to oppose most strongly Clauses 18, 19, 20, and 21 of the Elections (Parliamentary and Municipal) Bill, which would have thrown a considerable proportion of Electioneering expenses upon Ratepayers, and thus were glad to find that the name of a distinguished supporter of the Government appeared to the first amendment that was moved to the 18th clause. In consequence of the result of the Division on this Amendment, other Amendments, in the name of your Chairman and other members of the Committee, were never reached, as the Government abandoned all the Rating Clauses after the decisive Division taken on the first Amendment. The Committee have circulated among the Chambers of Agriculture a full report of this debate with the Division List. It will have been observed that the chief argument raised by almost every speaker during this debate had reference to the injustice of adding in the slightest degree, for any new object whatever of a National character, to the already heavy amount of local burdens. The Committee feel it to be matter of congratulation that, in a House when 416 members were present, these rating clauses should have been rejected by the large majority of 96. Bearing in mind that on a previous division Lord George Hamilton's motion to expunge the rating clause of the Army Regulation Bill was lost by a majority of two, it must be admitted that there is much to encourage hope and continued exertion in the future, and that no Government will endeavour to force contributions of this or any other National character, exceptionally from one section of the community, and from one description of property only. In the Municipal Corporations (Boroughs, &c., Funds) Bill, the Committee would point out that Clause 2 proposed to give absolute and unlimited powers to governing bodies to charge on the Borough Rates the cost of promoting, furthering, or opposing any measures or objects which they might think fit, at the expense of the Ratepayers, without their consent and approval, and depriving them of their constitutional right of Appeal if they felt aggrieved. Clause 5 was of a retrospective character, and would have given the Secretary of State power to charge on the Borough Fund such expenses as might have been incurred during the previous three years, even in such cases as that of Sheffield, where Courts of Justice had decided that they were illegal. These clauses, as tending to increase the charges upon Ratepayers to an indefinite amount, and for any purpose whatever, were steadily resisted by the Committee. It appears manifestly unjust that "governing bodies" should have the power of spending large sums without the control of the Ratepayers, and without special reference to their opinions and wishes. If such arbitrary powers had been conferred, Ratepayers would have been continually involved in litigation, and whether the schemes promoted or opposed were sanctioned or not, the expenses in either case would have fallen on them. In the Prison Ministers' Bill, Clause 3 would have given the Secretary of State power to appoint Ministers of any persuasion (where the prison authorities had failed to do so), if the average number of prisoners of that persuasion had exceeded ten during the three years preceding. These officials were to be paid very liberal salaries, according to a schedule attached to the bill, and, though appointed by the Home Secretary, their salaries were to be paid out of the county-rates; and they would have been quite independent of the visiting justices. During the past session two bills were introduced to regulate the Registration of Voters; No. 1 with regard to counties, and No. 2 with regard to boroughs. Both these bills proposed to charge the expenses of registration upon the ratepayers. It should here be remarked that a portion of the expense is already borne by ratepayers, but the bills proposed to create a new officer to be paid for by ratepayers, and to that extent to diminish the duties of the Revising-Barrister. Had these bills become law an additional charge of at least £150,000 per annum would have been added to the rates. Mr. Pell and Mr. Clare Read opposed the second reading of No. 1 Bill, and it was ultimately withdrawn, and shortly afterwards No. 2 met with the same fate. In the "Pauper Inmates Discharge and Regulation Bill" clause 9 provides that if guardians fail to provide casual wards with such fittings and furniture as may be approved by the Poor-law Board, they shall not be entitled to repayment from any Parliamentary grants. The committee are of opinion that this description of pauper in-

mates ought to be classed as vagrants, and as such should be under the jurisdiction of magistrates, and not under the Poor-law Guardians. The committee would also remark that police cells have already been provided at the expense of the ratepayers, and are available for the reception of vagrants. £7,000,000 have been already expended out of the rates for Union-houses alone since 1835, and it is unjust that Poor-law Guardians should be compelled to expend constantly (and without any discretion being allowed them) further sums at the instance of the Poor-law Inspectors. In the Vaccination Act (1867) Amendment Bill, clause 5 makes obligatory the appointment of an officer to be called the "Vaccination Officer," who is to be paid out of the rates. Formerly the appointment of such an officer was optional with the guardians. With regard to this clause Mr. Pell moved, in the House of Commons: "That it is neither just nor expedient to charge the local rates with payments as authorized by this bill, but that effect should be given to the Report of the Select Committee on the Vaccination Act (1867), 'that the efficient working of the Act would be promoted by the contribution of a considerable proportion of the expenses from moneys to be voted by Parliament.'" It is satisfactory to note that when the Chairman called the attention of Mr. Forster to this recommendation of the Select Committee, to the effect "that a considerable portion of the expenditure should be defrayed from the national exchequer, inasmuch as it was for the national benefit," the Vice-President of the Council admitted the justice of the suggestion, although he stated, that, in his opinion, it could not be carried out in the present bill; but, that he would support it when the whole question of Local Taxation was considered next session. The Committee, after much consideration, did not think it advisable to oppose the Local Government Board Bill introduced by the Government, inasmuch as it proposed to give no increased power to the Executive, and to detract nothing from local control, but simply aimed at effecting a concentration of the authority which at present exists, though inconveniently distributed among several distinct departments. At an interview of the Executive Committee with Mr. Stansfeld (the President of the then Poor-law Board), shortly after the introduction of the bill, he strongly disavowed any intention to prejudice (under the title of the Bill) the position taken up by the Committee, of insisting upon a distinction between charges of a local and national character. He denied that any centralising power would be created by the Bill, or that any increased charge would thus be thrown upon ratepayers, but stated that it would concentrate scattered departments, encourage and strengthen local authority, and no measure supplant it. Subsequently, when moving the second reading of the Bill, he stated the same opinions most fully to the House; but the Committee regret that in consequence of the late hour at which this, as well as other most important Bills were brought under the notice of the House, the speeches were imperfectly reported, and the public have lost their usual opportunity of learning Mr. Stansfeld's precise views on the subject. Should the recommendations of the Sanitary Commissioners be carried out (though good in themselves), a vast increase of expense will be thrown upon the ratepayers solely, for an object which all must acknowledge to be of national importance. In the case of cholera, or any other epidemic attacking this country (and the prospect of cholera is more than probable), the necessary expenditure would be very largely augmented. A Bill has just been introduced for the purpose of consolidating and amending the laws relating to public health and local government in England and Wales. This bill will come before the House of Commons for discussion next session. During the Parliamentary recess the Committee will make themselves acquainted with the provisions of this Bill; and should it appear that any new charges affecting ratepayers are to be proposed, they will publish an analysis of the Bill, pointing out the clauses, and showing their probable effect. The Committee would call attention to the fact that a great proportion of the expenses of elementary education will have to be defrayed from the rates, and to the very large amounts already proposed to be raised as loans, on the security of the rates, to enable School Boards to carry out the initiatory proceedings connected with their duties. It is apparent that there will be a steadily-increasing impost upon the ratepayers, in many instances causing an additional rate of 6d. in the £, for an object which all must allow to be of national importance, and not for the benefit of ratepayers more than any other class of the community. The Chairman of the Committee has brought before the notice of the House of Commons certain gross inaccuracies in the Abstract of County Treasurers' Accounts, and also in the Borough Accounts. Amended returns were obtained; but as they do not give the public a clear idea of the state of Local Finance, the Chairman has moved for a form of return, which, when issued, will have the desired result of showing the expenditure incurred, and the amount reimbursed by the Treasury, both in Counties and Boroughs, under the following headings: Police; Administration of Justice; Lunatics; Militia. The Lord Chief Justice Cockburn having made some very

stringent remarks in a case brought before the Queen's Bench, in April last (Queen v. Treasury Commissioners), adverse to the practice of the Treasury of disallowing expenses which had been incurred by order of the Court in Criminal prosecutions, and thus throwing them upon the County Rates, this case has been strongly commented on in the *Solicitors' Journal* (August 19, p. 761). This paper holds that "the Chief Justice was right in the opinion which he expressed, and that there is no authority for this disallowance." The Chairman of the Committee moved for a return which should show the amounts disallowed in each county and borough of England and Wales for the past seven years—1864 to 1871. From this return, which has just been issued, it appears that the per-centage disallowed in counties is: For England alone, 6·28; Wales, 11·3; England and Wales, 8·7 per cent. Under these circumstances the Committee have deemed it advisable to call the attention of the magistrates at the Michaelmas Quarter Sessions to this question, and have issued accordingly circulars to all the Clerks of the Peace, suggesting the propriety of petitioning Parliament on the subject. In several counties, and notably in Devonshire, Lincolnshire, Leicestershire, Somerset, the West Riding of Yorkshire, &c., action either by application for a mandamus, or by petition, has been taken, while the magistrates of Lancashire are believed to be about to re-open the question by further legal proceedings. The Committee cannot help expressing their opinion that although the total amounts disallowed by the Treasury, in the cases referred to, may not be individually very large, a question of principle is involved, which it is of great consequence to maintain; these disallowances by Treasury officials being a violation of the compact entered into in 1847, and enunciated by Sir Robert Peel, when he carried a resolution transferring such charges from local to imperial taxation. In conclusion, the Committee would point out that the tendency of legislation has hitherto been to throw upon the ratepayers various new charges for objects, which, however good in themselves, have more a national than a local character. Chancellors of Exchequer have thus been enabled to take credit for budgets which by no means represent the actual taxation of the country, but, by relieving imperial at the expense of local taxation, give a very delusive impression of the actual amount of our national imposts. The Committee therefore feel it incumbent upon them to urge upon all their supporters the necessity for increased exertions. Those of the Committee who are members of the House of Commons will not fail, when addressing their constituents, to place the bearings and present aspect of the subject fully before them; and, when they reassemble next Session, they hope that the number of their supporters will be so increased as to insure a speedy attention on the part of the Government to the injustice of the anomalies complained of. The prospect of the more prominent place in the Legislative labours of next Session which the revision of Local Taxation may fairly expect to claim, will, the Committee trust, induce all ratepayers, urban and rural alike, to press on their representatives the interest they individually feel on a subject of such vast import to the social well-being of the entire community. The Committee consider that most satisfactory progress has been made during the past Session, and by the aid of the cordial sympathy and co-operation of Chambers of Agriculture, and ratepayers in general, a position has been attained fully justifying their expectations in the past, and affording substantial encouragement for exertions in the future. Signed on behalf of the Committee, MASSEX LOPES, chairman.

*. Captain Craigie has accepted the post of Secretary in place of Mr. C. F. Gardner, resigned.

Mr. TRASK having moved, and Mr. CALDECOTT seconded the reception and adoption of the report,

Mr. NEILD (Lancashire) pointed out the advantage of including all local rates in one "demand note." This had been done in the union of Chorlton-on-Medlock, and the ratepayers were thereby enabled at one glance to see all that they had to pay and to what purpose the money was applied. If it were generally adopted it would materially assist in promoting a reform in the system of local taxation.

Mr. HICKS (Cambridgeshire) mentioned that he had brought the subject of Treasury disallowances in criminal prosecutions before the Quarter Sessions of his county, and that the finance committee had directed the clerk of the peace to put himself in communication with any counties which might be willing to take up the matter in conjunction with them.

Mr. WHITAKER (Worcestershire) animadverted upon the luke-warmness displayed by many counties on the subject of local taxation, and remarked that without the expression of a strong public opinion the gross injustice of the present system would never be remedied. He hoped, therefore, that county gentlemen would join the agricultural Chambers and help them to subscribe more liberally to the funds of the local taxation committee.

The motion for receiving and adopting the report was then agreed to, and the Secretary was directed to accompany the report with an appeal to the local Chambers to increase their subscriptions.

The CHAIRMAN, referring to Mr. Neild's observations with respect to the "demand note," stated that the select committee of the House of Commons on local taxation had, at his instance, unanimously passed a resolution to the effect that a note should be sent to every ratepayer, setting forth not only the amount in full but every particular object and purpose. And in the event of any further legislation the subject would not be lost sight of.

Mr. BIDDLE (Suffolk) said a provision of that sort in Mr. Goschen's bill was the one redeeming feature of the measure.

Mr. READ, M.P., in moving that "This Council considers that the failure of the Contagious Diseases (Animals) Act has demonstrated the necessity for compulsory slaughter or fourteen days' quarantine of all imported foreign animals, as uniformly demanded by this Council," said he had undertaken the duty at the request of the president, who was good enough to say that it was a subject peculiarly his (Mr. Read's) own. Well, if that were so, he had no reason to be proud of it; for, whilst no man could have tried harder to do some good, no man had ever accomplished so little as he had done in this matter. They had made a strong rod for their own backs and done comparatively no good whatever, either to the producers or consumers of meat or the importers of cattle. He saw now, and after giving the Contagious Diseases (Animals) Act a trial of two years, that so far as regarded the foot-and-mouth disease the measure had been a total and complete failure. When the question was under the consideration of the House of Commons, he ventured to say that it would be so, and, unfortunately, his predictions had been verified; because he believed that at no period within the last ten or a dozen years had the foot-and-mouth disease been so rampant and destructive as during the last few months. When the cattle plague broke out he had the honour of being appointed one of the commissioners who went fully into the consideration of the subject with the common idea then entertained by farmers that pleuro-pneumonia and the foot-and-mouth disease were a sort of epidemic that they could not guard against, and that it was of no use to try to get rid of them by any legislative enactments; but they were utterly undeceived. First of all the commissioners had before them the evidence as to what those diseases were—that they were simply contagious and could be stopped. They had then a total cessation of all traffic and fairs and markets during the cattle-plague era, and, to their great astonishment—at any rate to his own—not only did they stamp out the cattle plague, but they were at the same time delivered from pleuro-pneumonia and foot-and-mouth disease for two or three years. He believed, and now stated it most confidently, that what they had gained from the cessation of those diseases in that period fully compensated them for all the loss that the cattle plague had inflicted upon them. For three years they were free from the foot-and-mouth disease; but everybody who attended the Loudon market must have known that all that time the metropolitan layers were more or less infected by it. Foreign cattle continued to bring it into London; but it did not go beyond London, and it was not until the summer of 1869, when the Government thought proper to turn the foreign sheep all over the country, that they had this visitation again. It was all very well to be "wise after the event"; but he told the vice-president of the Council this: "You are well aware that foot-and-mouth disease is now rampant in the countries from which we are importing sheep; and that, being subject to that disease, they can carry the infection about with them, even when not diseased themselves; and now what are you going to do? You are going to turn out those sheep all over the country, and the result will be that you will see an outbreak of the foot-and-mouth disease in a little time." In the autumn of 1869 the foot-and-mouth disease spread over the country again; they had not since been able to get rid of it, and, in his opinion, they never would. It was of no use to attempt cutting off the disease in dribbets as they were trying to do. They must go to the fountain-head, and arrest the stream of importation at its source. It was constantly said that it could not be proved that these were foreign diseases; but let the fact be remembered that it was not until about the time that foreign importations of sheep and cattle became

general that they had those diseases among their live stock. On the other hand it had been proved before a Committee of the House of Commons that the foot-and-mouth disease and pleuro-pneumonia had existed on the Continent from time immemorial. Let not that be forgotten. They could not say exactly when the diseases came here. They could not tell exactly how the cattle-plague came here, though there were people who said it originated in some foul London dairy, was spontaneously generated there, it fact; and a majority of farmers and dealers would say that the foot-and-mouth disease came with the east wind, in which case it would be useless to attempt to stop it, inasmuch as the east wind was not to be stopped. Believing, however, as he did, that it was not generated spontaneously, he considered that it was imperative upon them to take such precautionary and stringent measures as were best calculated to banish it from the country (Hear, hear).

Mr. NEILD seconded the resolution, and urged that all foreign beasts when not slaughtered at the port of landing, required, so to speak, "acclimatising," before they should be allowed to come in contact with native herds. In his opinion the Act of Parliament had failed on account of not slaughtering at the port of entry. The state of things was at present such that, whether in fat or dairy stock, it was a most discouraging business for farmers to be stock-owners at all. In Cheshire and Lancashire the losses in dairy stock particularly were frightful to contemplate, and he wished it to be understood that it was simply and solely from a desire to protect our flocks and herds from foreign diseases, and not from any other or lower considerations, that they asked that the Act of Parliament should be carried out.

Mr. FOWLER (Chairman of the Home Cattle Defence Association) stated that according to the reports obtained by Mr. Waller, the Secretary to that body, inspection was at present almost a farce. He hoped, therefore, that they would do their utmost to render it effectual before bringing any pressure to bear upon their Irish brethren. What they wanted especially was that at the ports of debarkation foreign animals should be slaughtered, and that an efficient quarantine should be established on all animals intended as stock in this country. In the course of the last few weeks a cargo of fine cattle from Portugal was landed in this country, and had passed as free from foot-and-mouth disease on a Thursday; but the next morning the gentleman to whom the beasts were consigned, discovered that they were suffering fearfully from that disease. They were therefore sold within the port of London as diseased animals, and removed for slaughter within the metropolitan district. The very fact of removal from "that part of a port" a provision which the Government had laid down, showed of itself how ineffective was the system. Moreover, sheep might have been passing at the same time, as they were not included in the supervision, and have been the means of disseminating the disease throughout the country. It was impossible, then, for the Chamber to be too strong in their representations to the Government, and in the demand they made in behalf of themselves, both as farmers and as large consumers of beef, that the regulations should be stringently and effectively enforced. We admitted that there was a difficulty in connection with the subject when they came to consider the case of Ireland. The system there was simply this. Dealers went over the country, and bought up the one or two animals which the cottier or small farmer possessed, and which at this season of the year they must sell, for want of the necessary layerage, good yards, and food for maintaining them. It was almost imperative indeed upon the poorer Irish farmer and cottier that they should dispose of their cattle at this period of the year. The beasts were bought and shipped to this country, and were then sent into the fold yards at Norfolk and other parts; and no doubt formed a valuable accession to our stock. The point to press upon the Government therefore, as to Ireland, was that there should be strict supervision in Ireland, and that the herds should be rigidly inspected at the ports of embarkation, where he was told that inspection was at present delusion and a sham; in short, that there was no inspection whatever (Mr. MASFEN. "Nor in England either.") That was quite true; nor in England either. Then, with regard to the place from which the cargo of cattle he had mentioned had come from. It was a noteworthy fact that in Spain and Portugal the price of meat had risen to such an extent that it was within a trifle as high as in England, and there was scarcely a margin of profit

left on the importation of cattle from the Peninsula. It was all very well to say that English agriculturists had raised the price of meat, by their attempt to prevent the importation of foreign stock; but the price of meat abroad had risen as rapidly as in this country, and he had the authority of one of the largest dealers for stating that it was a fact that there was scarcely any margin of profit on the importation of cattle from Spain and Portugal. He thought he had said enough to show the necessity of pressing the resolution as strongly as possible upon the Executive, and he was pleased to see that farmers, represented as they were by Chambers of Agriculture, the Farmers' Club, and the Home Cattle Defence Association, were united on the question, and hoped they would send an influential deputation to the Government to insist upon their right both as producers and consumers to have the necessary regulations enforced.

Mr. WYMOND (Hertfordshire) supported the resolution, and produced the certificate of a medical practitioner, which showed that a patient of his was suffering from severe illness, consequent upon the use of milk from a diseased cow.

Mr. MARTIN (Cambridgeshire), in taking the same line, said all that was wanted was protection for our home stock, and he disclaimed any desire to restrict, either directly or indirectly, the quantity of stock imported from abroad.

The resolution was carried unanimously.

Mr. BROWNE (Norfolk) proposed, as the next resolution, "That Government officers should inspect all cattle and sheep previous to embarkation from Ireland, and that all vessels engaged in conveying animals between Ireland and Great Britain should be subjected to effectual supervision as to accommodation, cleansing, and disinfection." Such a provision would, he believed, provide an additional safeguard. He also thought that not only foot-and-mouth disease, but pleuro-pneumonia was to a great extent preventable, and that their existence at this time was traceable chiefly to mismanagement. A cargo of cattle was embarked, for instance, in a vessel from Ireland. The vessel was overcrowded, and the animals in consequence overheated during a ten or twelve hours' voyage. They were landed in the evening, and placed in a damp low meadow. A frost occurred in the night; next morning they were put in trucks, and conveyed by railway one or two hundred miles into the country, in all probability to be subjected to the same treatment next evening. He put it, then, whether this course of treatment was not of itself sufficient to generate foot-and-mouth disease, or pleuro-pneumonia, or both. If there were an effective inspection at the port of embarkation; if in every case where an animal was found to be affected the whole lot with which he was herded were prevented from being shipped, they would guard very much against the importation of any disease from Ireland. He insisted, therefore, upon the necessity of placing the vessels under strict supervision, that the cattle and sheep should not be overcrowded and overheated on their voyage, that at the port of landing a sufficient number of dry and well-sheltered layers should be provided, that the animals on landing should be subjected to close inspection, that the healthy cargoes should be sent to one layer, and if it were found that notwithstanding the inspection in Ireland a cargo was diseased on arriving in England it should be sent to another and distinct layer from which it should not be allowed to leave until pronounced free from disease. Indeed, if all cattle were compelled to remain 12 hours in good dry layers after landing, he had no doubt that it would tend greatly to prevent the introduction of disease from that part of the kingdom.

Mr. WEBB (Worcestershire) having seconded the motion,

Mr. HARDWICK (Gloucestershire) said he could prove from his own experience in Bristol market that inspection was a farce. Some animals were landed at that port from Ireland a few weeks ago, and after being officially inspected were sent to the market, where they were purchased by a friend of his having been first examined by a veterinary surgeon, who was a friend of the purchaser, and who also passed them as sound. They were then taken home, but on the following Saturday morning three out of the sixteen of which the herd consisted were affected with foot-and-mouth disease, and within four days every one of the lot was down with it. He felt certain then that the only effectual way of stamping out the disease, was the method laid down in the resolution—that all fat animals should be slaughtered at the landing-place, and all store animals be put in quarantine for a certain number of days.

In the process of shipment they should not be overcrowded or subjected to more excitement than was unavoidable, and the vessels in which they were embarked should be as clean and well-ventilated as possible. He had witnessed the landing of many an Irish cargo at Bristol, and anything more fearful than the stench which arose from the hold as it was unbuttoned could scarcely be imagined. The sickening effluvia might be detected a mile round, and the wonder to him was how a cargo of beasts ever escaped disease.

Mr. PELL, M.P. (Leicestershire), explained that an Order in Council of May 12th, 1870, provided for the very object contemplated by the resolution and the regulation of the transit of animals by sea. It made provision that on and after a certain date pens were to be constructed, and parted by substantial divisions. It gave the size of the pens and described the sort of floor the animals were to be brought in upon, in order to their having a good foot-hold, and the arrangements for ventilation. It also dealt with the conveyance of shorn sheep. The ninth clause of the Order prescribed that all vessels engaged in bringing cattle, whether from Ireland or abroad, should be cleansed, and what should be done with the dung which came out of them. Thus it would be seen that provision had been made for the accommodation of cattle and for cleansing of the vessels in which they were carried. But, unfortunately they saw no result from this provision. On the contrary, cattle came to the port of Bristol in vessels which were in a filthy state, and he had been informed that it was not the province of any person to board a vessel for the purpose of ascertaining whether it was clean or not, or if the Order in Council was carried out. By the resolution before the Chamber, therefore, they asked the Government to appoint the necessary officers for this purpose. He believed, and had reason to believe, however, that arrangements were made at the commencement of last month for Government inspectors to further the execution of the 5th, 6th, 7th, 8th, 9th, 10th and 11th clauses of the Order in Council to which he had referred. They were doing this now; and in regard to Bristol, Government officers did inspect these vessels, and did see to the accommodation and the cleansing of them; but it appeared that they did not inform against those who broke the law, because the power of doing that was vested in the local authorities, and it was left to them to carry it out. It was necessary, therefore, to call upon the Government to do what they had already done. He did not say whether the inspection was effectual or not; but to keep the Chamber right with the Government, and not to betray ignorance on the subject, he proposed to amend the resolution in this form: "That the Government should make their present inspection of all cattle and sheep previous to embarkation in Ireland, and of all vessels engaged in conveying animals between Ireland and Great Britain, as complete and effectual as possible." This amendment he moved in order that it might not be said that they were ignorant of the action of the Government, though it might be of an imperfect nature, or not such as they desired, and moreover had but recently been initiated.

Mr. ROBINSON (an importer of cattle) stated that since the promulgation of the Order in Council of May 1870, the vessels engaged in the trade with Ireland were fitted up in the best possible manner. Formerly it was the custom to leave the beasts into and out of the holds with ropes, but now these arrangements admitted of their walking into and out of the vessel. In his opinion the conveyance by sea had little to do with the spread of disease, because as a rule the owners of the vessels were also owners of the cattle, and always insured them, and latterly, since the foot-and-mouth disease had been rife, they had insisted upon stricter cleanliness. In fact, he believed that cattle got better treatment in vessels than on shore. Still the owners of these vessels were desirous of effecting every improvement for the health and comfort of the beasts, and as far as the establishment with which he himself was connected they were in the habit of carrying thousands of cattle yearly, and the loss was a mere trifle, not one head in five thousand, he supposed.

Mr. SMITH (Essex) seconded Mr. Pell's amendment, with all the more pleasure that it contained nothing in the nature of prohibition, but simply proposed that all proper precautions should be used, that the cattle might have as fair a chance as possible of leaving the Irish shores and reaching the English market in a healthy condition. For he thought it would be decidedly wrong to place any restriction on the circulation of

cattle; but at the same time the best provisions for its regulation should be devised. His own experience showed that the inspection now in operation did not amount to much; for example, there was a large market at St. Ives, at which as many as 6,000 or 7,000 beasts were sometimes assembled, to be afterwards distributed all over the country. What was the inspection? If one diseased animal was found among a herd of one hundred, he was removed, but his companions were left to circulate freely here, there, and everywhere. Such an inspection as that must necessarily be ineffectual as a means of checking the spread of disease. For his own part he was inclined to doubt whether all the care in the world would prevent it. His own herd suffered badly from foot-and-mouth disease so far back as 1839—three years before foreign cattle were admitted into the country under Sir R. Peel's new tariff. At one time he had not less than 30 beasts suffering from the complaint, and in the same spring 50 lambs were seized by it, and all died.

The CHAIRMAN: It was not correct to suppose that, because foreign cattle were not imported free of duty previous to 1839, therefore no foreign cattle were imported prior to that date. He had no doubt that both foot-and-mouth and pleuro-pneumonia were first brought into this county by foreign stock.

Sir G. JENKINSON, M.P., pronounced the existing system of inspection in a port like Bristol to be utterly useless, whether before embarkation or after landing, as a means of preventing the spread of the disease by animals which had been in contact with others that were palpably diseased. In the interest of the dairy counties, he moved as an amendment, "That in the opinion of this Chamber all cattle landed at any port in England, from any vessel coming from any place where cattle disease is known to exist, should be subjected either to compulsory slaughter or to a quarantine of at least 14 days." A provision such as that would, he conceived, strike at the root of the evil, and give more protection than was at present enjoyed.

Mr. DUGDALE (Dorset), as a sufferer to a considerable extent from foot-and-mouth disease in purchased animals, seconded the proposal.

Mr. HARDING approved of placing Irish stock for a temporary period in the same category with foreign.

Mr. FOWLER, on the other hand, objected to treating Ireland as a foreign country, and cautioned the Chamber not to make enemies of the Irish members of Parliament, who were now among their best friends.

Mr. MASEN took the opposite view, and thought the adoption of Sir G. Jenkinson's amendment would be viewed with favour by Irish members. The amendment made no mention of Ireland and the inference he drew from it was that all animals which had been in a vessel might, during the time of their stay there, have contracted or imbibed the seeds of disease. Hence they ought to be watched with care for a certain period before coming in contact with native beasts.

Mr. BROWNE reminded the Chamber that it had already passed a resolution which dealt with the foreigner, and that the amendment could consequently apply only to Irish importations.

Mr. READ, M.P., said the Irish grumbled much about the restrictions already imposed upon them, and that by the Act passed in 1870 the Irish Privy Council had full power to deal with cattle diseases. In August last he wrote to Professor Ferguson for a copy of the Orders then in force, and found that there was nothing said there respecting inspection at the ports. He thereupon put it to the Government whether it would not be possible to have some inspection at the ports; and now they found that in October the Order was put in operation. With regard to Bristol that port had power, and so had St. Ives, if they thought proper, to detain all cattle that had been herded with diseased animals; and it was the fault of the local authorities, not of the Government, if that were not done. He was always ready to give the Privy Council due credit or to censure them when they deserved it; but in this case they were not to be blamed so much as the local authorities of Bristol and St. Ives. As to the proposal of Sir G. Jenkinson, if it were acted upon, what would they have to do? Ten thousand cattle entered the port of Liverpool in the course of a week; and fancy quarantining that number for fourteen days! ("Hear," and laughter.) He undertook to say that, if they had never caught the disease before, they would be pretty sure to get it ere they left the

quarantine ground. It would, in short, entirely destroy the trade in store cattle. Sir George said, What's the difference, whether we get the disease from Holland or from Ireland?

Sir G. JENKINSON: No, I did not say so.

Mr. READ: No, you did not; but you will presently. The hon. baronet did not want the store cattle from Holland, because they were so wretchedly bred and were certain sooner or later, from the manner in which they were treated on board ship, to be subject to pleuro-pneumonia when they arrived here. The small number we got from Holland would no doubt allow of their being quarantined without great loss, whereas to quarantine for fourteen days the thousands on thousands we received from Ireland every year would entail immense loss upon the importers, and during the autumn months put an end to the importation of Irish store stock altogether.

Mr. T. HORLEY (Leicestershire) saw no hope of delivering the country from foot-and-mouth disease until the farmers, cattle dealers, and the public were willing, as in the case of the cattle plague, to adopt the system of removing cattle by licence. As an alternative, the only course was for the persons interested to co-operate with the local authorities in enforcing such regulations in various counties as were calculated to confine the disease within as narrow limits as possible. There was little use in inspecting the cattle in a market at ten or twelve o'clock in the day when many had already changed hands, and some infected ones might be on their way to spread disease among thousands all over the country. With respect to Irish beasts, inspection at the ports of embarkation and debarkation had proved unavailing, and he suggested that all cattle should be removed to the port of shipment under licence, which would press much less hardly on the owners of stock than the present practice. As to Sir G. Jenkinson's amendment, if gentlemen had visited Ireland, and seen the great improvement and immense increase which had taken place of late years in the cattle there, they would come to the conclusion that it would be a mistake to do anything to discourage the importations to this country where the cattle were so badly wanted.

Mr. TURNER (Peterborough), replying to Mr. Read's animadversions on the local authorities of St. Ives, invited him to explain this fact: A magistrate residing in the neighbourhood of that town having placed himself in communication with the Privy Council, received for answer that the Orders of the Council were fully carried out by the inspector seizing the diseased animals only, and that he was not permitted or empowered by their orders to take any which he did not know to be diseased, or with which the diseased animals had been herded. If Mr. Read's statement were correct, there must have been a new Order in Council superseding that.

Mr. READ: An Order, dated the 1st October, 1870, directed that the local authorities might prohibit or regulate the removal out of any field, stable, cow-shed, or other premises in which the disease had been found to exist, of any animal that had been in the same field, or premises, or in contact with any animal affected by the disease.

Mr. TURNER: Still the fact he had mentioned might be relied upon.

Mr. WHITAKER, believing that the existing system of inspection in Ireland was all humbug, and that the flocks and herds in this country would never be free from disease unless it were destroyed, concurred in Sir G. Jenkinson's amendment.

Mr. CALDECOTT observed that there were two sets of local authorities in England—one in the county, and the other in town, and that in 99 cases out of a hundred the latter were anxious not to go further than they could help in imposing restrictions upon the cattle trade. The truth was they looked at the question solely from the consumers' point of view, and considered all rules and regulations had a tendency to enhance the price of meat. They would not, therefore, heartily co-operate with the county local authorities in carrying out the provisions of the Act.

Mr. NEILD gathered from the discussion that gentlemen were distrustful of the Irish farmers, who they thought were not so careful of their stock as Englishmen were; whereas those who were acquainted with Ireland knew that extreme care was taken of the stock there. He hoped that nothing would go forth from the Council which would supply another argument to the "Home rule" party in the sister island.

Mr. PEARSE had no doubt that the disease had been imported from Ireland, in consequence of the regulations not having been enforced there.

Mr. WALLER (Secretary to the Home Cattle Defence Association) said that a fatal objection to Sir G. Jenkinson's proposal was how they were to find out where disease existed. Who was to tell them that? On the ground of policy alone it would be suicidal to introduce the question of Irish or Scotch importations, and many reasons could be assigned why they should take the course suggested by Mr. Fowler, who was the first to see what was the practical result of an increased period of quarantine in our foreign importations, and, next, if the necessities of the case required it, to turn their attention to other measures.

Mr. PELL condemned the amendment of Sir G. Jenkinson, on the ground that it would subject every animal, diseased or not, to a quarantine of fourteen days, and that this was placing Irish cattle upon a different footing from that of English. If the proposal were adopted, then, upon the principle that English and Irish cattle were to be placed on the same footing they ought to do this. At the present moment foot-and-mouth disease was rife throughout English counties. But he would take Leicestershire, and surely it would be no more than just that no animal, sound or unsound, going from that county to Norfolk or London, should be subjected to fourteen days' quarantine previous to being exposed for sale in a market (Hear, hear). Nay, he would go a step further in behalf of the Irish producers, and say that the conditions under which their cattle came to this country were more favourable to health than those under which cattle were conveyed from Leicestershire to Norfolk. As to the disease coming from Ireland, the reverse was the case; for it was carried thither from England in the first instance.

Mr. PEARSE did not mean to say that it had originated in Ireland, but only that it was being transmitted to us from there.

Sir G. JENKINSON disavowed any wish to aim a blow at the Irish cattle trade. If such a power existed as Mr. Read had described, it was unknown to the local authorities. Mr. Neild had stated that the Irish farmers were careful of their stock. They were, no doubt; but how did they do it? By sending their diseased animals to this country (Hear, hear, and No).

The question was then put to the Council, when Sir G. Jenkinson's amendment was rejected by 25 to 11; after which the original resolution, with Mr. Pell's emendation, was agreed to, with four dissentients only.

Mr. T. DUCKHAM moved and Mr. TURNER seconded—“That Government officers should be appointed to enforce the provisions of the Act with reference to the cleansing and disinfecting of railway trucks, yards, and pens, and the watering and transit of animals on railways in Great Britain and Ireland.”

The resolution was carried.

It was further resolved on the motion of Mr. LITTLE, seconded by Mr. STRIKE, “That the interests of stockowners and consumers alike demand the removal of the cattle cordons from the Metropolitan District,” and on the motion of Mr. D. LONG, seconded by Mr. BLICK, that a copy of the foregoing resolutions be immediately forwarded to Mr. Forster and the Prime Minister, and “That Mr. Gladstone be requested to receive a Deputation from the Chambers of Agriculture upon this subject in the week of the Smithfield Club Show.”

A Committee, consisting of the Chairman, the Vice-Chairman, Mr. Read, Mr. Pell, and Mr. Genge Andrews, with power to add to their number, was subsequently nominated for the purpose of making the arrangements, preliminary to the interview with the Premier.

The last business mentioned in the agenda paper was the policy of appropriating to secondary or middle-class education endowments left for the education of the poor.

The CHAIRMAN suggested that as they had now arrived at so late an hour and so few communications had been received on the subject, the discussion should be postponed; but in thus dismissing the question, he observed that if the principle advocated by the Endowed Commissioners were carried out, namely, that of confiscating and diverting small endowments in the rural districts from the primary education of the poor to secondary education, or the education of the wealthier classes, it would be alike impolitic and unjust. It would be unjust because those small endowments tended much to miti-

gate and diminish the great injustice of exceptionally imposing upon the owners and occupiers of real property alone the expense of carrying out the Elementary Education Act; and it was impolitic, because if endowments which were originally left for the particular object of benefiting the poor were confiscated and diverted by the Legislature to other purposes for which they were never intended, it would materially deter the creation of such charities hereafter. The argument of the Commissioners was that since the passing of the Endowed Schools' Act of '69 Parliament had passed the Elementary Education Act of last year, and that their powers had been very much increased by that measure. Under its provisions they said the education of the poor was provided for out of rates, and for that reason they argued they were able and were at liberty to divert the endowments originally left for the benefit of the poor to the advantage of the more wealthy classes. He (the Chairman) contended, however, that there was neither law nor right in such an argument. In their programme the Commissioners said that “a great many of the small endowments and some large ones are used at the present moment in paying the ordinary expenses of the primary schools of the country; and as questions respecting the permanent application of these endowments to elementary education frequently arise, it will be useful to state what general rules the endowed school Commissioners are, after a consideration of a great many individual cases, disposed to observe in dealing with them.” They went on to say: “The position of this matter has been substantially altered by the passing of the Education Act 1870 and the Code of 1871. Under the Endowed Schools Act of 1869 the Commissioners were bound to frame such schemes as would render endowments most conducive to the advancement of the education of boys and girls; and so they are still. But in order to find out what is most conducive, they have to look at all the surrounding circumstances, and these have changed. It is true that for many years past elementary education has been the object of great attention and zealous exertions, both on the part of Parliament and of voluntary agencies, while secondary education has received no such assistance. This circumstance has frequently been dwelt upon as a reason why the Commissioners in making new educational schemes should look to the promotion of secondary rather than of primary education; but it was not a conclusive argument so long as the provision for primary education remained imperfect. Now that the legal provision has been made complete in amount, the argument acquires almost irresistible force. If endowments can be made conducive to education at all, it must be generally true that they will be most useful if applied to those educational purposes for which money is wanted, but is not forthcoming from other sources..... If endowment is to be applied to the ordinary elementary expenses, it will simply relieve some of the other sources of revenue. Those other sources are (a) school fees, (b) Parliamentary grant, (c) subscriptions, (d) rates. Which of these shall endowments relieve? School fees are of great importance, because they keep up in the minds of the parents the sense of obligation to have their children taught, and cause them to take a more vigilant interest in schools. To save the Parliamentary grant is to lose or impair the influence of inspection, and inspection is the best safeguard for efficiency. To relieve the subscriptions is out of the question; for no one will contend that endowments were either intended or should be now used to ease the rich. It may be that saving the rates would not hurt the schools; but saving the rates is not the appropriate function of educational endowments; nor would it be easy to apply them in relieving those sources of revenue without also relieving the others, or at least the Parliamentary grant.” The Commissioners also said that these endowments should not be used in future for the ordinary current expenses of elementary schools; and he (Sir M. Lopes) contended that it would be a great injustice if these small educational endowments were diverted to any other purposes than those for which they were originally founded. He had drawn attention to the subject in order that the provincial Chambers might give it consideration, as it was a question of really serious import (Hear).

A vote of thanks to the Chairman closed the proceedings.

The general meeting of the Chamber in December will be made special, for the purpose of receiving and approving the alterations recommended by the Council in the constitution and laws of the society.

EAST RIDING CHAMBER OF AGRICULTURE.—At the monthly meeting at Beverley, Mr. C. Sykes, M.P., in the chair, a paper on pleuro-pneumonia or lung diseases in cattle, its cause and remedy, and the foot-and-mouth disease, prepared by Mr. George Holmes, was read by the secretary. It intimated that the lung disease was engendered principally by the inhuman manner in which foreign cattle were treated during their importation to this country; and the writer advocated Government interference in preventing the overcrowding of vessels. A resolution on the subject was carried, on the proposition of Mr. R. Fisher, seconded by Mr. J. Lee, as follows: That it was the opinion of the Chamber that a fixed and sufficient space should be allowed for all cattle brought from foreign ports in ships and vessels, including Ireland; that foreign fat stock should be slaughtered at the ports where landed, on account of being more liable to disease than store stock; that all foreign store stock should be kept a sufficient time in quarantine; that all beasts and sheep from Ireland should be detained at least 24 hours before being put on to rails, &c., and that they be properly fed and inspected; and that where one or more in a herd or lot of beasts were found suffering from infectious diseases on being travelled on any road, or shown in any market, the herd or lot might be detained until sufficiently recovered.

LEICESTERSHIRE CHAMBER OF AGRICULTURE.—At a meeting of this chamber, Mr. J. Crofts in the chair, Mr. W. Wright proposed "That this meeting requests the Central Chamber of Agriculture to petition Parliament to ensure the slaughter of foreign fat stock at the port of debarkation, and that all store cattle be subject to a sufficient term of quarantine, not less than a fortnight." Mr. W. Inett seconded the motion. Mr. T. Harrison approved generally of the proposition, but expressed himself favourable to foreign animals landed at the port of London being allowed to go to the metropolitan foreign cattle market now being made. He would not however, let them leave the market alive. The resolution was carried. With regard to foot-and-mouth disease, Mr. Wright was of opinion that the spread of the disease was due in a great measure to the inefficient way in which the railway cattle trucks were cleaned. Mr. Foster proposed "That, in the opinion of this Chamber, the local authority should be called upon to enforce more rigidly the orders already issued with respect to the home cattle trade, and that it is necessary that all cattle imported from Ireland be subject to sufficient quarantine before being sent into the market. Mr. Harrison said that if that resolution were carried out they might as well shut up the trade at once. Mr. Inett said that they had better have the disease than be without the cattle. Mr. Foster agreed to leave out of his resolution the clause relating to Irish cattle; whereupon Mr. Bland seconded the resolution. Mr. Perkins, jun. proposed an amendment to the effect "That a committee be appointed to draw up a scheme with the view of preventing the spread of foot-and-mouth disease, and that they report to the next meeting of the Chamber." This was seconded by Mr. Pateman. The amendment was carried.

STAFFORDSHIRE CHAMBER OF AGRICULTURE.—At a meeting held at the Swan Hotel, Stafford, Mr. R. H. Masfen presiding, Mr. J. Brawn moved the following resolution, which was seconded by Mr. Byrd, and carried: "That the first step toward preventing the introduction and spread of contagious diseases among our flocks and herds is to secure by legislative enactment the absolute slaughter of all imported fat stock, and separate ports set aside for such purpose. That similar regulations should apply to stock imported from Ireland, so long as contagious diseases exist in that country. That this Chamber, whilst regretting the failure of the efforts of the Privy Council to arrest the spread of contagious diseases among home-bred cattle, believes that such failure is to be attributed in a measure to the want of uniform zealous co-operation of local authorities and inspectors, and that steps should be taken to secure united action."—Mr. Robotham proposed that a copy of the resolutions should be sent to each of the members for the county and borough, and also the Privy Council. This was seconded by Mr. Keeling, and carried. It was agreed that the Chamber should subscribe £5 to the Home Cattle Defence Association.

WARWICKSHIRE CHAMBER OF AGRICULTURE.—At a meeting, held in the Shire Hall, Sir Robert Hamilton,

Bart., K.C.B., who presided, stated that a deputation from the Chamber waited upon the County Executive Committee, at the last Quarter Sessions, when the following resolution was submitted to the Court of Quarter Sessions, by which it was approved, and the necessary directions were given for carrying it into effect: "That the Court of Quarter Sessions be recommended to direct the chief-constable to instruct the police to attend from the opening to the close of every market, fair, or sale, and to strictly enforce clause 16 of the general Order in Council of the 16th of August, 1869, and the provisions of the Act and the Order of Council and the local authority, and to act generally in aid of the veterinary inspectors already appointed." The report was considered satisfactory, and adopted. —The Chairman said the proposed laws and constitution of the Central Chamber gave rise to considerable discussion at a meeting of that body in May last. A copy of them had since been sent to each Chamber for consideration; and the Council submitted the following resolution for the approval of the Warwickshire Chamber: "That, in the opinion of this Chamber, the report of the sub-committee upon the constitutional laws of the Association of the Central Chamber should be adopted and acted upon for a limited period, in order that their effect may be fully tested."—Mr. Startin moved the adoption of this resolution, which was seconded by Mr. Caldecott, and carried.—Mr. Endall, vice-chairman of the Henley-in-Arden Branch Chamber, submitted four resolutions, adopted at a meeting of that body, on the 31st ultimo. Two merely approved of existing regulations, with respect to animals affected by the foot-and-mouth disease; but one relating to imported foreign cattle, was as follows: "That this Chamber is of opinion a cattle market should be established at all the principal ports, for the sale of foreign cattle only; and that in no case should any imported cattle be allowed to leave such a market, or a suitable place of quarantine, within twenty-eight days." This and the other resolutions were formally received; but it was explained that the County Chamber, by so doing, in no way adopted or approved of the resolutions.

THE ABERDEENSHIRE GAME CONFERENCE.—The schedules issued to the landlords and tenant-farmers of Aberdeenshire have now been returned, and an abstract of the statistics made up. Of 6,965 schedules issued to tenant-farmers in the county over 4,500 were filled up and returned. These returns were carefully tabulated, and the result, we believe, is that about 3,800 say they suffer damage from game, while the remaining 700 say they suffer no material damage. About 2,500 suffer from hares and rabbits; about 1,800 from crows, wood-pigeons, and similar birds. Over 200 complain of damage from grouse, roe-deer, pheasants, &c. Rather over 3,000 would be satisfied in the meantime with an equal right with the landlord to kill hares and rabbits on their arable holdings. About 700 say that is not enough, and a few consider concessions unnecessary. Only about 2,200—barely the half of those who made returns—estimate their loss in money value by game ravages, the aggregate of which amounts to £19,000 annually. From the 102 returns made by landlords it appears that in the leases of sixteen estates there is no reference to game preservation; while on two estates the game is the property of the tenant, and on one permission is given to shoot winged game on application.

THE ROYAL AGRICULTURAL BENEVOLENT INSTITUTION.—At a meeting of the Council on Tuesday, November 7, at the offices, Charing Cross, Mr. C. S. Cantrell in the chair, Mr. Nash moved: That in the case of a married man who is on the books as a Male Pensioner, and whose wife is over 55 years of age, they be henceforth considered as a married couple, and be entitled to receive, if the husband be between 60 and 65 years of age, the sum of £30 per annum; if between 65 and 70 years of age the sum of £35 per annum; if over 70 years of age the sum of £40 per annum. And that this rule as to the pensions be understood to apply to all new applicants as well. The motion was not seconded, and consequently fell to the ground.

LEICESTERSHIRE AGRICULTURAL SOCIETY.—At a meeting of the Committee on Saturday, November 4th, Mr. R. D. Miles' Knight of Kars horse was disqualified as not having been a sufficient time in his owner's possession, and Mr. Pain's (Shangton) succeeds to the first prize in the All-England Hunter Class.

BOTLEY AND SOUTH HANTS FARMERS' CLUB.

At the November meeting, Mr. Warner, the new President, in the chair, the subject for discussion was, "The Root Crop: What shall we do with it?"

Mr. SPOONER said this subject had been brought about in consequence of the great superabundance of the root crop this year, and also on account of the scarcity of stock, particularly sheep, and those who were in the habit of keeping the latter were looking about them to see where they would be enabled to make a profit. It had been said that the dearth and scarcity of sheep would have a bad effect, but he could not help feeling there would be still some gain; as they might depend upon it the love for mutton still existed in this country. Then, again, their skins were of more value. He thought the value of the skin of a good teg in the spring would be nearly a sovereign, and though they did not directly get paid for it, yet it was done indirectly. Therefore they must not think of entirely plunging in their root crops as manure if they could make a more profitable use of them. Therefore he thought that would be sufficient to warrant him in bringing forward "The root crop: What shall we do with it?" He could not do better, although at the risk of going over the same ground again, than bring forward the relative properties of the various feeding stuffs, as it was very necessary they should have clear ideas of their different constituents as food, so as to compare the one with the other. They would take the analysis of swedes, linseed-cake, and other foods, and then show the properties of their constituents. In foods there were the flesh-making part, the part which sustained the temperature in the body of the animal, kept it warm, and furnished the means of respirations, and then there was the earthy part—that portion taken up from the soil, and which was returned to the earth again. The elements of food were separated into three divisions, the earthy part containing the phosphates, and nourished the bone; secondly, the nitrogenous, or flesh-making division; and thirdly, the carbonaceous part, such as starch, sugar, &c. The albuminous part was called the nitrogenous, because it contained nitrogen which was found in the atmosphere, to the extent of four-fifths, and it was at all times an important and valuable part in manure. The analysis showed that carbon in sugar was about 42 per cent., in starch about 44 or 45. They would thus see that, as a nourishing food, starch was richer than sugar, nearly 3 or 4 per cent. But still sugar was the more valuable, because while starch was insoluble sugar was readily dissolved. Carbon was about 41 per cent.; hydrogen about 6 or 7, and oxygen from 51 to 52, in sugar, while in starch it was only 59. In oil, which was richer in quality, we find 76 or 77 of carbon, hydrogen 12, and oxygen 11. The great distinction in oil was that it contained very little oxygen, and a considerable quantity of carbon, and it thus became a most valuable part of food, because it was more readily converted into fat in the system than any other constituent. It was also more valuable in keeping the animal warm than the others. He need only call their attention to cold countries where oil was given in large quantities. If they took the Esquimaux they would find that his half-pound of candles and his train oil was very necessary for his existence. If they took up albumen they would find that of carbon there was 53.5, of hydrogen 7, oxygen 22, and an addition of 15 per cent. of nitrogen. Thus they would see from this that meat contained a large proportion of albuminous matter, and was extremely nutritious. They would see that it was very nourishing, and while it was also nourishing it had the power of keeping the animal warm. They could readily understand how the greater part of the food was taken up by the animal for the purpose of keeping up the warmth, for in the winter, and it was perhaps 32 degrees or below freezing point, they would understand how necessary it was that there should be fuel or food which would raise that temperature up to 98 or 100 in the animal. Their experience showed them that of the nourishing food given to an animal not more than 10 per cent. was taken up and utilised in the system for the growth of the body. Then there was another

thing which people formed very different ideas upon, and that was the various values of manure. The manuring value of linseed cake was £4 10s., wheat 35s., barley 37s. per ton, and then, again, turnips was 4s. per ton. It appeared to some that there must be great doubt about the value of the manuring properties of these articles of food, and that it looked like an attempt to cram and humbug people. However much they might differ in opinion on the matter with reference to the different values as food, there could be but very little doubt respecting that part which enters into the composition of manure. They could very easily ascertain what amount of ammonia existed in various manures such as guano, nitrate of soda, sulphate of ammonia, and other things, and they would see that the valuable properties of guano were owing to the ammonia it contained, which was something like £70 or £80 per ton. The great value of guano was because it contained such a large amount of nitrogenous elements—and 14 parts of nitrogen were equal to 17 of ammonia. If they took up turnips or swedes and went into the nitrogenous matter they contained, they found their value was about 4s. per ton as manure. The phosphoric acid was only about 1 per cent., which on that account did not make them very valuable, and if they added the amount, they would see that 4s. per ton was about £4 for 20 tons of swedes per acre. The question of ploughing in the crops was somewhat serious, especially when they had to deal with the roots, but they all knew that the greens of mangold wurtzel and swedes decomposed with much greater readiness than the bulb. The value of the greens for manuring purposes was nearly double that of the bulb—he meant in proportion to the weight—that was taking six tons of greens per acre, they were equal to something like 12 tons of bulbs. This was a strong fact, and a very strong argument to show that this year all greens should be left to be ploughed in as manure. Last year the roots were very valuable, inasmuch as there was a great scarcity of them, for then one ton of roots was equal to more than two tons of roots this year. About six weeks or two months ago he was in Scotland, in the Lothians, and he had a conversation with many of the farmers. He talked to them about their root crops, and particularly about those of this year, and he asked them what value they attached to the greens. They said that they sometimes sold their roots to the cowkeepers, and offered £2 per acre to allow the greens to remain on the land, and they universally refused to part with the greens. In the Lothians, the greens were very abundant, and as they contained a large body of food, they were cherished by the cowkeepers, and they refused to take the £2 per acre, thus showing the importance and value attached to them. The fact was the greens contained double the quantity of nitrogen than the bulbs did—that was in proportion to their weight. If they took up the analysis of swedes they found there was almost 90 per cent. of water, while of albumen there was only 1 per cent., sugar and other carbonaceous properties about 5½, woody fibre 2.44, and minerals .63. This showed by entering into calculations, that they were not of so much account for their manuring value. The quantity of water they contained was a great drawback when they compared them with some other feeding stuffs. If they estimated their value as in concentrated food, such as linseed cake, they would find that the value of a ton of swedes was something like 16s. 6d., while the value of swedes for manuring purposes was only 4s. 3d. If they compared the residuum from swedes they would find that their great drawback was the large amount of water they contained. Perhaps some of the gentlemen present would tell him how much water a sheep would drink in a day supposing it had nothing but dry food. Last year it was necessary to draw a considerable quantity of water to the Downs for sheep. He wished to know what were their opinions with regard to the quantity of water a sheep would drink. (Several members here said more than a gallon.)

The CHAIRMAN.—If sheep are fed on hay and dry food they would drink a gallon of water per day.

Mr. STUBBS.—I am quite sure they would drink as much,

Mr. SPOONER said that experiments were tried with five sheep which eat on an average 23lbs. of chaff per week, or 3lb. 4oz. per day, and they drank 5lb. 11ozs. of water per day, or 40lbs. per week. Others consumed 18lb. of hay, and 7lbs. of beans, and drank 13lbs. of water per week, or 6lbs. 2ozs. per day. He wished to point out to them, that the water was only equal to nearly 7lbs. of swedes, and this would show that when they were given in large quantities to sheep—when they were given them *ad libitum*—they would see what a large quantity of water they took into the system.

The CHAIRMAN.—If you give sheep as much roots as they can eat, they will consume 25lbs. per day.

Mr. SPOONER said that the sheep by eating the roots to excess, took up four times the quantity of water they required or there was occasion for, and it did them no good. He would ask them as men how they would like it if they were forced to drink thrice the water than they knew would do them good?

A MEMBER.—You are not going to get sheep to drink more than they want.

Mr. SPOONER said that might be all very well, but he would show them that by giving sheep an abundance of roots they would not gain so much flesh as they would if given with more nutritious food. He thought, therefore, he was justified in saying that while there were questions as to what should be done with the bulbs, he would advise them to cut off the greens and plough them in as manure. It was also this year most desirable to pit the roots as much as possible, for after they were kept some time they would lose 10 per cent. of water, and then they would be quite as valuable if, after all, they had to plough them in. They would thus get the roots more nutritious by the loss of this water, and prevent the starchy matter from being converted into woody fibre. These were points which were worthy of being reflected upon. He had now explained to them the different properties of food whether concentrated or otherwise, and although he had not the time to enter into it at length, he hoped he had made himself understood sufficiently. It might be said by some that, as the feeding value of grain was only £1 to 30s. per ton, linseed cake was not much more, then why should they use the latter? He could show them that the cake would bring them in the most money in the end, and this would be shown if they compared the value of the manure. They would find that if they paid dearer for an article and it was richer in manuring properties, there would be a gain by buying the dearer. Thus it was that decorticated cotton and nut cake were so valuable on account of their manuring properties, because the albuminous properties were about 40 per cent., while rape and linseed cake contained about 28 or 29, and grain about 13. Thus it would be seen that these analyses were of great importance, as they showed that that which cost more in the original form was richer in flesh making and manuring properties, than that which cost less money. And this led him to speak of another matter, and he did so with more authority, for for several years past it had been grown with advantageous results in other districts—he alluded to the Silesian sugar-beet for the manufacture of sugar. He would now explain why it might be desirable for the members of that club to take it up and cultivate it. Mangold wurtzel was a crop which was grown in very large quantities, and was valuable on account of the sugar it contained. They would find that if they took beans and oats they were much more valuable in consequence of the sugar and starch they contained. The animals which consumed barley and oats took up a large amount of starch, which was converted into fat, and thus it was that pigs got much fatter on barley meal than they did on anything else, and this was due to the large amount of starch rather than the small quantity of sugar it contained. Sugar was soluble and easily digestible, and therefore it was that which made the locust bean so valuable. If they were fed on this alone it would not be found to be very beneficial in sustaining life, but when added to other things it improved the quality of the food, being savoury and soluble.

The CHAIRMAN asked Mr. Spooner what price he put on sugar.

Mr. SPOONER said, 1½d. per pound for fattening purposes. Unless they put a proper and proportional amount on the constituents of oats and cake, they could not reach their market value. Dr. Voelcker, in a paper sent to the *Journal* of the Royal Agricultural Society, with reference to water,

showed that there was 59 per cent. in the common mangold, and 84½ in the Silesian beet; and therefore the latter contained 1½lb. more of nutriment in the room of water. Of sugar there was 5½ in common mangold, and 9 to 11 in Silesian beet. In albuminous matters there was not much difference in value between the two. Woody fibre was 3 in the common mangold, and 3½ in the Silesian beet. In minerals it was about the same. In various places efforts had been made to convert the sugar beet into sugar, and a factory had been established in Suffolk for that purpose, the success there being very fair. The growers there seemed to be very well satisfied with the trial they had given it, but the manufacturers had been able to make a profit of 15 per cent. Then, also, beet had been introduced for the purpose of getting spirits, and it was so done in Berkshire. There Mr. Campbell farmed about 4,000 acres, and he had laid out a considerable sum in the growing of the beet and distillation of the spirit. He (Mr. Spooner) believed, on the whole, whatever success he might have obtained, that it was very difficult to separate those volatile oils which were so disagreeable and unpleasant to the taste, while sugar could be refined and got clear of such disagreeable companions. The price given for it at the factory was £1 per ton, and the pulp might be had back at 12s. per ton afterwards. Analysis showed that, after the water and sugar had been got out, the pulp was much more valuable than the root as manure; there was a difference in the albuminous compounds of 2½ per cent., and three-quarters of a ton of beet would be equal to a ton of mangold. Of crude fibres the pulp contained 24 per cent. It had been shown that when two tons of roots were converted into one ton of pulp, the latter would be quite as valuable per ton as the former in their original state. The question was whether 24 per cent. crude fibre was of more value for feeding than the displaced sugar; and the results proved more favourable. It was grown in large quantities on the Continent, and it did not interfere with the condition of agriculture. In fact, it increased it, and much more corn was grown than otherwise. In this country it had not been attempted in many places, but he thought a profitable crop might be produced. The question was whether it would be worth while for them to grow it if a market was open to them. Beet was of value for feeding, because it contained more solid matter and 25 per cent. less of moisture than mangold. One ton of sugar-beet was equal for feeding purposes to 1½ ton of mangold wurtzel. Messrs. Thomas Hill and Company had a factory at Southampton for the manufacture of saccharum, and they wished for the cultivation of beetroot in order to be supplied with that at a cheap rate which they could convert into saccharum. They proposed to purchase the sugar-beet to a considerable extent at £1 per ton, put on the rail, and they were willing to sell the pulp at 12s. per ton. But it was most essential that they should know that there were farmers who were willing to grow it in sufficient quantity so as to supply them. He anticipated that they would require 10,000 or 15,000 tons as the *minimum* quantity, and as they would want that large quantity it was necessary that they should meet with some response from the agriculturists before they commenced. He had had a conversation with the chairman, who had received a communication upon the matter, and in which Messrs. Hill had offered a valuable prize for the encouragement of the growth of these roots in their fields next year. In the last number of the *Journal of the Chamber of Agriculture* there was a very exhaustive paper on the subject by Mr. Algeron Clarke, the editor, and he would recommend any gentleman to read it. It was of such an extent that he had not time even to quote it then, but he would advise the members of the Club to carefully peruse it, and form their own conclusions. He might state that it had been grown by their chairman and Mr. Leggatt without any reference to this sugar factory, and they could no doubt give them the results of their experience. But he would beg to remind them that the growth of beet was very different indeed to that of mangold wurtzel. The mangold contained a large quantity of salt, which was poisonous to the sugar-beet, and must therefore be avoided in the manure. With regard to the beet not requiring so much manure, it contained a higher per centage of sugar than that which Drt Voelcker had first found when it was grown on one of the sewage farms near London. Therefore he thought it would require plenty of manure to produce 350 of good roots per rod. Mr. Spooner, in conclusion, said that the time at his command

did not enable him to deal further with the question, or to go into the experiments that had been tried, but he should be happy to answer any questions or give any information, and he had no doubt their worthy chairman would give them his experience in sugar-beet growing during this year.

Mr. J. BLUNDELL said they were indebted to Mr. Spooner for the valuable statistics he had given them, but it scarcely required those calculations to deal with the subject before them. It was one of those practical points which they had to consider in every day life; it was closely allied with the position of the agriculturist at the present day, and as it was a matter of immense importance they should view it from a practical point of view. There could be no misunderstanding as to there being a superabundance of the root crop this year. The main question they heard, go into what company they would, was how sheep might be kept with a profit this year. That was a question which none of them could answer. But when they came to take a just view of things, they were forced to the conclusion that there was this year an enormous deficiency in the live-stock market, especially in sheep, and also in horned cattle. He said that that must cause much anxiety. The root crop was more than three-fourths as much as it had been for some years. Then there arose the question—"What shall we do with the root crop if we have not enough sheep to eat it?" His reply was "Wait, wait." How did they know what the winter would be? They would not know before the 1st of February how their root crop might turn out, and it might be that they would be surprised to a very great extent. Some of their roots were grown very quickly, but how did they know how they would withstand the frost, and therefore he said that ploughing in the roots in a reckless manner would expose them to a great risk. Thus it would require a little caution on their part before they laid down a rule by which they were to get rid of their root crop. It being the fact that there was such a superabundance of roots, the question was "What shall we do with them?" It might be desirable, if they found they had too many for feeding the cattle, to plough them in, but he must tell them the ring roller and the plough would not answer the purpose. They might smash them up with the ring roller, but that would not do it entirely, and the harrow would be sure to drag them to the surface again. His idea was to get them cut up, at so much per acre—about 4s. He could take the cutter into the field; the roots could be pulled up and put into it, and then the pieces could be put up in heaps and spread over the land the same as manure. That was his idea, and the only one he could see to effectually dispose of the root crop. There would be a profit off sheep, although they were exceedingly short of them. Of wether sheep there were only a few left. In another year, drawing on them as they had been doing, they would dispose of the whole of them, and they would then be entirely dependent on the young ewes, the tegs, and the lambs. This was a very serious matter for the consideration of the people of this country. It was a matter of the greatest possible moment to the consumer, because every day the quantity of sheep was diminishing, and there must be a falling back on beef only. If he looked to the import of corn, he found it had been about 35 per cent. of their requirements, and this year nearly 40 per cent. Then came the question with regard to the meat. They had ransacked the whole of Europe for cattle, and then the importations only amounted to 9½ per cent. Therefore they could not fall back on the other countries of the world to supply the deficiencies. Thus it was a momentous and serious question, What was the cause of this diminution in the supply of cattle and sheep? The real cause was because the keep had been scanty in previous years, and sheep and cattle had to be slaughtered because there was no food for them. That was the cause of the deficiency, which could not be made up. He denied *in toto* that it could be. While the relations between landlord and tenants existed as they now were it would never be made up. It was agricultural impediments on which he read a paper last year, which prevented the deficiency from being supplied. They were unable to keep more sheep and cattle in order to bring them to market. A tenant could not afford to lay out his capital in the purchase and rearing of stock while the relations with his landlord were so unsatisfactory; but let the restrictions which at present encumbered leases be removed, and then the tenant might do a great deal more for the benefit of the community. The people themselves should assist the agricultural community to

free themselves from the trammels by which they were surrounded. There was a scarcity of sheep, and people would not be able to get mutton as food without having yet to pay a higher price for it. And this was justified because they now required higher prices for stock. Let them take the last 15 years, or the sheep sold at Wilton and Weyhill fairs. They would find that the sheep were five or six shillings more per head at one place than the other, and they would find that the sheep of the present day were much improved to what they were 15 years ago. They were of much better quality, and therefore the consumer had to pay a much higher price in consequence of the improvement that had taken place. But the all important point for their consideration that day was the disposition of the root crop. The paper said "What shall we do with it?" He said "What can we do with it?" Let them take the sugar-beet. He would not go into the calculations about the growing of it, but, first of all, how many tenant-farmers where there who could do it? He asked any gentleman present who did not farm his own land to look into their leases, and see whether they had any power to sell sugar-beet. He must say there were very few landlords who would allow them to grow sugar-beet unless they grew it instead of a cereal crop. Sugar-beet as well as mangold was a most exhaustive crop. The statement made by the secretary as to the result of the crops of sugar-beet showed that there was very little profit, supposing they got 16 tons to the acre, which was the outside they would ever get (No, no). Then there was the carriage; they all knew what that amounted to. If they had to go three miles to a railway station it would not be less than 2s. 6d. per ton. Mr. Clarke had put it at 6d. per ton per mile, but he knew it could not be done under 3s. His experience in the carriage of such things told him this. There were not only these expenses, but the exhaustion of the soil by the crop, and he did not think it would be so beneficial as compared with swedes at £1 per ton. If beet was to replace their swede crop he would say "Stick to your swedes." There was no doubt they had a great scarcity of stock in the country, and he would ask them whether it would not be more reasonable to turn their attention to making meat instead of sugar.

The CHAIRMAN said he should not have spoken so early in the discussion, had it not been for the fact that his name had been mentioned as having grown the sugar beet. He had hoped that Mr. Hill would have been present that day, and have given them a little of his experience, but he had sent a telegram to say that he could not attend. He sent in Mr. Hill a half-dozen roots in order that they might be analysed, and he had sent to say that they gave about 11 per cent. of sugar. Messrs. Hill and Co., offered a prize of 20 guineas for the best five acres of beet producing the most saccharum. He brought this subject forward because gentlemen might consider the matter, and see whether it was worth their while to compete for the prize next year. He (the Chairman) had grown a few acres of sugar-beet, and he had a rod of them pulled in order to produce there that day. He must tell them that he did not select the worst rod, but about the best, and these beet were not sown in the ordinary season, but after a green crop, fed off by sheep, and once ploughing. The produce of this rod was 257½ lbs., which was just over 16 tons per acre.

Mr. SPOONER.—Was that the average of the whole?

The CHAIRMAN replied that it was not, but about 13 tons was the average of the whole. He believed 26 tons could be grown with good cultivation. His drills were 18 inches apart, and the plants 9 inches apart in the drills. He got 242 plants to the rod, or 38,720 to the acre, which, at 1lb. each, would give 17 tons 15 cwt. 3 qrs. 7lbs. to the acre; at 1½ lbs. each, 21 tons 12 cwt. 1 qr. to the acre; at 1¾ lbs. each, 25 tons 18 cwt. 1 qr. 19 lbs. to the acre. If the drills were placed only nine inches apart there would be, he believed, 50 tons per acre. He thought they might give some attention to the sugar-beet, and it was for those who desired to do so to say how it was best to be done. Mr. Hill offered 20s. per ton or 23s. delivered on the railway. Then the great point for their consideration was whether they could afford to grow it at that price or not. At the price Mr. Spooner had put the sugar he thought it would answer very well. Mr. Blundell had alluded to the calculations of Mr. Clarke, and the very exhaustive paper he had read. He said that Mr. William Biddle had grown a crop of 60 acres in Suffolk for several

years, and after paying all expenses—rent, taxes, &c., there was a profit of £1 12s. 6d. per acre.

Mr. BLUNDELL.—But Mr. Clarke has not put down enough by 30s. for his cartage.

The CHAIRMAN said he would not enter into that. Mr Leggatt had grown beet this year, and no doubt he was prepared to say what he thought of it—whether it answered or not. If Mr. Hill had been present, he (the Chairman) would have offered him the produce of twenty acres on the condition that he took the chance of what he grew. However, as he was not there, he could not enter into any contract with him. Leaving the beet question, he wished to ask Mr. Spooner which was most valuable—the manure from young or old animals? and whether it made any difference with regard to the quantity of food given? Also, what was the value of the bulbs of the sugar beet before they were made into pulp, after the water had been extracted?

Mr. LEGGATT said that he had given sugar-beet a trial as well as mangold. He had them set in about twenty inches apart, set out close to the other roots. They came up very irregular, and some of them looked very ugly; and what he had produced there that day were some of the most respectable-looking he had. They had very great difficulty in digging them up. Another thing was that he thought he put too much guano with them. He tried them by the side of some ordinary mangold-wurtzel, and the result was that he had a very large crop of mangold indeed—perhaps 35 tons. With perseverance and trouble, they might get a good crop of beetroot.

The CHAIRMAN: Do you believe they can be grown to a great weight per acre?

Mr. LEGGATT: Yes; but the question is whether the larger would be as saleable as the smaller ones. I think they might be grown at £1 per ton.

Mr. C. HOLDAWAY said this year they not only had to deal with the general root crop, but a superabundance of it. If they took the land right through the country, and looked at the crops and the large amount of grass, and the after feed, they would find the supply was far before the demand. The discussion that day was to see how they could best get rid of the surplus, and he would first allude to the white roots. Was there a market to be found where they could sell them at so much per ton? There was not, and they could not sell them for sheep. It had been said that they should plough them in. A way he had of dealing with them, and it was a "hobby" of his own, was better than ploughing them in, and then have to kill them, perhaps, afterwards. He recollected some 25 years ago that he had a large supply of turnips, and he was about to turn them into the ground, when a neighbour came along and gave him the cognomen of being a destroyer of food, and he gave him permission to feed 200 sheep on the turnips for a fortnight. He turned them in, and he (Mr. Holdaway) turned into the land those by the side where the sheep fed. He sowed it with harley, and he had a sack per acre more there than on the place where the turnips had been fed off by the sheep. He called his neighbour in to see it, and he said it was all chance. But that did not satisfy him, for he felt that the sheep came there to feed and took something away as well. What they left was worth about 4s. per ton as manurial value, whereas the turnips would have been of more value to him if he had ploughed them in instead of giving them away. Therefore it was wise, instead of giving them away, to try and use them themselves. One mode of dealing with them was to bury them, while Mr. Blundell said the best way was to pass them through the cutter. This was an old plan, but he did not think it could be done for 4s.—not for twice 4s. [The Chairman: Yes, and not for three times 4s.] He (Mr. Holdaway) gave 7s. per acre to have it done, but then there was this agreement, that there shall not be found one slice which exceeds one inch in thickness. By these means the thing was done effectually. With regard to swedes it was different. They were marketable, and might be sold by the ton. The present market price was 10s. They must make a calculation whether they could afford to sell them at this, as there would be no return to the land, and they would want quite 3cwt. of Peruvian guano to make up for that which was taken out of the land. If they could not get a profit it would be better to slice them up.

Mr. W. B. GATER thought the ring roller would serve for the purpose of smashing up the root crop, and that by these means it would be done effectually.

Mr. JOHN WITHERS also thought that with the ring roller and a little frost the roots would become decomposed, and that it would answer every purpose.

The CHAIRMAN said Mr. Blundell had made one remark which might act injuriously to those who had an idea to grow sugar-beet. He told them there would be great difficulty in getting landlords to allow their tenants to grow it, as it would take so much out of the land. But that was not an insurmountable objection, as he thought there were many landlords who would allow it if the tenant agreed to return something of equal value to the land to that which was taken away. For instance, they were allowed to sell their straw, and they took something away with this, but this was returned in the shape of cake and other things given to the animal. He thought this was a difficulty which might easily be got over.

Mr. BLUNDELL thought the only way it could be done would be to grow beet in rotation, and then it would displace a cereal crop.

Mr. HOLDAWAY pointed out that it was all very well for them to talk like this about agreements being entered into between landlord and tenant, but it could not be done without a new lease, for, suppose the owner were to die, the agreement would be of no use while the original lease was in existence, and they would find it a difficult matter to deal with.

Mr. JAMES WARNER agreed with Mr. Blundell, that they should look before they leaped. They could not tell what might happen between this time and a few months hence, and there might then be no cause for disposing of the extra quantity of roots which they now had. Where land was light it required to be trod upon, but where it was heavy sheep did more harm than good.

Mr. SPOONER, in reply, said he was glad to find that a discussion had resulted, for the introduction of the subject would be very useful to them indeed. The Chairman had asked him one or two questions, which he had much pleasure in answering. Young animals would certainly take up more of the food than old ones. A young animal would take up more of the albuminous parts and retain them in the flesh than the older one, and thus the manure of an older animal was much more valuable than that of a young one, as more of the nitrogenous parts were retained in the system. Then came the question whether it would make any difference in the quantity given. Most decidedly it did, and this would be evident if they turned a lot of cows into a straw-yard to get fat, as some people did. They would eat up and absorb all the manuring properties of the straw. If they gave a great surplus of cake or any other food a very considerable quantity of that passed through the animal without doing much good to the system. The more good food they gave an animal the more valuable the manure became, but they would find it to be a very expensive process if they gave such food for the purpose of manure alone. The larger the quantity of nutritious food the better would be the manure from it. The most profitable way was to give the food in that proportion which would best suit the animal. With regard to the pulp of the sugar beet there was about 85 per cent. of water in the beet, and but 60 in the pulp, so that 25 per cent. was replaced by solid matter. One ton of sugar-beet pulp was the residuum of two tons of the beet itself. He proposed "That the thanks of the Club are offered to Messrs. Hill and Co. for their liberal offer of prizes for the cultivation of sugar-beet in 1872, and this club recommends the growth of this crop for the purposes of sugar as a most desirable addition to the products of agriculture in this neighbourhood."

The CHAIRMAN seconded the motion, and it was carried.

Similar compliments were passed to the Lecturer and Chairman.

SANDWICH PROPOSED BEETROOT-SUGAR COMPANY.—A public meeting, convened by the promoters of the above Company, was held at Sandwich, when the chair was taken by Mr. W. Gillow, of Woodnesborough. Mr. A. Baruchson, of Liverpool, gave some details as to the suitability of the English soil and climate for producing beet, which he contended could be done even more advantageously by the English farmer than by those of other countries. The proceedings terminated upon the understanding that another meeting should be called early next month, to ascertain if there might be enough shares taken and a sufficient quantity of beet promised to enable the Company to commence operations.

HINCKFORD NEW AGRICULTURAL CLUB.

A public meeting of agriculturists was held at the Bell Inn, Castle Heddingham, for the purpose of forming an Agricultural Club for the district. The meeting was convened by circular, which stated that the Hinckford Conservative Club had this year "cast off the agricultural part, and become exclusively a political Conservative one," and that, consequently, "many agriculturists in the Hinckford Hundred are desirous on behalf of the poor and deserving labourers, to take up the part which has been abandoned by the Hinckford Conservative Club, and establish a purely agricultural club, independent of politics.

The Rev. C. J. GOOCH, the Chairman, hoped that in taking part in the proceedings it would not be considered that he, or those who would propose the resolutions, were acting in opposition to any club already established. It had always appeared to him unfair to exclude anyone from an agricultural club, either on account of his political or religious views, and their object was to form a club independent of politics. He could not see why a liberal should not be a good farmer; he might even be a stark staring radical, and yet be an intelligent member of the club which they intended to establish that day.

The following letters were then read :

Aberdeon, Nov. 1, 1871.

Gentlemen,—I beg to thank you for the circular which you have sent to me inviting me to attend a meeting to promote the establishment of a new Labourers' Friend or Agricultural Society for the neighbourhood of Castle Heddingham. I am anxious to explain to you why it is that I do not feel able to support the proposed club. As the Hinckford Agricultural Club has not altered its constitution, has not abandoned the agricultural portion of its work, as stated in the circular (doubtless from erroneous information), I cannot see that there is room for a second Agricultural or Labourers' Friend Society in the district for so many years past occupied by the Hinckford Club. So long, therefore, as that club continues to include in its programmes, and objects the giving rewards to skilful agricultural labourers and rewards for long service, I must continue to support it. Even should the Hinckford Club at any future time cease to be an Agricultural Club (a question which could be decided by its own members only), I do not feel sure that it would not be better that Castle Heddingham and some parishes near it should join one of the existing agricultural societies rather than join in any new agricultural society, for which there is not much room. I shall be obliged by your reading this letter to the proposed meeting, for I am anxious to explain why I am not able to join in a movement intended, as I presume, to benefit the labouring classes.—I am, yours faithfully, LEWIS A. MAJENDIE.

Spain Hall, Braintree, Nov. 3, 1871.

My dear Mr. Elwes,—I have received a circular from the promoters of a new club for the Hinckford district, appended to which are the names of several very good friends of mine. I much regret that I shall not be able to attend the meeting, and I very much hope that a proposition will be made at the meeting to postpone further proceedings for a month. In the meantime the old Hinckford Club will be able to call together its supporters, to examine their present position, and I trust offer such terms to the promoters of the new club as will be acceptable to them. It will be quite impossible to carry on two societies for the distribution of prizes, &c., in the same district. A new club must fail, if it commences by provoking the hostility of many who would be its friends and its best supporters. On the other hand an old club cannot be successful when it loses some of its best blood. There must be mutual concessions. I know you are a man of "peace" and not of "war," so I venture to trouble you with my humble opinion upon this vexed question.—With kind regards, yours very truly, S. B. RUGGLES BRISE.

Boxted, near Colchester, Nov. 4th, 1871.

My dear sir,—I fear I cannot attend your proposed meeting

on Monday next. I do not understand that the old Hinckford Club has abandoned its character as a Labourers' Friend Society, as is stated in the circular which I received at Heddingham. Indeed, the Chairman at our annual dinner expressly stated that the pecuniary condition of the Club obliged us to abandon giving prizes, for this year only, but that next year we should again be able to distribute rewards for ploughing, &c., as heretofore. Until it is the wish of the members of the old club to alter its constitution and character, is it desirable to form a new club when one already exists?—I am, yours faithfully, JAMES ROUND.

In reply to the committee's circular, Mr. Samuel Courtauld wrote: "Without more definite explanation of the plan and proceedings of the proposed club, I am not able to form an opinion respecting it." Mr. G. W. Eagle wrote to apologise for his unavoidable absence; and the Rev. S. Steer replied by subscribing £1 ls. annually.

The Rev. F. ELWES wished, before any resolution was proposed, to offer a few words of explanation. Their object in promoting this club was to form a purely agricultural society, independent of all politics, and to aid agriculture by the distribution of prizes to deserving labourers and skilful ploughmen. Although, however, it was not intended that the new club should enter upon general politics, all politics referring to agriculture would be open to discussion at their meetings, but nothing more. That was the sole object in view, and from the promises of support already received, there was every prospect of forming a good club on a basis entirely independent of party politics.

The CHAIRMAN: That is to say, if there is any proposal made in Parliament inimical to the agricultural interest it may be discussed?

The Rev. F. ELWES: Precisely: such questions as local taxation or the malt-tax.

Mr. J. S. GARDINER said he had frequently heard complaints made by influential persons that they could not join a political agricultural club, and for himself he had often regretted that they could not meet such men as Mr. Smoothy and Mr. Chaplin at the distribution of prizes by the Hinckford Club. He begged to propose a resolution, which, for the sake of discussion, he had divided into sections, each of which would be subject to amendment:

1. That, in the opinion of this meeting, it is desirable to establish a club irrespective of political party, to be called the Hinckford Agricultural Club.
2. That the Club shall consist of subscription members of from 5s. and upwards, a managing committee, a chairman, and a secretary, the two latter to be elected annually.
3. That the managing committee shall consist of all members paying 10s. each and upwards, with a proviso of a quorum of not less than five members.
4. That the object of the Club is to discuss questions bearing upon agriculture, to offer prizes for agricultural and garden produce, to stimulate and encourage honest persevering industry among the deserving working-classes, by giving rewards worthy of acceptance.
5. That an annual dinner shall be held, at which it shall be open to discuss questions pressing upon the agricultural interest.
6. That a committee be at once formed to draw up rules for the government of the Club, and to report the same to an adjourned meeting of the members for their approval.
7. That a chairman and secretary be elected forthwith.

Some discussion took place with respect to the meaning of the words "agricultural produce" in the 4th rule, and it was satisfactorily explained that it was intended to apply to labourers' produce, and that no part of the subscribers' money would be offered in prizes to farmers themselves.

The Rev. F. ELWES suggested that a small sweepstakes for roots exhibited by farmers might be instituted among themselves; and Mr. Hadden urged that monthly meetings for dis-

discussion of agricultural topics might advantageously come within the scope of the society's objects.

Mr. J. R. CHAPLIN seconded the adoption of the rules.

Mr. G. D. BADHAM thought they were not in order at the present in establishing another club, and he should himself hesitate before doing so. No doubt the old club required reform, and that influential meetings would tend to bring it about. But after the handsome letter from Colonel Brise that had been read, he thought the least they could do was to postpone action for another month, and if that was done probably all parties would be able to join the old club. He begged therefore to propose that the matter should be adjourned for one month.

Mr. WRIGHT seconded the motion.

Rev. F. ELWES said he could not see that such a proposition could be entertained. He did not think it could for one moment be taken into consideration. The club had already had ample opportunities of altering its rules, and had not done so, and now it came at the last moment—it was only on Saturday he heard the proposal—to ask the promoters to throw over the friends they had brought there, and to postpone the whole question for a month. He should like to ask what the old club could offer to Mr. Chaplin and his friends so as to include them? Whereas they could support a purely agricultural club, disconnected with politics. He reminded the meeting that the suggested object in delay was totally at variance with the tenor of Mr. Majendie's letter. Mr. Majendie said there was no scope for a second society, but they were justified from the amount of support they had already received in going on with the project.

Mr. CHAPLIN said he knew nothing of course of the Hinckford Conservative Club; how should he? He would not have been admitted. There was no other club that he could join except this new club, and he should be happy not only to join it, but to use his influence in obtaining other members.

Mr. SMOOTHY said he had been asked to join the old club, and in reply had promised to do so when they took from it the word "Conservative," and discarded politics. If the Conservatives wished to have a political club by all means let them have it; but now there seemed to be a probability that a club would be established in which all could join, and he for one would do all he could to support it, feeling sure that if the question was remitted to the old club they would get back into their old state.

The Rev. J. M. CRIPPS asked whether it was not possible that the old club might give up the agricultural portion of their object in favour of this club? His only reason for being present was that he thought it was desirable to have a club for purely agricultural purposes, and he would suggest whether it might not be put to the old club whether they would give up their agricultural section.

Mr. COLLIS asked whether the old agricultural club really existed, since it had given up offering prizes, and had turned

itself into a purely political club. He did not think the gentlemen present would follow Mr. Cripps's advice and go to consult the Hinckford Club. It was not for them to go to the Hinckford Club, but for the Hinckford Club to come to them. They had won the whip-hand and they meant to keep it.

The Rev. F. ELWES said there was a good deal in what Mr. Cripps had said, but the promoters could certainly not go to the Club, although he trusted the Club might come to them.

Mr. J. S. GARDINER complained of the past management of the old club, and challenged contradiction to any of the statements to which his name had been appended in print.

The amendment was then put, but four votes only were given in its favour, and the Chairman declared the resolution carried by a large majority.

On the motion of the Rev. F. Elwes, seconded by Mr. Chaplin, Mr. A. B. Collis was requested to accept the office of Secretary of the ensuing year.

Mr. COLLIS, in notifying his willingness to comply with the wishes of the meeting, stated that he had already £25 in hand, and he wished the old club which could scarcely pay his debts, to know that fact.

The following gentlemen were then nominated as a *pro tem.* committee: Messrs. G. Eade, J. S. Gardiner, J. R. Chaplin, A. B. Collis, G. Wood, E. Gardiner, Rev. F. Elwes, G. H. Goodchild, C. H. Branwhite, J. W. Pudney, J. N. Sparrow, A. P. Viall, E. Hadden, W. Peck, J. Green, Thos. Hardy, S. Smoothy, and R. R. Hutton.

Mr. GARDINER, in proposing the election of a chairman, remarked that the gentlemen he intended to propose came of a good old stock, and from a good old county—he referred to the worthy Chairman, who would, he hoped, accept the office. He had heard that a better or more kind-hearted man than Mr. Gooch's father had not lived; and he thought they might say the same of their chairman.

Mr. SMOOTHY believed it would add greatly to the success of the Club if Mr. Gooch would consent to be at their head. And it was quite certain that he would not lead them into much trouble.

The CHAIRMAN expressed his gratification in being requested to take the office, and accepted the post with pleasure. He remembered that when the Hinckford Club was established he was at Toppsfield, and wrote to his father, asking his opinion as to whether he should join it. His reply was—"By no means join it; potatoes and politics are two distinct things." He had held aloof until the last election (in which he felt bound to take part); but he still thought that agriculture and politics ought not to be united, and that they had no right to exclude men from the agricultural club on account of their political opinions. He should be happy to acquiesce in their wishes by accepting office for one year.

The proceedings closed with a vote of thanks to the chairman.

RUTLAND AGRICULTURAL SOCIETY.

MEETING AT OAKHAM.

The "Uppingham Ox" at Oakham was but a third-rate show-beast last season; and although he has gone on well since, and is really very good for so big upstanding an animal, he has little promise of succeeding to an equally high position elsewhere, whether at Islington or in the North. Mr. Wortley's and Mr. Pulver's steers have continually met, and it appears to be still a moot point as to which is the better of the two, although we hold to the Rutland reading in favour of the Home Secretary's very stylish Shorthorn. Lord Exeter won in the next class with a white of the same breed, good before but standing badly behind; as his lordship did also with a small neat Highlander of nice quality but weak in his back, as over whose actual merits the argument grew somewhat strong. There was scarcely any competition amongst the fat cows, but Mr. Sharpe's red heifer is a wonderfully well-grown heavy-fleshed animal,

and her owner had a lead in some other classes. The Burghley Leicesters have gone off terribly, but they have seldom sent a smarter or more blood-like pen from Keythorpe, which goes on to Birmingham. The winning Lincoln again were very superior, and there were some prize white pigs which united size and weight with quality.

So far, we write without the aid of a catalogue, for we saw the stock show on the Wednesday evening; whereas the great day at Oakham is on the Thursday, when the hunters and hacks are judged in the open, and the arrangements otherwise completed. The horse show is an improving feature in the business of the Rutland Society, if the entry were not quite so strong as at the previous meeting. Mr. Fludger's Footstool chesnut, of a very good stamp, Mr. Laxton's four-year-old, by the Drake, and Mr. John Bennett's three-year-old, by Mogador, also the best three-year-old at Leicester, were left in as the

first prizes of their several classes, to compete for the gold medal for the best of all the hunters; but the event was never in doubt. The Laxtons, of Yaxley, have long been known for the care they take in breeding a hunter in the right way, though we doubt if they ever had a better than The Drake four-year-old, a very truly framed colt, with every promise of still improving; so that he fairly beat off the swells, like Mr. Fludger, Mr. Chaplin, and Mr. Westley Richards, as well as some of Mr. Percival's from Wansford, and the Shangton chesnut, second at Leicester and second here again in the all-aged class. Old Lady Florence was the best brood mare of a small and moderate entry, while the hacks were a very nondescript lot, and the first and second ponies placed precisely as at Leicester, but with objections still cropping up, as both were said to be above the standard. Custance, who had two winning mounts here, with Fordham amongst the public, declared there was as much wrangling as over a Plate at Croydon. If these objections should be sustained, a very neat but very small pony with capital action, the property of Mr. J. Hornsby, of Grantham, would succeed to first place. There were, further, two classes of cart horses, which seemed to take a deal of doing.

PRIZE LIST.

JUDGES.—STOCK: Messrs. J. Topham, W. R. Cresswell, and C. Bosworth. HUNTERS and HACKS: Messrs. J. Baillie, G. V. Braithwaite, and Henry Corbet.

CATTLE.

Ox or steer, of any breed or weight, exceeding three years and three months old.—First prize, £15, Col. Reeve, Leadenham, Grantham; second, £7, E. Wortley, Kiddington.

Ox or steer, of any breed or weight, not exceeding three years and three months old.—First prize, £10, J. How, Broughton, Huntingdon; second, £5, J. Codling, Whaplode, Spalding. Commended: Sir W. de Capell Brooke, Geddington Grange.

Cow, of any breed, age, or weight.—Prize, £10, W. Faulkner, Rothersthorpe. Commended: T. Willis, Carperby, Bedale, Yorkshire.

Heifer, not exceeding four years old, of any breed or weight.—Prize, £10, J. J. Sharp, Broughton.

Steer, not exceeding two years and six months old.—First prize, £10, Marquis of Exeter, Burghley Park; second, £5, J. J. Sharp. Highly commended: Sir W. de Capell Brooke. Commended: T. W. Fowler, Exton.

Fat beast, above two years and six months old (shown as extra stock).—Prize, £5, Marquis of Exeter.

Best fat beast.—The Uppingham School medal and extra premium of £25, Col. Reeve.

Shorthorn cow, above three years old, in milk or in calf.—First prize, £10 10s., E. Wortley. Commended: C. Chapman, Exton.

Cow above three years old, in milk or in calf.—First prize, £10, J. J. Sharp; second, £6, Sir W. de Capell Brooke. Commended: G. Cant, Harringworth.

Heifer, above two and not exceeding three years old, bred within the district.—First prize, £7, C. Speed, Horn Mills; second, £5, C. Chapman. Commended: Earl of Gainsborough.

Heifer, above one and not exceeding two years old, bred within the district.—First prize, £7, J. J. Sharp; second, £4, T. W. Fowler. Highly commended: Marquis of Exeter. Commended: R. Pinder, Whitwell.

Heifer calf, above six and not exceeding twelve months old.—First prize, £8, T. Stokes, Glaston; second, £2, J. Lynn, Church Farm, Stroxtun. Highly commended: J. Sharp.

Bull not exceeding twelve months old.—First prize, £10, C. Bayes, Kettering; second, £5, J. J. Sharp.

Cow in milk.—First prize, £5, G. Chester, Waltham; second, £2, J. Edgson, Langham. Commended: J. Hawkins, Ashwell; W. Hubbard, Langham; Mary Hammond, Egleton.

Heifer under three years old.—First prize, £4, W. Hubbard; second, £2, C. Hubbard, Langham. Commended: E. Cooper, Burley.

Heifer calf not exceeding 12 months old.—First prize, £2, C. Hubbard; second, £1, R. Coverley, Cottesmore.

Best breeding beast shown as extra stock.—A gold medal value 10 gs., J. J. Sharp; a silver medal value 5 gs., C. Chapman.

Best breeding animal.—An extra premium of £10, J. J. Sharp.

SHEEP.

Three fat wether Leicester sheep, one year old.—First prize, a silver cup or £10, Executors of Lord Berners, Tugby; second, £5, Sir W. de Capell Brooke.

Three long-woolled fat wether sheep of the Lincoln breed, one year old.—First prize, £10, J. Byron, Sleaford; second, £5, Sir W. de Capell Brooke.

Three short-woolled or short and long woolled cross-bred fat wether sheep, one year old.—First prize, £10, Colonel Lowther, Barleythorpe; second, £5, Sir W. de Capell Brooke. Commended: T. Tyron.

Best pen of sheep.—Prize £10, Executors of Lord Berners.

Four long-woolled breeding ewes, bred within the district.—First prize, £3, C. J. Bradshaw, Burley.

PIGS.

Fat pig under 13 months old.—First prize, £5, A. A. Almond, Oakham; second, £3, S. Deacon, jun., Polebrooke Hall, Oundle. Highly commended: W. Hughes, Oakham.

Fat pig under 10 months old, not to exceed 30 stones live weight.—First prize, £5, Carver and Sons, Ingarsby; second, £3, J. Lynn, Stroxtun, Grantham. Highly commended: R. E. Duckering and Son, Northorpe, Kirtou Lindsey.

Fat pig of any weight, for tenant occupiers of not more than 30 acres of land in the district.—First prize, £2, H. Royce, Exton; second, £1, R. Gregory, Egleton.

HORSES.

Hunting mare or gelding, above five years.—First prize, £20, A. Fludger, Ayston Hall (Ottoman, by Footstool); second, £10, J. Pain, Shangton (Charley). Highly commended: W. A. Chaplain, Melton Mowbray (Pioneer).

Four-year-old hunting mare or gelding.—First prize, £20 and gold medal, value 10 gs., as best hunter, J. Laxton, Morborn, Yaxley, Peterborough; second, £10, S. Stokes, Daddington (Forester). Highly commended: W. Mould, Great Easton.

Three-year-old hunting mare or gelding.—First prize, £10, J. Bennett, H. Bosworth Grange, Rugby; second, £5, R. Stokes, Alexton Lodge, Uppingham.

Mare adapted for breeding hunters, and to be satisfactorily in-foal by a thorough-bred horse.—Prize, £5, J. E. Bennett (Lady Florence). Highly commended: T. Stokes, Warrington, Oundle.

Riding mare or gelding, under seven years old, not exceeding fifteen hands and one inch high.—First prize, £10, H. Whincup, Stamford; second, £5, W. Woods, Edithweston.

Pony under seven years old, not exceeding thirteen hands high.—First prize, £3, R. B. Hlack, Keyham, Leicester; second, a hunting whip, W. Fowler, Manton. Highly commended: J. Hornsby, Castlegate House, Grantham.

SUTTON'S ROYAL READING ROOT SHOW.—First prize: Long Red Mangel, £3, J. Cave, Pinesfield Rickmansworth; Long Yellow Mangel, £2, the Marquis of Ailesbury; Yellow Globe Mangel, £3, J. Cave, Pinesfield, Rickmansworth; Yellow Intermediate Mangel, £3, Hepburn and Son; Red Globe Mangel, £1, J. Cave; Champion Swedes, a Silver Cup, value £10 10s., H. Allsop, Hindlip Court, Worcester; White globe turnips, £1, A. C. Cobham Green-topped white turnips, £1, C. Witherington Red, grey, or purple-topped white turnips, £1, H. Redman Yellow-deshed or other turnips, not included in the foregoing, £1, Wm. Bullen Green Kohl Rabi, £1, J. Cave Purple Kohl Rabi, £1, J. Cave Sugarbeet, £1, J. Cave Drumhead cabbage, 7s. 6d., S. Robinson. Parsnips, 7s. 6d., B. Lane.—Red carrots, 7s. 6d.—Wiltshire.—White carrots, 7s. 6d., W. May.—Onions, 10s., J. Cave.—Early kidney potatoes, 10s. P. McKinlay.—Kidney potatoes, 10s. J. Choyce.—Early round potatoes, 10s., R. Crawley.—Late round potatoes, 10s., McDonald.—Silver cup for the best collection of roots, consisting of swedes, long red mangels, and yellow globe mangels value £5 5s., Mr. J. Cave.—The best roots will be selected for Messrs. Sutton's stands at the Birmingham and London shows.

PROFESSOR SPOONER, Principal of the Royal Veterinary College, died at his residence in the College, Camden Town, on Friday morning, Nov. 24, in the 66th year of his age.

BIRMINGHAM AND MIDLAND COUNTIES' CATTLE SHOW.

In the course of ten years the Innkeepers' Plate or prize for the best beef in Bingley Hall has been won at four meetings by Shorthorns, at three by Scotch black Polls, twice by Herefords, and once by a Shorthorn-and-Aberdeen cross. On three of these occasions the best of all has been taken from the cow and heifer classes, but it may be interesting if not more directly useful to give the complete return :

- 1861.—Mr. M'Combie's polled cow.
- 1862.—Mr. Stewart's cross-bred ox.
- 1863.—Mr. Swaisland's Shorthorn heifer.
- 1864.—Mr. Phillips' Hereford steer.
- 1865.—Mr. Rowland Wood's Shorthorn steer.
- 1866.—*No show of cattle.*
- 1867.—Mr. M'Combie's polled ox.
- 1868.—Mr. Heath's Hereford steer.
- 1869.—Lord Aylesford's Shorthorn steer.
- 1870.—Mr. Pulver's Shorthorn steer.
- 1871.—Mr. Bruce's polled heifer.

Of these Mr. Swaisland's Shorthorn heifer, Mr. M'Combie's polled ox, and Mr. Heath's Hereford were also *gold medal* animals at the Smithfield Club show ; as since the establishment of a Champion Plate in London the Birmingham ruling has been followed with Lord Aylesford's and Mr. Pulver's Shorthorns.

It will be seen, then, that so far the Shorthorns and Scotch Polls have had all the best of this best-of-all business, the very honours of the cross-bred winner being divided between them. And a look through Bingley Hall on Saturday went only the more to confirm such superiority. Good as some of the Devons were, it was clear enough, long before it came to running off the deciding courses, that none of these could ever hope to stand in against the white steer or the black heifer ; while the entry of Herefords was so generally moderate, that when they had beaten each other all interest over these classes seemed to evaporate. The best of all the white-faces, where as usual the catalogue opened, was also the best ox at Abingdon on Monday, Mr. Bettridge being always in force about home. This is a big deep beast, full of good firm flesh, but short in his quarter and plain about his head. In fact, Mr. Heath's second is far more stylish in his character if not of equal value to the butcher, as his touch is not so kind ; but after all there is not much to choose between the two with any man who really fancies a handsome high-bred Hereford. Mr. Bettridge's third prize was also from Mrs. Weyman's herd, and a half-brother on the sire's side to the winner, but his affinity was about his chief recommendation. Beyond Mr. Aaron Pike's good-looking steer, there was nothing of remarkable merit in the two lots of younger animals, where the competition was very limited, running in all to but nine entries ; nor were the Hereford cows and heifers in any way stronger, there being but fourteen nominated for the three classes, some of which were not sent. Mr. Bettridge's best cow is at best but a plain one, as she was beaten at Abingdon by a Shorthorn of Colonel Lindsay's, so that any faint hopes of further distinction amongst the females depended on Her Majesty's Victoria Alexandria, a very nice high quality beefy heifer, although getting wrong in her quarters, and altogether weak behind. The noticeable want of competition in and about Herefordshire during the autumn had not augured much for anything coming on, nor does it promise to be a great Christmas show of whitefaces and red-coats, or old-fashioned

greys, of which colour one at Birmingham was a winner, to be distinguished from her fellows as Nelly Grey.

"Mr. Stratton kept back most of his plums, and did not offer a prize-winner ; but a splendid white steer out of Flower-Girl's dam did his morning walk outside the hurdles, and was in truth a walking advertisement as to what the stock could produce. He is of great growth, very active, and remarkably level-fleshed ; and if he goes on it will take a very superior animal to beat him at the next Christmas show." So ran the opening of our own report of the sale of a draft of Mr. Richard Stratton's herd in the early spring of this year. And "the walking advertisement" for the Burderop herd has gone on famously since then, as it was evident from the first he must do great things during the day. He is a particularly handsome beast, and has continued to feed very level, as in fact for his weight and size it is not often that a better balanced ox has been brought out. He is very good to meet, has a neat bloodlike head, and, a great point, is better out than in his stall, so gay is his carriage and so smart his appearance. His touch is wealthy enough for that of a Hereford, or as some superfine connoisseurs might call it, rather strong, but in our times this is a fault in the right direction. Moreover, the white steer is "well-connected," for his grandam on the sire's side, Diadem, was a gold medal cow at the Smithfield Club, and his half-sister, Village Rose, "a very sweet lengthy heifer, with every promise of growing into a handsome cow," was the first prize calf at the last All-Yorkshire Meeting, where she beat the second prize calf from the Wolverhampton Royal. By Bude Light out of April Rose this ox is a twin, but the other went wrong and died young. As is well-known his breeder, Mr. Richard Stratton, died a few months since, and the ox was entered here by one of the sons, Mr. Joseph Stratton, so that he was ineligible for the combined fed-and-bred premium. Otherwise, up to a certain point, he won everything he could easily enough, as, beyond his class, when it came to the best of all the Shorthorns, the judges had the winners in the several classes paraded just for form's sake, and then arrived at an instantaneous decision. We quite expect to see the white ox do as well in London as he did at Birmingham, if not even better, for with three Shorthorn judges against a mixed bench, the Shorthorns have now always "the pull" at the Smithfield Club when it comes to a comparison of breeds. Further on it was not by any means a great show of the sort. The best beast at Oakham, Colonel Reeve's great red ox, was not here—not that he could have made any great mark ; and in the old class, Mr. Walter Farthing, for the nonce discarding the Devons, was second with a small stylish steer, and Mr. M'Combie, also turning away from his much-cherished Polls, was highly-commended for a Shorthorn. All this is somewhat significant of the way in which the Shorthorn is extending its influence, when we see such successful exhibitors of other breeds coming over. This was by far the best class of Shorthorns, in which Mr. Pulver's very moderate steer could reach no higher than to a commendation, his conqueror at Oakham, Mr. Edward Wortley's very pretty and taking steer, being now put away in a class all by himself. That is to say, there was introduced on this year's prize sheet a class of Shorthorn steers where the competition was confined to "tenant-farmers," an altogether petty derogatory notion for a national meeting, which, we are pleased to say, resulted

in the most signal failure. There was but one entry; the other tenant-farmers going in for open competition and carrying off gold medals and champion plates. Some such nonsense as this has been talked of before now with reference to the Smithfield Club, but we trust never to see such a class again in the catalogue of any Society which aspires to be anything beyond a merely local meeting. As it was, Mr. Wortley's steer took his prize honestly enough, but we would rather have seen him fighting his way in the open field. If not quite fashionable the *white* Shorthorns were altogether in the ascendant at Birmingham, as where there was any competition all the first-prize oxen and steers were of this colour. Thus, beyond Mr. Stratton's ox, the best of the next class, who came from Scotland with a high character and goes on to London, was a white; but though a really good steer, he had not much to beat, as the same may be said of Lord Exeter's white, a first-prize at Oakham, and a nice beast forward, but standing very badly in his hocks. For one prize the two-year-old had only two competitors, and this young class of steers was pretty generally a failure, reaching to four Herefords, three Shorthorns, and four Devons. So far as the look of the thing goes, it were far better struck out of the catalogue, for small entries at great meetings are at best but a bad advertisement. There was a very moderate class of Shorthorn cows, which, like that of Shorthorn oxen, was we believe generally commended by the judges; and one or two of the things thus distinguished went to render such a compliment more or less ridiculous. The commendation of a whole class would imply a very high order of merit, which was certainly not here apparent. The winner was a long way the best of them: and a good straight heavy-fleshed cow, with a capital touch and a broad back, but somewhat steery in her character. The Princess of Oxford, for so she is called, is a half-sister to the Princess of Yetholm, the best cow in Birmingham and the cup cow in London, two years since, and the one bears a striking resemblance to the other, having just the same flashy red-and-white markings in her coat, and the like beefy look about her—a sort of animal which you fancy more in the stall than on the pastures. For second best the judges reversed the Oakham award, placing Mr. Willis' plain cow before Mr. Falkner's Whoman-in-white—more white—although we infinitely prefer the previous decision. Mr. Falkner's cow is rather delicate and narrow forward, but she is of a far better stamp than the other, although they have both done good service in the herd, whereas the winner, like her sister, has only just qualified with one calf, but neither of them ever looked like a breeder. Three or four in an otherwise large class of Shorthorn heifers were not sent, while the winner is the plainest and commonest of the three prizes, as we should doubt very much her holding her own in London. Mr. Crawshaw's second is of good quality, but is not so ripe; Mr. Ibbs' third has appearance in her favour, and the class was further as moderate as need be, the very judges being chary of commendation.

There was a very good show of Devons, more especially in the two older classes of oxen and steers; and here again the commendation was liberal. It must have been a very close race between the first and second oxen; Mr. Senior, junior, showing the bigger and coarser beast, about as ungainly a mover as ever was led out for inspection; nevertheless, despite his action and his mean quarter he was ultimately declared to be the best of all the Devons, and as there is said to be a better reserve for Islington, the Broughton beasts would threaten again to run very forward. To our fancy, however, Mr. William Smith's second was a superior animal, of primer quality, more thoroughly furnished and of nicer character. He looked to be the very embodiment of good roasting beef, just where

a Devon of all others can carry it; and whether he proved or not by that most absurd and bewildering of tests in the hands of a judge—the tape—we shall watch with some interest his next appearance in public. The two had it all to themselves, and in the next class Mr. Smith and Mr. Senior were again next to each other, but with their places reversed, and both fairly beaten for first by a very handsome highly-bred steer, from Mr. Taylor's fast rising herd in Sussex. The Exeter cow, Musk, was here in her proper place: for, as we said during the past summer, she had no business of late at a breeding show. Now, however, she looked at one time like standing in for further honours, but she does not improve on you when out, being bad in her quarter, while the second—with Mr. Smith and Mr. Senior again in front—should perhaps never have been shown, as, though an otherwise good cow, she is terribly disfigured from “withering;” and when it came to the best of the Devons Mr. Taylor's beautiful yearling, in a class to herself, looked to have a great chance; but has a well-bred yearling heifer properly any place at a fat cattle show? The Prince of Wales' entry in the older class of heifers, where she took a second prize, has been objected to as above the stated age; but it is right to say that His Royal Highness did not breed this cow.

There were no entries of Welsh, five in all of Longhorns, and but seven of Scotch Polls. Here, however, the strength of the show centred; and so soon as Mr. Bruce's heifer was inspected, it was seen that the white steer would have something to do before he won outright. This is a really sweet stylish cow, beginning with a blood-like, kindly head, backed with a long, level frame; and she is further as ripe as can be without any signs of excess or disfigurement from over-feeding. So far as we remember she is nearly as good as Mr. McCombie's cow, which also won the Junkeers' Plate here, and infinitely superior to the one they now sent up from Tilly-four, although Sweetheart has done something in her time as a prize taker at the summer shows of the Highland Society, but she never bred, and hence the sacrifice. The two will not meet in London, as Mr. McCombie's cow goes back to the North, not that she could ever hope to reverse the decision with Mr. Bruce's far more perfect heifer, which it is said will take the whole round from the Midlands to the Smithfield Club, and on to York, Leeds, and Newcastle. The Burnsides lassie still rather lacks scale, and this may stay her from reaching quite to the top in London. The two prize polled oxen are mainly remarkable for size, the best being a plain animal, while it will be satisfactory to the judges to hear that they had previously been placed by Aberdeen men as they now rank in Bingley Hall. The almost invincible Mr. Senior was first again with a fairish West Highlander, in a moderate class, where Lord Exeter's black, the best at Oakham, was quite outsized, as all the Highlanders so far threaten to be eclipsed by a dun which Mr. McCombie, now trying his hand at all kinds, will show at Islington.

Mr. Pike's Hereford cross is a great upstanding animal, plain in his appearance, and harsh in his touch, as we question his ever again getting so forward; while the second is of better quality, and the third a previous winner in Scotland. These crosses ran to a large class, which we had little opportunity of looking carefully through; but the three prize heifers, all of a cross between the Shorthorn and Scotch, either Polls or Highlanders, show in every instance a very successful issue. The extra stock was, of course, made up of “failures,” that is, mainly of Shorthorn cows with long pedigrees and no calves.

The Keythorpe Leicester, with their bloodlike clean heads and famous fleeces, never were better, although better still are in reserve for London: and a pen of Mr.

Byron's fine quality *Lincolus* we had just previously seen at Oakham. But the competition here was confined to the three prize pens, as it was also amongst the Cotswolds, where Mr. Hall showed a trio of grand well-prepared sheep, which put the other pens quite into the shade. The Prince's Southdowns were so beautifully got up that people began to think John Day must have gone over to Sandringham; but they came even better to the hand, and the winning lot well deserved their place. They are of capital quality, but not very sorry, the pen being set-off by one very sour-headed sheep, while the other pen should never have been sent, so altogether inferior and common are they in their looks and character. Taken singly, the best sheep in the class was one of Lord Sondes' six; but these again were not cleverly matched, and it would probably have been better to have shown one pen than two, as ambition in this way often o'erleaps itself. The smartest sheep of the show, however, was the Prince's old wether, of a very neat type, with a nicely coloured true Southdown head, and quite "a model" in shaping, as we question if they ever exhibited anything better from Merton. Mr. Colman does not progress so rapidly, despite the spirit with which he has gone into the thing, while the Osberton flock seems to be sadly deteriorating, their single sheep being an especially bad sample of the Southdown; but Mr. Waller, on the other hand, was deservedly commended. Lord Chesham still holds a lead amongst the Shropshires with some stylish broad-backed, firm-fleshed sheep, although nothing can be stronger than the contrast between the Latimers and some great, open-woolled old-fashioned animals from Lord Bradford's flock placed side by side. Mr. Allsopp's first wether in the old class has something of the earlier stamp about him, but is a sheep of fine "presence" with well-cut features and a poor loose fleece. Here again some other sheep from the same flock were as bad as the winner was good, and the show of Shropshires on the whole scarcely a fit sequence to the exhibition of a few months since at the neighbouring town of Wolverhampton. There were seven entries of Oxfordshires, six of which appeared in the names of Messrs. Nathaniel, Zachariah and Henry Stilgoe. We spoke to the great merit of Mr. N. Stilgoe's wethers when we saw these during the autumn at Aylesbury, and they were now first and second, although we believe by accident some sheep from the companion flock at Adderbury, were placed above the Aylesbury pen at the Oxfordshire Society's meeting. Dorset horns, Ryelands and Hampshires, running up to four entries in all, represented the other breeds; and a cross between the Cheviot and Hampshire Down, as tried on the Royal farms at Windsor, was perhaps the curiosity of the meeting. With the worst of heads, the longest of necks, and the weakest of frames, it is only to be hoped that, as the cheap advertising people say, "one trial will prove sufficient." There were the usual classes of single ewes, of which that for Southdowns was the best filled, where the Prince had entered one of his own breeding "over four years of age"; and, as His Royal Highness won here again, old mutton should not go quite out of fashion, despite the mania for early maturity.

The Pig show at most points was but moderate, and the very first pen on the list was disqualified, although exhibited by Lord Aylesford. These pigs were a cross of the Berkshire on to the black Suffolk, and entered as ten months old; whereas Professor Gangee pronounced one to be twelve months, while the farm stewards at Packington maintains that the three are all of a litter. It is noticeable, however, that the disqualified pig takes all after the Berkshire, while the other two throw to the Suffolks. Here is something for Mr. J. K. Fowler to speak to in his "Facts and Principles of Breeding;" but

Mr. Fowler's brother was also disqualified for Berkshires, Mr. Z. Walker written illegible, and Mr. Peter Eden cast with a capital lot of small whites, which otherwise must have won. Of the pens of three fat pigs far away the best were Mr. John Biggs' Berkshires, which might have taken any extra premium as the best of all, instead of merely the best of the two classes. They are really farmers' pigs, with great size, good coats, and a certain rough and ready look about them, which, as we take it, should be one of the especial properties of your true Berkshire, however much improved. The best single fat pig was an old sow of immense size, and we certainly preferred Mr. Deacon's more slightly second best, which, the Duckerings also behind, was second at Oakham. Over a large entry it was significant enough that the judges did not append a single commendation to the awards for Berkshire breeding pigs, where the three prizes went to Mr. Smith, of Henley-in-Arden, some of whose pigs had coats to their backs and some had not. The other class of large breeding pigs was almost altogether indifferent, as noticeable enough amongst the worst were the two pens from the Bedford Britannia Farm. They were not only bad, but badly shown, as seldom have we seen pigs publicly paraded in such wretched plight. On the banishment of Mr. Eden's best pen in the small class, Messrs. Wheeler succeeded to the first place with four very creditable pigs pulled down by a plain one; but it may be a matter of some difficulty to sample out five from one litter.

The classes for corn are fairly well filled; Mr. Frederick Lythall's Talavera wheat, grown in strong loamy soil after mangolds, being especially noticeable both for strength and colour. The other varieties of white wheat are very good, as are the beans and peas. The first prize for white peas was awarded to a fine sample of Princess Royal, a comparatively new variety of large size and excellent quality. The crop was grown on heavy soil after mangolds.

The roots, as might have been expected after the favourable season we have had, are generally excellent, and the entries are much more numerous than they have hitherto been. The mangolds are generally remarkable for size, one specimen of the large red kind weighing 52½ lbs. There is a large and excellent display of swedes; and the common turnips, both white and yellow fleshed are the best which have been seen anywhere for a long time, being almost without exception large, symmetrical, and clean in growth. The carrots are a small, very praiseworthy collection, both prizes going to very superior entries of the Altrincham kind. The collection of roots which gained Messrs. Procter and Ryland's silver cup weighed 4¼ cwt. 16 lbs., namely six grey mangolds, 1¼ cwt. 19 lbs.; six globe mangolds, 1¼ cwt. 5 lbs.; and six swedes, 1 cwt. 20 lbs. Sir Wm. Heathcote's collection, to which Messrs. Sutton and Sons' cup was awarded, weighed 4¾ cwt. 27 lbs.; the six long mangolds, 1½ cwt. 6 lbs.; six yellow mangolds, 1¼ cwt. 15 lbs.; and six white turnips, ¼ cwt. 27 lbs.; six Kohl rubi, ¾ cwt. 10 lbs.; six swede, ½ cwt. 25 lbs. Messrs. Perry's cup collection, consisting of six purple-top swedes, six green Kohl rubi, six long red mangolds, six yellow globe mangolds, six yellow intermediate mangolds, and six white fleshed turnips, weighed 5 cwt. 23 lbs. Colonel Motley six first prize kohl rubi weighed ¾ cwt. 21 lbs., and his second six ¾ cwt. 12 lbs. The first prize six long mangolds weighed 2¼ cwt. 16 lbs., and the second 1¾ cwt. The first prize globe mangolds weighed 1¼ cwt. 17 lbs., the second 1¾ cwt. 24 lbs., the quality of the first named lot determining the award, notwithstanding that the latter was so much the heavier. The six first prize swedes weighed 1 cwt. 9 lbs., the second ¾ cwt. 20 lbs. The show of potatoes is exceedingly large; the sixteen classes into which they are divided containing fine examples

of all the leading varieties; and taking so strong a show right through no set of Judges had more to do than the Bench who held their Court in the galleries.

Bingley Hall still maintains its supremacy in respect to its exhibition of poultry, of which there was a grand display, with no less than 2,087 pens. All the varieties but the pigeons are well represented, and the general condition in which the specimens are shown is highly creditable. The following are the winners of cups:—Dorkings, cocks, exceeding a year old, Countess of Dartmouth; Cochins, cocks, hatched in 1871, W. Augustus Taylor; Spanish, cocks, hatched in 1871, John H. Ruby; Polish, cocks, of any age, G. C. Atkins; Game, black breasted reds, cocks, exceeding one year, J. Forsyth; Game, white and piles, and medal, Charles W. Brierley; Silver-pencilled Hamburgh, cocks, of any age, H. Pickles, jun.; Golden-spangled Hamburgh, hens or pullets, John Rollinson; Silver-spangled Hamburgh, cocks, of any age, H. Pickles, jun.; Brahmas, dark, cocks, exceeding one year, W. A. Taylor; Ducks, black East Indian, Francis Pitted, jun. Beyond this Champion return the following weights of the winning pens may be interesting:—Ducks, white, Aylesbury, drake and one duck, 1st, 17lb. 12oz.; 2nd, 16lb. 12oz.; 3rd, 15lb. 4oz.; 4th, 13lb. 10oz. Ducks, Rouen, drake and one duck, 1st, 19lb. 5oz.; 2nd, 19lb. 1oz.; 3rd, 18lb. 15oz.; 4th, 18lb. 10oz.; 5th, 18lb. 8oz. Geese, white, birds exceeding one year old, gander and one goose, 1st, 56lb. 9oz.; 2nd, 56lb. 9oz. Ditto, birds of 1871, 1st, 48lb. 6oz.; 2nd, 44lb. Ditto, grey and mottled, exceeding one year old, 1st, 60lb.; 2nd, 51lb. Ditto, birds of 1871, 1st, 47lb.; 2nd, 37lb. Turkeys, cocks, exceeding one year old, 1st, 36lb. 4oz.; 2nd, 32lb. 8oz. Ditto, hatched in 1871, 1st, 28lb.; 2nd, 23lb. 4oz. Turkeys, hens, exceeding one year old, 1st, 35lb. 12oz.; 2nd, 33lb. 8oz. Hens, hatched in 1871, 1st, 35lb. 10oz.; 2nd, 27lb. 2oz.

PRIZE LIST.

CATTLE.

JUDGES.—G. W. Baker, 45, Cambridge-terrace, Clapham-road, London.

J. Thompson, Badminton, Chippenham.

S. P. Newberry, 4, Baington Villa, Plympton, Devon.

HEREFORDS.

Oxen or steers, any age.—First prize, £15, and extra prize of £20 for the best Hereford, H. Bettridge, East Hanney, Wantage, Berks; second, £10, W. Heath, Ludham Hall, Norwich; third, £5, H. Bettridge.

Steers, not exceeding 3 years and 3 months old.—First prize, £15, A. Pike, Mitton, Tewkesbury, Gloucestershire; second, £10, H. Bettridge; third, £5, W. Groves, Brompton, Berrington, Salop.

Steers, not exceeding 2 years and 6 months old.—Prize, £10, given by the ex-Mayor of Birmingham (Mr. G. B. Lloyd), Her Majesty the Queen, Windsor Castle. Commended: J. Baldwin, Luddington, Stratford-on-Avon; J. Crane, Bent Hall, Shrewsbury.

Cows.—First prize, £15, H. Bettridge; second, £10, W. Groves, Brompton, Berrington; third, £5, A. Pike, Mitton.

Heifers.—First prize, £15, and silver medal as breeder, Her Majesty the Queen; second, £10, R. Shirley, Bancott Manslow, Church Stretton, Salop. Highly commended: T. J. Garrett, Bourton-on-the-Hill, Moreton-in-the-Marsh.

Heifers, not exceeding 2 years and 6 months old.—Prize, £10, given by Mr. J. H. Dawes, and silver medal as breeder, J. Crane, Benthall, Shrewsbury. Highly commended: J. Codling, Whaplode, Spalding, Lincolnshire.

SHORTHORNS.

Oxen or steers, exceeding 3 years and 3 months old.—First prize, 15, extra prize of £20 for the best Shorthorn, and gold medal as best ox or steer of any breed or age, J. Stratton, Alton, Marlborough, Wilts; second, £10, W. Farthing, Stowey Court, Bridgewater, Somerset; third, £5, Richard Nelson, Barton-hill House, York. Highly commended: W. McCombie, M.P., Tillyfour, Aberdeen; T. Elliott, Hindhorpe,

near Jedborough. Commended: T. Pulver, Broughton, Kettering; J. Evans, Alport, Derbyshire.

Steers, not exceeding 3 years and 3 months old.—First prize, £15, and silver medal as breeder, R. Bruce, Newton of Struthers, Forres, Moray; second, £10, T. Walker, Berkeswell Hall, Coventry; third, £5, Colonel Loyd Lindsay, M.P., Lockinge Park, Wantage, Berks. Commended: F. J. S. Foljambe, M.P., Osberton Hall, Worksop, Notts.

Steers, not exceeding 4 years old, bred and fed by the exhibitor, a tenant farmer.—First prize, £15, and silver medal as breeder, E. Wortley, Kidlington, near Uppingham.

Steers, not exceeding 2 years and 6 months old.—First prize, £10, given by the Ex-Mayor of Birmingham (Mr. E. B. Lloyd), and silver medal as breeder, the Marquis of Exeter, Burghley, Northamptonshire.

Cows.—First prize, £15 and silver medal as breeder, Sir W. C. Trevelyan, Wellington, Northumberland; second, £10, T. Willis, Manor House, Carperby, Bedale, Yorkshire; third, £5, W. Faulkner, Rothersthorpe, Northampton. Highly commended: J. Walesby, Kirkham, Cadeby Hall, near Grimsby, Lincolnshire. Commended: Colonel Loyd Lindsay, Lockinge Park; W. Bevington Lowe, Latington, near Stratford-upon-Avon; J. Birch, Edge Farm, Sefton, near Liverpool.

Heifers.—First prize, £15, and silver medal as breeder, W. Tidy, Middleton, Tamworth; second, £10, H. Crawshaw, Oaklands Park, Newnham, Gloucester; third, £5, R. Ibbs, Woodstile, Grimsby, Salop. Highly commended: W. How, Tooting, Thetford, Norfolk.

DEVONS.

Oxen or steers, exceeding 3 years and 3 months old.—First prize, £15, and extra of £20, as the best Devon, Trevor Lee Senior, Broughton House, near Aylesbury; second, £10, and silver cup, value 20 guineas, given by Earl Beauchamp, the president of the Society, for the best ox or steer of any breed or age, bred and fed by the exhibitor, Wm. Smith, Hooperu, Exeter; third, £5, Thos. Bond, Park, Huntworth, Bridgewater. Highly commended: The Queen. Commended: Chas. McNiven, Ferrysfield, Oxted, near Godstone, Surrey; John Hitchcock, Broom House, South Molton, North Devon; Edward Trood, Bowhay, Exminster, Devon.

Steers, not exceeding 3 years and 3 months old.—First prize, £15, silver medal as breeder, Wm. Taylor, Glynley, Eastbourne, Sussex; second, £10, W. Smith, Hooperu, Exeter, Devon; third, £5, Trevor Lee Senior, Broughton House, near Aylesbury. Highly commended: Walter Farthing, Stowey Court. Commended: Chas. McNiven, Ferrysfield; Edward Trood, Bowhay.

Steers, not exceeding 2 years and 6 months old.—First prize, £10, and silver medal, as breeder, the Queen. Highly Commended: Walter Farthing.

Cows.—First prize, £15, Wm. Smith, Hooperu; second, £10, Trevor Lee Senior; third, £5, Henry Hitchcock, George Nympton, South Molton, Devon. Commended: John Hitchcock, Broom House.

Heifers.—First prize, £15, silver medal as breeder, J. T. Senior, Broughton Pastures, near Aylesbury Bucks; second, £10, the Prince of Wales, Sandringham; third, £5, Chas. McNiven. Commended: Prince of Wales.

Heifers, not exceeding 2 years 6 months old.—First prize, £10, given Mr. W. Lort, silver medal as breeder, Wm. Taylor, Glynley, Eastbourne, Sussex.

LONGHORNS.

Oxen or steers of any age.—First prize, £10, J. Jackson, Burbery, The Crofts, Stratford-on-Avon; second, £5, Sir J. Harpur Crewe, Calke Abbey, Derbyshire.

Cows or heifers.—First prize, £10, silver medal as breeder, J. Holland Burbery, The Chase, Kenilworth; second, £5, W. T. Cox, Spondon Hall, Derby.

SCOTCH BREEDS.

Polled oxen or steers of any age.—First prize, £15, silver medal as breeder, J. Stephen, Conglass, Inverurie, Aberdeen; second, £10, J. and W. Martin, Aberdeen.

West Highland oxen or steers.—First prize, £15, T. Lee, Senior; second, £10, Sir G. M. Grant, Bart., Ballindalloch, N. B.; third, £5, C. Morrison, Basildon Park, near Reading, Berks. Commended: Rev. W. Sneyd, Keele Hall, Newcastle, Staffordshire; C. Morrison.

Cows or heifers.—First prize, £15, Hotel and Innkeepers' Cup, value 25 guineas, for the best animal in the cattle classes, £20 for best Scot, and gold medal as best cow or heifer of any breed or age, J. Bruce, Burnside, Foehabers, N. B.; second,

£5, and extra prize of 10 guineas, given by C. Ratcliff, for the best Scot bred by the exhibitor, W. McCombie, M.P., Tillyfour, Aberdeen.

WELSH BREEDS

Oxen or Steers.—No entry.

OTHER PURE BREEDS AND CROSS-BRED ANIMALS.

Oxen or Steers of any age.—First prize, £15, Aaron Pike, Mitton; second, £10, Jeremiah James Coleman, M.P., Carrow House, Norwich; third, £5, James Stephen Conglass, Inverurie, Aberdeen. Highly commended: Messrs. J and W. Martin, Merdeens. Commended: Francis Wright, Osmaston Manor, Derby; Fowler Cartwright, Kirkstead Abbey, Horucastle, Lincolnshire; Henry D. Adamson, Balquharn, Alford, Aberdeen.

Cows or Heifers.—First prize, £15, J. and W. Martin, Aberdeen; second, £10, James Reid, Greystone, Alford, Aberdeenshire; third, £5, Lord Fitzhardinge, Berkeley Castle, Gloucestershire. Commended: Samuel Carter, Quarry Hill, Battle, Sussex.

EXTRA CLASSES.

For animals not qualified to compete in any of the preceding classes.—Oxen—No entry.

Cows or Heifers, not qualified to compete in any of the preceding classes.—Prize, £5, Richard Moss, Whisby, Lincoln. Highly commended: Richard Heath, Harras, Earnhill, near Forres. Commended: Captain Robert E. Oliver, Shorebrooke Lodge, Towcester.

SHEEP.

JUDGES.—John Wood, Harewood Hill, Darlington.

H. Overman, Weasenham, Brandon, Norfolk.

C. R. Keeling, Yew Tree Farm, Penkridge.

LEICESTERS.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, extra £10 given by Linen and Woollen Drapers, second, £10 and third, £5, executors of late Lord Berners, Keythorpe Hall, Leicester.

LINCOLNS.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, and Linen and Woollen Drapers extra £10, and second, £10, J. Byron, Kirkley Green, Sleaford; third, T. Gunnell, Milton, Cambridge.

COTSWOLDS.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, and Linen and Woollen Drapers' £10, Richard Hall, Great Barford, Deddington, Oxon; second, £10, J. Wheeler and Sons, Long Compton, Shipston-on-Stour; third, £5, R. Swanwick, R.A., College Farm, Cirencester.

SOUTH-DOWNS.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, and extra prize of 10 guineas given by G. Bromley Davenport, Esq., M.P., the Prince of Wales; second £10, and third £5, Lord Sondes, Elmham Hall, Thetford, Norfolk. Highly commended: H. S. Waller, Farmington, Northleach, Gloucestershire. Commended: J. James Coleman, Carrow House, Norwich.

Fat wether, exceeding 23, and not exceeding 35 months old.—Prize of £5, given by Messrs. Mapplebeck and Lowe, the Prince of Wales. Commended: H. S. Waller.

SHROPSHIRE.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, and extra prize of 10 guineas, given by C. N. Newdegate, Esq., M.P., Lord Chesham, Latimer, Chesham, Bucks; second, £10, Mrs. Beach, The Hattons, Brewod; third, £5, T. Nock, Sutton Maddock, Shifnal, Salop. Highly commended: Lord Chesham; Mrs. Beach. Commended: H. Matthews, Montford.

Fat Shropshire wether, exceeding 23, but not exceeding 35 months old.—Silver cup, value £5, given by Messrs. Mapplebeck and Lowe, H. Allsopp, Hindlip Hall, New Worcester.

OXFORDSHIRES.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, and linen and woollen drapers' £10, and second, £10, N. Stilgoe, Adderbury Manor Farm, Oxon; third, £5, Z. W. Stilgoe, Adderbury.

SHEEP NOT QUALIFIED TO COMPETE IN ANY OTHER

CLASS.

Three fat wethers, not exceeding 23 months old.—First

prize, £15, and silver medal as breeder, and second, £5, A. Morrison, Fonthill House, Tisbury, Wilts. Commended: H. Farthing, Nether Stowey, Bridgewater; J. B. Downing, Holme Lacy, Hereford.

CROSS-BREDS.

Three fat wethers, not exceeding 23 months old.—First prize, £15, and silver medal as breeder, N. Stilgoe; second, £5, W. F. Holton, The Manor House, Cleve Prior, Evesham. Highly commended: W. F. Holton. Commended: J. J. Colman.

EWES.

Fat Leicester, having bred one or more lambs.—Prize, silver medal, E. Tindall, Knaption Hall, Rillington, York. Highly commended: E. Tindall. Commended: W. P. Herrick, Beaumanor Park, Leicestershire.

Fat Lincoln, having bred one or more lambs.—Prize, silver medal as breeder, J. Byron, Korkly Green, Steaford.

Fat Cotswold, having bred one or more lambs.—Prize, silver medal, executors of the late J. Godwin, Troy Farm, Somerton, Deddington, Oxon. Highly commended: H. S. Waller, Farmington, Northleach.

Fat Southdown, having bred one or more lambs.—Prize, silver medal, Prince of Wales. Highly commended: Lord Sondes, Elmham Hall, Thetford, Norfolk. Commended: F. J. S. Foljambe.

Fat Shropshire, having bred one or more lambs.—Prize, silver medal, Lord Willoughby de Broke, Compton Verney, Warwick. Highly commended: G. A. May, Elford Park, Tamworth.

Fat Oxfordshire, having bred one or more lambs.—Prize, silver medal, Z. W. Stilgoe, Adderbury Grounds, Oxon.

Fat ewe of any other pure breed, having bred one or more lambs.—Prize, silver medal, R. H. Harris, Earn Hill, Forres.

PIGS.

JUDGES.—C. Randell, Chadbury, Evesham.

A. F. M. Druce, Eynsham, Oxon.

H. Tait, Shaw Farm, Windsor.

Three fat pigs of one litter, not exceeding ten months old.—First prize, £10, and silver medal as breeder, Marquis of Ailesbury, Holme Farm, Savernake Forest, Marlborough, Wilts.; second, £5, Rev. H. G. Baily, Swindon; third, J. H. Clark, Lowwood, Castle Hill, Maidenhead, Berks.

Three fat pigs, one litter, not exceeding fifteen months old.—First prize, £10, and silver medal as breeder, and silver cup for best pen of three fat pigs, J. Biggs, Cublington, Leighton Buzzard; second, £5, Earl of Aylesford, Pakington Hall, Coventry; third, £3, J. H. Clark. Highly commended: R. E. Duckering and Son, Northorpe, Kirton Lindsey, Lincolnshire. Commended: P. Eden, Cross Lane, Salford, near Manchester; R. A. Davis, M.D., Burntwood Asylum, Lichfield.

Fat pig exceeding fifteen months old.—First prize, £6, and silver medal as breeder, P. Eden; second, £4, S. Deacon, jun., Polebrooke Hall, Oundle; third, £2, R. E. Duckering and Son. Highly commended: P. Eden.

BREEDING PIGS.

BERKSHIRES.

Five of one litter exceeding three and not exceeding six months old.—First prize, £10, silver medal as breeder, and extra £5 5s. as best pen of Berkshires, second, £5, and third, £3, J. Smith, Henley-in-Arden.

OTHER LARGE BREEDS.

Five of one litter exceeding three and not exceeding six months old.—First prize, £10, and silver medal as breeder, C. R. N. Beswick-Royds, Pyke House, Littleborough, near Manchester; second, £5, J. Wheeler and Sons, Long Compton, Shipston-on-Stour; third, £3, M. Walker, Stockley Park, Anslow, Barton-on-Trent.

SMALL BREEDS.

Five of one litter exceeding three and not exceeding six months old.—First prize, £10, silver medal as breeder, and silver cup for best pen of small breed, J. Wheeler and Sons; second, £5, M. Walker; third, £3, and silver medal, P. Eden.

REFEREE FOR THE AGES OF STOCK.—Professor Gamgee, 1, Great Winchester Street Buildings, London, E.C.

VETERINARY INSPECTOR.—Mr. E. Stanley, 35, Islington, Birmingham.

CORN.

JUDGES.—E. Davenport, Quadrant, Birmingham.
J. Guest, Ashted, Birmingham.

Silver cup, value £5 5s., to the winner of the greatest number of prizes in the classes for corn.—Prize, F. Lythall, Spittal Farm, Banbury.

White wheat (Talavera).—First prize, £2, F. Lythall; second, £1, S. Robinson, Shaw House, Melbourne, Derbyshire.

White wheat (any other variety).—First prize, £2, Col. Lloyd Lindsey (Chidham); second, £1, Henry Frampton, Watership Farm, Newbury, Berks (Victoria).

Red wheat.—First prize, £2, Col. Lloyd Lindsey (Nursery); second, £1, F. Lythall (Nursery). Commended: H. Frampton (Nursery).

Barley.—First prize, £2, S. Druce, Eynsham, Oxford (Hallet's Pedigree); second, £1, J. H. Clarke, Lowood, Castle Hill, Maidenhead (Golden Melon).

White oats.—First prize, £2, F. Lythall (Canadian); second, £1, J. H. Clarke (Canadian).

Black oats.—First prize, £2, F. Lythall (Polands); second, £1, H. Frampton (Tartarian).

Beans.—First prize, £2, F. Lythall (French eyes); second, £1, J. H. Clarke (white eyes).

Peas, white.—First prize, £2, G. Dunkley, Kingsthorpe, Northampton (Princess Royal); second, £1, Z. W. Stilgoe (earliest in cultivation). Commended: Z. W. Stilgoe (second early).

Peas, blue or grey.—First prize, £2, F. Lythall (blue); second, £1, G. Dunkley (maple).

ROOTS.

JUDGES.—J. H. Burbery, The Chase, Kenilworth.

R. H. Masfen, Penderford, Wolverhampton.

T. B. Wright, Quarry House, Great Barr.

H. Thornley, Marston Hall, Elmdon.

Class 1.—A silver cup, or other article of plate, of the value of £5 5s., offered by Messrs. Proctor and Ryland, of Birmingham, as a prize for the best collection of the three following varieties, namely: Long mangold Wurzel, globe mangold wurzel, and swedes—six roots each. J. Moore, Itchington, Warwickshire. Highly commended: Sir F. Smythe, Acton Burnell, near Shrewsbury. Colonel North, M.P., Wotton Abbey, Banbury. Commended: Marquis of Ailesbury, Burood Farm, Marlborough, Wilts.

Class 2.—A silver cup, value £5 5s., offered by Messrs. Sutton and Sons, as a prize for the best collection of the five following varieties, namely: Six long red mangolds, six globe or intermediate mangolds, six purple-top swedes, six green kohlrabi, and six turnips (green, white, or yellow). Sir W. Heathcote, Hursley Park, Winchester. Highly commended: Marquis of Ailesbury, and Colonel North, M.P. Commended: Colonel North, M.P.

Class 3.—A silver cup, value £5 5s., offered by Messrs. J. Carter and Co., as a prize for the best collection of the six following varieties, namely: Six purple-top swedes, six green kohlrabi, six long red mangolds, six yellow globe mangolds, six yellow intermediate mangolds, six white-fleshed turnips. G. and J. Perry, Acton Pigott, Conover, Salop. Highly commended: Colonel North, M.P., and the Marquis of Ailesbury.

Kohlrabi.—First prize, £2, Colonel North, M.P.; second, £1, Colonel North, M.P. Highly commended: Col. Loyd-Lindsay. Commended: R. Tanner, Frodesley, Dorrington, Salop (Carter's mammoth purple).

Long mangold wurzel.—First prize, £2 (with £2 2s. added by Messrs. Proctor and Ryland), G. Baylis, Gayton Farm, near Ross (Sutton's red mammoth); second, £1, Sir F. Smythe (Sutton's red mammoth). Highly commended: J. Birch, Sefton, near Liverpool; J. Moore (Sutton's). Commended: W. Dickinson, New Park, Lymington; S. Robinson, Shaw House, Melbourne.

Mangolds (globe and intermediate varieties).—First prize, £2 (with £2 2s. added by Messrs. Proctor and Ryland), Sir F. Smythe; second, £1, G. Baylis (Sutton's Berkshire prize). Highly commended: W. B. Boxall, Strathfieldsay, Winchester, Hants.

Swedes, any variety.—First prize, £2, with £2 2s. added by Messrs. Proctor and Ryland, A. K. Algie, Toghier House, Holly Mount, County Mayo (Hogg's select, purple-top swede); second, £1, A. K. Algie (Hogg's Bronze). Commended: Col. North. Class generally commended.

Turnips (White-flesh).—First prize, £2, J. Simson, Cloona Castle, Holly Mount, County Mayo (Pomeranian Globe); second, £1, G. A. May, Elford Park, Tamworth. Commended: Duke of Portland, Clipstone Park Farm, Mansfield, Notts. (Green Barrel); T. L. M. Cartwright, Melville House, Lady Bank, Fife (White Globe); Sir F. Smythe (Green-top Globe).

Turnips (Yellow-flesh).—First prize, £2, H. D. Adamson, Balquharn, Alford, Aberdeen (Aberdeen Yellow); second, £1, W. M'Combie, Tillyfour, Aberdeen (Aberdeen Yellow). Highly commended: J. Stephen, Conglass, Inverurie, Aberdeen (Green-top Yellow). Commended: J. Stephen; W. M'Combie (Aberdeen Yellow).

Carrots, of any variety.—First prize, £2, F. J. S. Foljambe, M.P.; second, £1, Duke of Portland. Class generally commended.

Bovina, or cattle feeding potatoes.—First prize, £2, with a silver-gilt epergne, value £8, added by Messrs. Paterson, Lord Willoughby de Broke, Compton Verney; second, £1, W. W. Pearce, Measham, Atherstone.

Ox cabbage.—First prize, £2, and second, £1, S. Robinson (Robinson Champion Drumhead).

POTATOES.

Ashleaf kidneys.—First prize, £1, John Choyce, Piuwall Grange, near Atherstone; second, 10s., F. Lythall.

Royal ashleaf kidneys.—First prize, £1, George Dunkley, Kingsthorpe, Northampton; second, 10s., D. Payne, Stoke Golding, Hinckley.

Gloucestershire kidney.—First prize, £1, Samuel Evans, Asbury, Nuneaton, Warwickshire; second, 10s., Zachariah W. Stilgoe.

King of Potatoes.—First prize, £1, J. H. Clarke, Lowood, Castle Hill, Maidenhead; second, 10s., F. Lythall.

Milky white.—First prize, £1, G. and J. Perry, Acton Pigot, Conover, Salop; second, 10s., Sir F. Smythe.

Flukes.—First prize, £1, General the Hon. Arthur Upton, Lords Plain Farm, Milatörpe; second, 10s., G. and J. Perry.

Dalmahoy.—First prize, £1, J. Choyce; second, 10s., Anthony Tustain, Great Barford, Oxon.

White Regents.—First prize, £1, F. Lythall.

Red Regents.—First prize, £1, F. Lythall; second, 10s., John Choyce.

Victorias.—First prize, £1, and second, 10s., George Mangles, Givendale, Ripon, Yorkshire.

Red-skinned flour ball.—First prize, £1, Duke of Portland; second, 10s., F. Lythall. Class generally commended.

ANY OTHER NAMED VARIETIES.

Early kidneys.—First prize, £1, George Dunkley (Early Conqueror); second, 10s., D. Payne (imperial ash-leaf). Highly commended: Sir F. Smythe (early rose). Commended: George Mangles (Mona Pride, Ashtop); Nathaniel Stilgoe (white blossoms).

Second early.—First prize, £1, George Dunkley (Giant Kings), second 10s., F. Lythall (Breese's Peerless). Commended: Lord Willoughby de Broke (Breese's Prolific), Sir Frederick Smythe (Lapstone Kidney); C. J. Perry, The Cedars, Castle Bromwich (Early Emperor); D. Payne (American Rose), Geo. Dunkley (Johnson's Seedling).

White, late, or winter varieties.—First prize, £1, F. Lythall (Breese's Prolific); second, 10s., D. Payne (Breese's Prolific).

Red or blue late varieties.—First prize, £1, John Choyce (Red Flukes); second, 10s., W. W. Pearce, Measham, Atherstone (Albert's Blue). Highly commended: C. J. Perry (Red Flukes); Felton and Sons, 96, High-street, Birmingham (President Lincoln).

Early kidney, second early, and late or winter potatoes, collection of 6 dishes, prizes given by Mr. Mathews.—First prize, £3, D. Payne; second, £2, J. Choyce. Highly commended, F. Lythall.

Second earlys, 2 dishes, prizes given by Wheeler and Son, Gloucester.—First prize, £1 5s., George Mangles; second, 15s., F. Lythall.

THE STAFFORDSHIRE CHAMBER OF AGRICULTURE.—Mr. E. W. T. Jones, of Wolverhampton, has been appointed analytical chemist to this Chamber.

THE FIRST APPEARANCE OF FOOT-AND-MOUTH DISEASE IN ENGLAND.

All foreign animals must be slaughtered at the landing ports. This, if we are ever to free the country from Foot-and-Mouth disease, is the principle which we must maintain. It is true that during the run of the present outbreak very little contagion can be traced from abroad. Mr. Forster says to Sir George Jenkinson that "the late outbreak is attributed to the increased freedom of movement of Dutch cattle; but it may be stated that this disease has not existed in an epidemic form in the Netherlands this year; while it existed in at least 50 counties in Great Britain when the restrictions on those cattle were removed, and that there has not been a single case of either Foot-and-Mouth disease or Pleuro-pneumonia in the two parishes of Harwich and Dovercourt, notwithstanding that more Dutch cattle have been landed at Harwich than at any other port in this country except London, that the cowkeepers at Harwich and Dovercourt are in the habit of filling up their dairies with Dutch cows, and that there is scarcely a farmer in Dovercourt parish who has not taken these cattle in to keep." *The North British Agriculturist*, states that at Granton and Leith "three years have passed without a single animal being infected," as that "similar testimony to the health and soundness of the Danish Cattle brought into ports in the Firth of Forth is borne not only by the veterinary inspectors, but also by the cow-keepers and farmers, who have been the ready purchasers of these cattle." Again, no "case of Foot-and-Mouth disease has been noticed in this year's importations at Hull, where foreigners graze in the fields adjacent to the home-grown stock, without communicating to them any disorders whatever." It would really seem that after all the stranger has been somewhat wrongfully accused of causing or communicating the attack now raging. But this is of course not the point. If the foreigner cannot just now be so precisely implicated, he in the outset first brought the disease amongst us, as we shall never be free from it or safe again so long as his presence is permitted. This is carrying the argument home, as on this must depend the course of action so warmly advocated. We must be understood as by no means begging the question here, for at a meeting down in the West but a short time since the chairman defied any one to name any instance of Foot-and-Mouth disease having occurred in England, Ireland, or Scotland previous to the year 1844.

It may be very useful, in order that we should speak no longer from false premises, to take up this challenge. In, then, the very first volume of the *Journal* of the Royal Agricultural Society of England the Veterinary Committee has to report "a concise and practical statement on the present epidemic among cattle." The Report, bearing the date of April 8, 1840, was drawn up in concert with Professor Sewell, the veterinary officer of the Society, while it opens thus: "This disease being in many instances of a slight nature the constitution does not always suffer from fever, either of a typhus kind or of an inflammatory character; and recovery takes place without the administration or application of medicinal agents. The attack does not always commence in the same form, but ultimately terminates in a general disease of the same type and character; in some animals it commences in the feet, between the claws, and in others it appears to have begun in the mouth; in others a stiffness in the legs of the animals is first perceived, as if treading upon thorns and briars; then follows a discharge of saliva from the

mouth and a champing of the lips, accompanied with blisters on the tongue, palate, and lips; the blisters peel off, loss of appetite and general debility ensue." Here follow some simple remedies, such as warm lodging, fresh air, dry bedding, and cleanness; while the mouth is to be washed with a weak solution of sulphate of copper, the diseased orny, part of the hoof to be cut away, poultices and lotions to be applied, and so on to the dressing of sores on other parts of the body; as diseased sheep are to be treated in much the same way. Above all, the committee strongly recommends "the disordered animals to be kept apart from the other stock, as there is much doubt whether the disease does not partake both of an epidemic and infectious character." This is admirably put, and might have been written but yesterday, so thoroughly does it go with present opinions and differences of opinion. In a further but briefer report, dated June 6, 1840, and signed by the Duke of Richmond, as president, "the Society would particularly recommend that the animals, as soon as affected, should have their ground changed, and be immediately put in a state of quarantine from the remainder of the stock." And this passage also reads as if it were quoted from a last week's report.

When it is affirmed that no case of Foot-and-Mouth-disease ever appeared in the United Kingdom, previous to 1844, it is clearly implied that the disease came in with the free importation of foreign cattle. Whereas, in point of fact, it was first observed in England, in the summer of 1839—at Stratford, in Essex, and some other places in the immediate environs of London, and more particularly at Islington, where it soon spread among the dairy cows, and continued to do so during September, and October. In the first week in November, the Foot-and-Mouth-disease broke out at Langley, near Loddon, in Norfolk; and subsequently showed itself in the same county on farms far distant from each other, between which no communication could be traced, nor could the attack at Loddon ever be accounted for. So far, the disease was apparently an epidemic. Nearer town, however, as about Staines and Honnslow, cases could occasionally be traced to the introduction of calves bought in Smithfield for fattening on milch cows; and the very first case discovered in Middlesex, at Laleham, was satisfactorily proved to have occurred in this way. In the year 1840 the disease had widely spread and during 1841 was as rife as it has ever been since; reaching, as we believe, down into Devonshire, where its appearance at such a period has been so strongly denied. Cattle, sheep, pigs, and even poultry became affected by the "epidemic" as it was termed in England, or by "the murrain" as it is still called in Scotland; while since its first appearance in 1839, the disease has never been absolutely extinct in this county, although nearly stamped out by the severe restrictions enforced with regard to the cattle plague. The most severe outbreaks have been in 1840-41, 1845, 1861, 1862-63, and 1870-71.

This history may be familiar enough to some, although it is manifestly not so to others, while out of it arise some very serious questions for consideration. Is it quite so certain that we are on the right road to stay the spread of Foot-and-Mouth disease by the slaughter of foreign stock? Can it be shown that Foot-and-Mouth disease either came on us in the first instance from abroad, or that it has come from abroad now? It may, perhaps, be very unpalatable to some to parade such facts and to put forth such ques-

tions. But it must surely be much more monstrous to throw them aside as unsuitable to the tone of the times. The only way in which so far Foot-and-Mouth disease has ever been put down has been incidentally, when enforcing conditions against a much more terrible calamity. Everybody knows this, as every one knows further that the English farmer would not again submit to such embarrassing obstacles on the plea of subduing any minor evil. Then, as the Veterinary Committee of the Royal Agricultural Society reported more than thirty years since, Foot-and-Mouth disease has still something of both an epidemic

and infectious character. It has from the first been impossible to account for a strong proportion of outbreaks, and such as have been traced have been traced chiefly to the metropolis. This is the centre; London and the London dairies are and have been the forcing houses of Foot-and-Mouth disease, and when we break through the London cordon we court danger far more directly than we can from any other quarter. As the North British Agriculturist puts it: "in the lairs and stalls of the metropolitan market, amongst the town-fed dairy cows there is greater risk of contagious disease than in almost any market or fair in the kingdom."

THE BUSINESS OF THE SMITHFIELD SHOW WEEK.

A Licence to hold an Exhibition and Sale of Cattle at the Agricultural Hall, in the parish of Islington, in the county of Middlesex, on the 4th, 5th, 6th, 7th, and 8th of December, 1871, has been issued by the Lords of the Council. So says Mr. Alexander Williams, officially enough, in a Supplement to *The London Gazette*. And if the bright, bracing atmosphere but return, the single hair upon which the success of the cattle show has so often hung of late may not be severed. As happened last year, cases of disease may again be discovered during the meeting; but then a crowded building, a high temperature, and continual excitement are probably more conducive to the development of such disorders as those our stock now suffers from than we have hitherto been inclined to admit. With a green, muggy Christmas the worst is to be feared; with clear, sharp, seasonable weather the best to be hoped for. If the cracks only come on unscathed from Birmingham, a good, fair exhibition may be looked for, although the entries in some of the leading classes are, we hear, not up to a numerical average. The Scotch contingent, however, threatens to be in force, where Mr. McCombie will have a shaggy, long-horned, West Highland ox, in place of the usual close-coated, bullet-headed Poll. From the south country stalls the white Shorthorn steer, which made such an impression when paraded at the late Mr. Richard Stratton's sale in the summer, is much fancied, and if the Aberdeens and their crosses do not interfere, it promises to be another Shorthorn year. Our own report, however, of the Midland Society's show in another place will speak more definitely to this point.

The members of the Smithfield Club, together with the exhibitors, will have the judging to themselves on Monday, December 4th, when the Champion Cup having been awarded, the public will be admitted, and so on up to Friday evening, when the doors will close, and the Company be left to count over its gains. The dinner of the Smithfield Club seems to be now definitely abandoned, but the Directors of the Hall Company will ask the judges to dine with them on the conclusion of their labours; and on the same evening the Marquis of Exeter will entertain the Council of the Club at the famous City Albion, where the best of everything will be provided but speeches, which are not considered the correct thing on these occasions. At three o'clock on this day there is the monthly meeting of the Committee of the Farmers' Club, and at six the discussion, when Mr. J. K. Fowler, of Aylesbury, will read a paper somewhat *apropos* to the week's business on *Breeding—Facts and Principles*.

On Tuesday, December 5th, there will be the Monthly Council Meeting of the Royal Agricultural Benevolent Institution at eleven o'clock, at the Offices, 55, Charing Cross; and at one o'clock the General Meeting of the members of the Smithfield Club, when the agenda paper in-

cludes the Report of the Council, the presentation of the Champion Plate and Cups, the election of the President-elect: Lord Tredegar, vice Lord Penrhyn, succeeding Lord Exeter in 1872; while the following eight members of the Council retire by rotation: Messrs. Hugh Aylmer, John Beasley, C. S. Bigge, John Clayden (deceased), Charles Howard, W. Ladds, C. Randell, and Jacob Wilson. At three o'clock there will be a meeting of the Local Taxation Committee of the Central Chamber of Agriculture in Salisbury Square; and the General Annual Meeting of the Farmers' Club at half-past three, when the Report will be presented. This speaks to the Club in every way maintaining its position, although it has to lament the loss of such well-known agriculturists as Lord Berners, Mr. John Clayden, Mr. George Jackson of Tattenhall, Mr. Richard Stratton, and Mr. Edmunds of Rugby. The Annual Dinner follows at half-past five o'clock, of course at The Salisbury, with Mr. J. B. Spearing in the chair, faced by Mr. Henry Chelms of Easton Manor, one of the original members of the Club of some thirty years since, who now succeeds to the President's place.

On Wednesday morning there will be the Council Meeting of the Royal Agricultural Society of England in Hanover Square, at twelve o'clock; and during the day the Committee, Council, and Annual Meetings of the Central Chamber of Agriculture, at one, two, and three o'clock, when the chief business will be to consider what steps shall be taken over the cattle disease, and to agree with the Home Cattle Defence Association upon a common course of action. This reconsideration of the subject has been found necessary in consequence of Mr. Gladstone having signified his inability to receive a deputation. At three o'clock on this day the General Meeting of the French Peasant Farmers' Seed Fund will be also held at the Salisbury Hotel, when the final report from the Committee will be presented. At six o'clock the members of the Cirencester Club College dine together under the Presidency of Mr. E. Bowly, at The London, in Fleet-street; and at eight o'clock Mr. Bailey Denton is announced to read a paper at the House of the Society of Arts in John-street, Adelphi, on *Sewage as a Fertilizer of Land, and Land as a Purifier of Sewage*. This looks like rather a full day's work.

On Thursday the General Half-yearly Meeting of the Royal Agricultural Society of England will be held in Hanover Square at twelve o'clock, and with this, beyond the show itself, the public business comes to a conclusion. York, Edinburgh, and Dublin, however, have shows of their own during this same week; the Irish exhibition, in consequence of the Foot-and-Mouth disease so generally prevalent in the sister kingdom, attempting nothing more than entries of roots and poultry, with stands of imple-

REVIEW OF THE CATTLE TRADE

FOR THE PAST MONTH.

The cattle trade during the past month has been devoid of any feature of special interest. Fair average supplies of beasts have come to hand, but as has been the case for some time past foreign breeds have greatly predominated. The English supply has included some well-conditioned stock; but on the whole the quality has not been satisfactory. Some choice Tonnaing beasts have been on sale, and general condition of the foreign breeds has been good; in fact the improvement in the quality of the foreign receipts during the past four or five years has been marvellous. As regards trade, the tone has been ultimately steady and quiet. The best Scots and crosses have mostly made 6s., and the choicest Welsh beasts and Herefords have found buyers at 5s. 8d. to 5s. 10d. per 8 lbs. The top price for foreign stock has been 5s. 6d. per 8 lbs.

As regards sheep, English breeds have been comparatively scarce, but the quality has been good. Foreign breeds have been more numerous, and some animals have come to hand in good condition. During the greater part of the month the demand was firm, and the best Downs and half-breeds made 6s. 10d. to 7s.

Calves have been in short supply and fair request at full prices.

Pigs have been steady in value, with a moderate demand.

The supply of grass in the pastures has somewhat decreased, but there is still a fair quantity. The demand for feeding stuffs has been more animated.

The total imports of foreign stock into London during the past month have been as under:

	Head.
Beasts	12,816
Sheep	56,299
Calves	1,857
Pigs	2,812

COMPARISON OF IMPORTS.

Nov.	Beasts.	Sheep.	Calves.	Pigs.
1870	14,906	43,830	2,177	2,463
1869	9,964	32,091	1,713	2,298
1868	9,391	18,162	598	353
1867	10,761	33,202	618	2,069
1866	13,278	38,389	1,290	1,187
1865	16,254	52,517	2,526	7,770
1864	17,137	34,792	2,970	3,947
1863	11,020	30,347	1,770	2,202
1862	6,839	28,577	1,659	633
1861	5,295	27,835	946	1,241
1860	6,961	22,723	1,604	828
1859	5,927	21,907	997	159
1858	4,786	18,258	1,174	156

The arrivals of beasts from our own grazing districts, as well as from Scotland and Ireland, thus compare with the three previous years:

	Nov. 1868.	Nov. 1869.	Nov. 1870.	Nov. 1871.
From Lincolnshire, Leicestershire and Northamptonshire.....	9,500	9,550	5,250	9,150
Other parts of England.....	1,950	2,048	1,450	2,100
Scotland	635	158	1,020	79
Ireland	708	2,312	620	600

The total supplies of stock exhibited and disposed of at the Metropolitan Market during the month have been as follows:

	Head.
Beasts	25,100
Sheep	108,930
Calves	2,017
Pigs	720

COMPARISON OF SUPPLIES.

Nov.	Beasts.	Sheep.	Calves.	Pigs.
1870	15,570	96,920	2,332	1,670
1869	21,390	77,990	1,604	615
1868	19,249	98,390	1,048	1,404
1867	24,080	109,960	1,016	2,350
1866	24,660	95,800	1,190	3,090
1865	36,820	167,230	2,858	2,811
1864	32,600	114,300	2,587	2,900
1863	27,704	99,130	2,156	3,170
1862	30,139	110,020	2,313	3,172
1861	26,590	109,370	1,370	3,430
1860	25,400	103,600	2,112	2,920

Beasts have sold at from 3s. 10d. to 6s., sheep 4s. 4d. to 7s., calves 3s. 8d. to 5s. 8d., and pigs 3s. 6d. to 4s. 8d. per 8 lbs., to sink the offal.

COMPARISON OF PRICES.

	Nov., 1870.	Nov., 1869.
	s. d. s. d.	s. d. s. d.
Beef from	3 4 to 6 0	3 4 to 5 10
Mutton	3 4 to 6 2	2 6 to 5 10
Veal	3 6 to 5 10	4 0 to 6 2
Pork	4 4 to 6 2	4 4 to 6 0
	Nov., 1868.	Nov., 1867.
	s. d. s. d.	s. d. s. d.
Beef from	3 4 to 5 4	3 2 to 5 2
Mutton	2 10 to 5 4	3 2 to 5 0
Veal	2 6 to 5 6	4 4 to 5 8
Pork	3 4 to 4 6	3 4 to 4 2

GLoucestershire Root Show.—Judges: Mr. Samuel Friday, Mr. James Witeomb, and Mr. Daniel Vick. Awards: County cup, value £21, for five acres of swedes, open to any variety, Mr. William Hartland, Upleadon Court; bone manure and farmyard; previous crop, wheat; sown first week in his June; crop estimated to weigh twenty-eight tons per acre. Silver cup, value £5 5s., for five acres of swedes, Mr. C. Bennett, North Nibley, Dursley; Wheeler's Imperial. Silver cup, value £5 5s., for five acres of turnips; no entry. Silver cup, value £5 5s., for two acres of mangolds—1st, Mr. W. Lawrence, Brockworth Park; Wheeler's Mangold; 2nd, £2 2s., Mr. W. Hartland; Sutton's Long Red Mangold.

HEREFORDSHIRE CHAMBER OF AGRICULTURE.

—At a general meeting held at Hereford, Mr. R. Hereford in the chair, Mr. Daekham, the Secretary, stated what had taken place in London, last week on the subject of cattle diseases; and proposed that, "it is the opinion of this Chamber that great evil arises in consequence of the laxity with which the provisions of the Contagious Diseases Animals Act are carried into effect by some of the local authorities in this county." After some remarks from Mr. Galliers and others, the chairman said it would not be advisable to enter into a discussion which might become personal, and he therefore called upon the Secretary to propose another resolution; and the following was ultimately adopted: "That it is the opinion of this Chamber that, in order to check the spread of contagious diseases amongst the herds and flocks of this county, the local authorities should stringently enforce the provisions of the Contagious Diseases (Animals) Act, and instruct the police to vigilantly watch the removal of the cattle and sheep upon the roads of the county." Professor O'Hara then delivered an address on The Modern Application of Science to Agriculture to a small audience.

LINCOLNSHIRE AGRICULTURAL SOCIETY.—At a meeting of the council, Sir J. H. Thorold in the chair, Mr. Torr reported that he had brought the resolution passed at the last general meeting, with regard to the disease amongst lambs, under the notice of the council of the Royal Agricultural Society, who had unanimously passed the following resolution: "That the thanks of the council be given to the Lincolnshire Agricultural Society for their communication, and that Professor Simonds be requested to make thorough and immediate examination of the nature of the disease, and the circumstances under which it most commonly occurs, with suggestions for its treatment and prevention." A vote of thanks having been accorded to Mr. Torr for the trouble he had taken in this matter, a committee was appointed to correspond with and generally to assist the Royal Agricultural Society in their investigations, and to take whatever steps they might think necessary with respect thereto. A deputation attended from Gainsborough, and applied that that town might be selected as the place of Exhibition for the year 1872. The application was unanimously acceded to.

THE WARWICKSHIRE CHAMBER OF AGRICULTURE.—At the fifth annual meeting, Sir R. N. C. Hamilton, Bart., K.C.B., in the chair, the Report congratulated the members on the firm footing the Chamber had obtained in the county, and the steady progress made since its establishment five years ago. There were 186 members clear on the books, and 264 in arrears with their subscriptions. After some discussion with the mode of dealing with the arrears, the Report was unanimously adopted. Mr. J. Ford was appointed Chair-

man, and Mr. Startin Vice-Chairman for the ensuing year, and five new members of Council elected. Mr. Horley named the Laud Question as a most important one, requiring early consideration, and gave notice of his intention to bring it forward for discussion at the next meeting.

WEST SUFFOLK CHAMBER OF AGRICULTURE.—At the annual meeting, held at Bury St. Edmund's, Lieut.-Col. F. M. Wilson in the chair, the Honorary Secretary read the report of the Council for the past year. The report was received and adopted, and a resolution passed, instructing the Secretary to take steps to collect the subscriptions in arrear. Mr. William Biddell made a report on behalf of the committee, to whom had been referred the question of appointing an analytical chemist to the Chamber. They had communicated with Mr. Sibson, and were disposed to recommend his terms as the most acceptable; and it was carried by 13 to 9, that the Chamber authorise the payment of the retaining fee of £10 10s. to Mr. Sibson. Colonel Wilson was re-appointed chairman, and Mr. W. Biddell vice-chairman of the Chamber. The retiring members of the Council were re-elected. The president re-

marked that the new rules which were now under discussion by the Central Chamber would alter to some considerable extent the representation of district Chambers to the Central Chamber. It was now proposed that the representation should be according to the number of members, and the subscription paid by the local Chambers. Against this Lord Augustus Hervey protested, as his lordship remarked that it appeared to him to be an unfair principle to give representation according to the amount of money paid. The Chairman announced that Captain Horton had undertaken to introduce the question of the "Supply of Agricultural Labourers, with especial regard to the Wages Question," and Mr. Biddell "The Best Means of Providing Reserve Forces, with the least inconvenience to the Employer." The Secretary read the resolutions passed at the Central Chamber, last week on the subject of the foot-and-mouth disease, and the following was ultimately passed: "That this Chamber cordially agrees with the two resolutions passed at the Central Chamber last week." A copy of the resolution, was ordered to be forwarded to Mr. Forster.

REVIEW OF THE CORN TRADE DURING THE PAST MONTH.

As October gave us a wholesale share of fogs which we hardly considered due, so November, beyond its usual allowance, has added a severity of frost to which we have not been accustomed, the thermometer having several times registered 10 degrees below freezing. The ground has also occasionally been too hard for anything but carting; and as some autumn-sowing was deferred for want of opportunity, so now this must be deferred till spring, which is always more uncertain in its success. The early-planted pieces of ground, however, do not yet appear to have suffered, and may go scot free should they not be rooted up by successive fluctuations. So, if frost should return with severity, we hope it will be with a protective covering of snow, though this would greatly limit work out of doors. Notwithstanding the well-established truth of a very deficient crop of wheat in France, and scarcely an ordinary one here, the wheat trade for the most part has gone on heavily, the slightest advance being most grudgingly paid. But when we look at our import returns and the overloaded state of our granaries, it is not to be wondered at, for millers know that, under such circumstances, there are always some willing to sell ex-ship. This, with the English supplies, enabled them to keep up their stocks to the needful point. The entire gain for the month, with an early set-in of frost, scarcely exceeds 1s. per qr. on the average, and till Christmas be past over and our stocks get lightened there does not seem much chance of improvement; and with frost so early in the Baltic there is no certainty of its continuance, and we hear already that a south wind has broken away large blocks of ice, and released some vessels which were given up till spring. So fickle, indeed, is Dame Nature, that she may yet be mild at Christmas and indulge us then with beautiful weather. Next to the reported deficiency of France, the chief feature in the corn trade in Europe seems to be the great rise of prices in Hungary, to which we have lately looked as an unfailing source; and though Russian houses speak of large accumulations of old wheat and extra breadths of new growth, they do not lower their rates equivalently with their large stocks, for Petersburg is dearer, and Odessa keeps firm; while New York has also lately been rising, without feeling the pressure of Chicago. But as spring opens we certainly expect rates will improve, for then French wants

will be known. The following rates have lately ruled at the places named. White wheat at Paris 65s. to 71s., red 64s.; white at Bordeaux 64s.; red Ghirka at Marseilles 55s. 6d., Marianopoli 58s. 6d., red Richelle 67s. 6d. Brussels quoted Danish red 63s. 9d., Pomeranian 62s. At Louvain wheat was 65s. 6d., at Liege 64s. 6d., at Antwerp 62s. 9d.; white Zealand at Rotterdam 66s.; Polish at Amsterdam 61s.; red at Hambro' 65s., cost, freight, and insurance; at Copenhagen 64s., cost, freight, and insurance; at Cologne 62s. 6d., free on board; at Danzig 65s. to 66s., cost, freight, and insurance for high-mixed new; at Konigsberg 63s. 6d., cost, freight, and insurance; at Manheim 61s., free on board; at Pesth (Hungary) 51s. to 57s. free on board; red Barletta at Naples 60s. 9d.; white at Valladolid 52s. 6d.; red No. 1 spring at New York 50s. per 480lbs., free on board.

The first Monday in London opened on a small supply of English wheat, but the foreign arrivals were very large. Not many fresh samples from Essex and Kent were exhibited in the course of the morning, and this, with some improvement in condition, prevented the anticipated decline; but sales were still dull, even for the best qualities. In foreign there was a fair business passing, in consequence of some importers finding granary room difficult to obtain, and accepting 1s. per qr. less ex ship; but parcels already landed were no cheaper. Sales afloat were difficult, at scarcely former rates. But little difference of value was noted in the country wheat trade. Farmers generally would not part with their best lots at less money; but inferior in several instances were cheaper, and some places, as Bristol, Gloucester, Gainsborough, &c. were 1s. per qr. down. Liverpool was dull on Tuesday, but firmer on Friday. Both Edinburgh and Glasgow gave way 1s. per qr., and foreign samples declined as much at Dublin, but not Irish.

On the second Monday English samples were again in small supply; but foreign arrivals were unusually heavy, chiefly from Russia in the Baltic, where ports were closing. From Essex and Kent but little was sent up, and samples till 1 o'clock could scarcely be seen from the density of a fog; but prices eventually were maintained for everything in good condition. The little done in foreign was also at full prices, and some holders in granary would not sell at former rates. Floating cargoes

maintained their previous values. The tendency of prices this week was about in the same proportion upwards as it was previously towards decline. Croydon, Maidstone, Melton Mowbray, Sheffield, Stockton, &c. being decidedly 1s. per qr. dearer, almost every market pointing that way. Liverpool recovered 1d. to 2d. per cental on Tuesday, with a like advance on the last market. Edinburgh was in calm, without any rise; but the value tended upwards at Glasgow. Dublin reported no change either in Irish or foreign qualities.

On the third Monday there was a moderate increase in the English supplies; but in foreign arrivals there was a reduction to less than one-fourth of the previous quantity. The morning's show on the Essex stands, as well as those of Kent, was limited. Condition still various, though, on the whole, improved; and this gave resolution to factors to hold out for another shilling, which they eventually obtained, though very slowly. In foreign, where the falling off was most felt, there was a more decided advance, 1s. per qr. over the previous rates being freely paid for American red and Russian qualities, other sorts not in equal request being held at a like improvement. Floating cargoes in fair order were also the turn dealer. The country markets came generally with a tendency upwards, and many of them were reported 1s. per qr. dearer. Among these were Manchester, Sheffield, Maidstone, Steaford, Melton Mowbray, St. Ives, Alford, Louth, Lynn, Leeds, Stockton, Bishopsthorpe, Woodbridge, Bangay, &c. Liverpool gained 1d. per cental on Tuesday, and lost it on Friday. Edinburgh had only a quiet trade in wheat; but Glasgow was firm, and so was Dublin, with some activity both in native and foreign qualities.

On the fourth Monday the supplies of English wheat were moderate, but the foreign were more than double those of the preceding week. The show of fresh samples on the Essex and Kentish stands was small, but mild weather having returned, sales were only slow for the best qualities, at the previous currency. In foreign, business was very inactive, and though prices were nominally the same, to have forced sales of cargoes on board ship would have required some reduction.

The imports into London during the month were 22,557 qrs. English, 202,314 qrs. foreign, against 22,621 qrs. English, 67,264 qrs. foreign for the same period in 1870. The exports from London were 13,132 qrs. wheat, 799 cwt. flour. The London averages opened at 60s. 6d., and ended at 59s. 8d.; the general averages commenced at 56s. 7d., and closed at 55s. 11d. per qr. The imports into the kingdom for the week ending Nov. 18th were 3,905,180 cwt. wheat, 260,189 cwt. flour, against 2,381,209 cwt. wheat, 292,471 cwt. flour in 1870.

The country flour trade, with good supplies, has very little varied through the month, Norfolks commencing and leaving off at about 40s. to 41s. per sack, and good American barrels at 29s. per barrel, while quotations at New York were 27s. Town millers have made no change in the top price, which has stood steady at 50s., without any immediate prospect of alteration. The imports into London for the month were 81,273 sacks English, 7,617 sacks 8,449 barrels foreign, against 83,477 sacks English, 7,901 sacks 46,204 barrels foreign in 1870.

The imports of Maize were only free on the first and last Mondays of the month, and prices have gained about 1s. per qr., fine yellow being worth 34s. to 35s. per qr. The advance, however, has limited the demand, which it always does, as low-priced foreign Barley then comes in, and this grain does not seem likely to rise materially without a heavy advance in wheat, for which it then becomes a substitute. The imports into London for the month were 41,335 qrs., against 29,668 qrs. in 1870.

The receipts of British barley, though somewhat increased, have still been only on a moderate scale; but lately those from abroad have been liberal, including a fair quantity from France fit for malting, but the low feeding sorts have still been mostly in poor condition, and difficult of disposal. Good malting English has remained scarce, and worth 42s.; secondary qualities have been dull and cheaper, with quite an uncertain value, and feeding foreign varied from 24s. to 30s., according to weight and sweetness. The imports into London have been during the month 12,813 qrs. British, 58,847 qrs. foreign, against 16,536 qrs. British, 29,284 qrs. foreign for the same time last year.

The malt trade, which had for a long time been excessively dull, has lately evinced more activity, with prices somewhat hardening, the samples of new being generally approved. There were 2,936 qrs. exported in the month.

In consequence of Petersburg having been early frozen up, the oat trade has been lively, with prices advancing, the gain for the month being about 1s. 6d. per qr. on old corn. Good fresh old Russian samples, being worth 21s. 6d. per qr., weighed 38lbs. per bushel, and the rough Orel sorts and new Swedes, which at one time were unduly depressed, have recovered still more, being about 3s. above their lowest quotation, which was about a month ago. The early frost may, however, partially break and relieve some sea-bound vessels to help us through the winter, or we shall be principally left to granary stores at possibly higher prices. The imports into London for four weeks were in English sorts 1,570 qrs., in foreign 147,401 qrs., against 3,184 qrs. English, 13 qrs. Scotch, 1,200 qrs. Irish, 254,913 qrs. foreign in 1870.

Of beans the native supplies have been moderate, of foreign fair; and rates have very little changed during the month. The tendency of prices since the frost has been rather upward, and old English, from scarcity, have advanced 2s. to 3s. per qr., being worth as much as 53s. for small white. Alexandrian are not above 34s. to 35s., and Sicilian 40s. The value of this grain depends partly on the weather and the state of the oat trade, but we do not anticipate a decline during winter. The imports into London for four weeks were in English sorts 4,541 qrs., in foreign 9,762 qrs., against 3,297 qrs. English, 3,265 qrs. foreign for the same period last year.

White native peas have been more plentiful, foreign supplies have been limited: all sorts have therefore maintained their value. The best English white boilers are held at high rates, say 44s. to 46s., maples about 45s. down to 40s. to 42s., and foreign old white for feeding at about the same; these last are now getting low in stock without much prospect of replacement before spring, a hard winter would not fail to send up the best boilers. The imports for November into London, were in English sorts, 6,668 qrs.; foreign, 8,504 qrs.; against, 2,064 qrs. English; 2,143 qrs. foreign, in 1870.

The linseed trade, with fair receipts, has ruled very firm, and so have cakes, more especially since the frost, as the grass land lands now give but a poor bite with little nourishment, and there is no prospect of rates being lower from the shortness of stocks. November imports: 55,339 qrs.; against, 89,317 qrs. in 1870. Almost every description of agricultural seed has been rising in consequence of the continued small supplies. Cloverseed has advanced 3s. to 5s., and native qualities from scarcity have become very dear. The French, instead of exporting large quantities as in times past, are in want themselves, and look to Italy and Germany for their chief supplies; so prices this season must rule high; American red, lately worth 54s., is now valued at 60s., but winter rates are still neglected.

THE FARMER'S MAGAZINE.

DECEMBER, 1871.

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