

MASSACHUSETTS
STATE COLLEGE

GODELL LIBRARY

Per

~~10004~~

Ser. 3
v. 542

v. 52

No. 1, Vol. LIII.]

JULY, 1878.

[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.

John Edgington & Co.,

ESTABLISHED 1805.

48, LONG LANE, WEST SMITHFIELD, E.C.

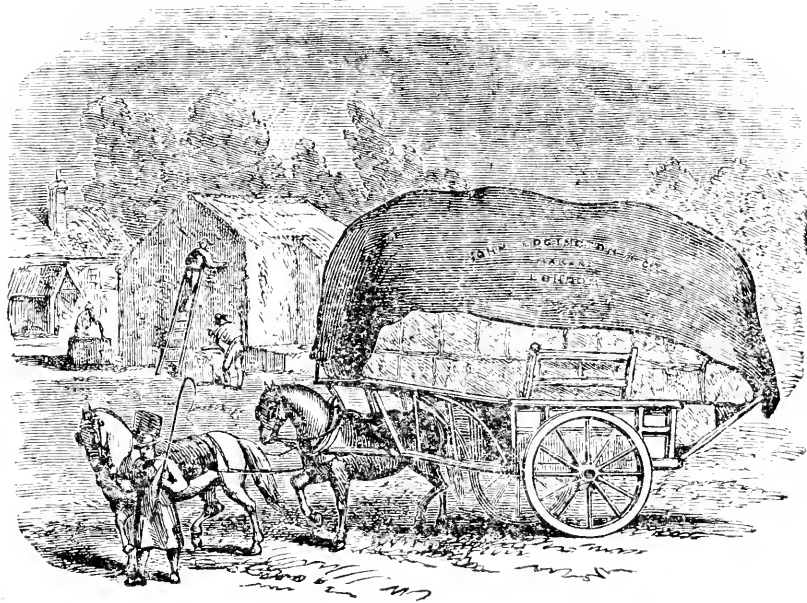
Manufactory—108, OLD KENT ROAD, S.E.,

West End Agency—18, PICCADILLY, LONDON, W.

Marquee, Tent, and Flag Makers to the Royal Family,

MANUFACTURERS OF

RICK CLOTHS, VAN TILTS, SACKS, ROPES, NETS, TWINES, &c.



Rick Cloth and Hay Sheet.

SPACIOUS MARQUEES

Of any dimensions made on the most approved principle for

HORTICULTURAL, AGRICULTURAL AND FLORICULTURAL SOCIETIES.

All Sizes ON HIRE from 30ft. × 16ft. to 300ft. × 115ft.

SHEDDING FOR AGRICULTURAL SHOWS, &c.

Domed Garden Netting, Scrym, Tiffany, Elastic Netting, Patent Shading, Frigi Domo, Bunting, &c.

SAMPLE BOOK, POST FREE, TWO STAMPS.

TEMPORARY ROOMS, DINING AND DANCING MARQUEES,

ERECTED AT A FEW HOURS NOTICE ON HIRE.

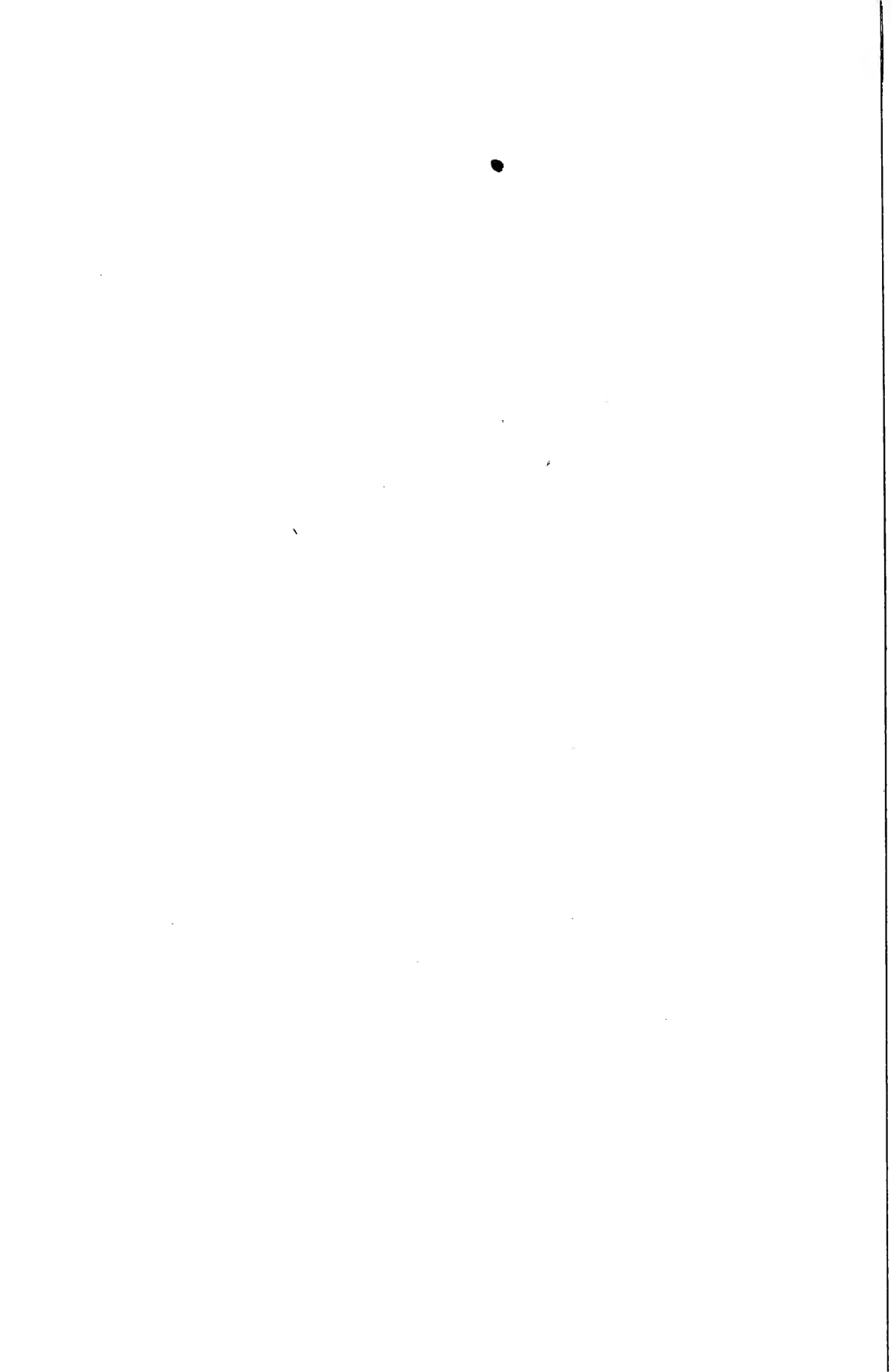
Their use displacement of Furniture is entirely avoided on the occasion of a Wedding, Coming of Age, Garden Fete, Agricultural Dinner or Festival of any kind. They are perfectly weatherproof, lined throughout, decorated and brilliantly lighted, securely floored with boards and carpeted, fitted with mirrors, ottomans &c., and warmed or ventilated to any degree.

JOHN EDGINGTON and CO., have no connection with any other Firm using the name of Edgington.—Note Addresses above.



Sheep to One

— 1850 —



THE FARMER'S MAGAZINE.

JULY, 1878.

PLATE.

FIVE TO ONE.

Five to one on the duck—though the odds are against her; or, for the sake of a bet with you, gentle reader, five to one against the duck. Don't bet? nonsense! Why, it is well known that, previous to the Derby, not only you, but members of the Royal Family, the clergy, in fact, of every profession and sect, *laid their heads on the pillow* and *rested soundly* slept regardless whether bets went with the stakes or the first past the post. Then, what is life but a game of chance, like that of the ducks in our plate, where every leaf, like evergreen beaux, is trying to excel the other in freshness, flower with flower, as beauties strive, while each ear of wheat is racing to be above and greater than the rest, and scarlet runners to get to the "top of the stick" first? All the world's a course, the men and women merely "platers," and each man in his time runs many races (uphill and down), wherein some are so badly trained, or backed, or get so badly off at starting that they are out of the race with those who make the most "noise" before they reach the brow of the hill, though some occasionally creep to the front and distance all competitors; while others get off with a clear lead but cannot hold it. Some run on the wrong side of a post, some hugging the rails get forced over them, and some

bolt; others are attacked with megrims, break down, or are savaged by ill-tempered brutes, and so put out of their stride, crossed and jostled, or run into by the impetuous trying to get through the rack which brings a lot to grief. Then, when nearing home, rounding Tattenham Corner into the straight, hope forsakes some, though going well, and they collapse, while others struggle gamely on though they have but the shadow of a chance, as there are really only two in the race, and as the one who has been cutting out all the work increases his lead, the air is rent by the shouts of thousands, "Gladdy wins! Gladdy in a canter!" But when within a few lengths of the judge's chair something ruffles his temper, and he swerves right across the course, and in a moment his defeat is proclaimed by a book maker with a shriek—"Dizzy, by Jove!" Then, like everything else, such is the uncertainty of popularity, those who cheered on Gladdy now hurrah Dizzy. But to our bet, reader—the duck and green peas, which we know when it does come off you are more than a match for, if not for that wicked little duck, in a sweet, darling, duck of a bonnet, we saw you sharing a Hansom with on the Derby day, and who called you "Ducky."

RED RUST IN WHEAT.

We heard an inquiry made the other day by a retail corn-dealer for tail wheat, and the reply was to the effect that if he could wait until after harvest there was every probability of chickens' meat being plentiful. We fear there is likely to be too much truth in the above remark; if there is a good yield and a good quality of wheat this harvest it will be an agreeable surprise to many. The excessive rainfall and abnormally low tempera-

ture which has obtained during the past four weeks is directly unfavourable to the development and perfection of the wheat plant, and indeed of the other cereals as well. The unhealthy appearance of the plant, even on high-lying chalk soils, and generally in such districts as can best endure an excessive rainfall, has attracted much attention and given rise to some well-founded alarm. It is quite possible that a spell of settled summer wea-

ther, with plenty of hot sunshine, would do much to relieve the mischief, but it is unreasonable to suppose that the wheat crop can possibly be as good as it promised to be a month ago. One highly important change has recently occurred with which the farmer is powerless to deal—at least in a direct manner—namely, the presence of red rust. A great proportion of the yellow discolouration now to be observed on the wheat grain is the early stage of *trichobasis rubigo-vera*, or red rust, which, in due time, will most of it develop into another stage, in which it appears as dark-brown or black streaks on the straw and leaves, being then known as *puccinea graminis*, or corn-mildew. It is worthy of notice that this fungus has steadily increased in Australia during the last ten or twelve years, and on the continent of America it causes considerable damage, a report from Tennessee dated May 2 stating that its appearance there this season is causing some apprehension. The Royal Agricultural Society of the Colony of Victoria has organised a committee to inquire into the cause and nature of this farmers' pest, and accordingly a number of circulars were issued and returned by the colonists, but they are no wiser than they were before as to its cause and its nature, neither the committee nor the farmers appearing to understand with what they have to deal.

Without giving a botanical description of this fungus we may mention for the benefit of such of our readers as may not have devoted any particular attention to the subject, that this red rust is but a form of corn mildew, which is not correctly termed a mildew—but that does not affect our subject. The fungus is dimorphous, that is, it presents distinct forms at two independent stages of its growth. Its first form is the yellow streaks and blotches on the leaves and stem—chiefly on the leaves, and these deepen in colour as the spores ripen and burst through the outer skin of the plant. These spores are one-celled, and the fungus which is thus perfected so far as this single stage is concerned is *trichobasis rubigo-vera*, or red rust. But these one-celled spores, germinating on the same or on adjacent host plants, produce the dark-coloured streaks and blotches on the straw and leaves, especially the straw which when ripe, burst in the same manner, their spores being two-celled. This is the second stage of growth, and is called *puccinea graminis*, or corn mildew. It is quite possible it may be one day found that the red rust is not the first stage of this fungus; for De Bary succeeded in producing the cluster-cup fungus of the berberry, *acidium berberidis*, from the resting spores of corn mildew. This would be of importance to agriculture, as it would probably facilitate

means by which the evil could be combated. As it is, however, we know that this identical parasite attacks many of the grasses, and that nearly allied species—some of them occupying several host plants—may be found on nearly every wild plant in our fields, hedgerows, roadsides, and ditches. There can be little doubt that, as in the case of ergot, the fungi infesting our cultivated plants are nursed and perpetuated on wild plants of the same natural order, and sometimes on plants of a totally different order; and our object in thus calling attention to the prevalence of rust this season—if our readers will take the trouble to examine the wild grasses in their ditches and hedgerows they can judge for themselves—is to urge the necessity of clearing out these ditches and hedgerow bottoms during the early summer, and again before autumn. We feel tolerably sure that this course is about the only one, combined with effective drainage, which the farmer can pursue with any chance of practical success against parasitical fungi. No doubt such a plan as that we have suggested, if vigorously carried out, would meet with very considerable opposition amongst keepers and game-preservers, especially those middle men who rent shootings. But nests can be cut round without being destroyed; at all events the object in view is of far greater consequence than game, and whilst we would do all in our power to preserve the partridges we would not hesitate to destroy or check the ground game in this or any other way. Not only would the close trimming of hedgerow bottoms, ditches, and all waste places at this season, and again later on, serve the purpose for which we especially advise it, but it would at the same time greatly check insects, weeds, and vermin.

It may be well to bear in mind that no check can be given to rust by pickling the seed, as in the case of the nearly allied fungus, bunt (*tilletia caries*), which attacks the grain itself, and its spores are disseminated amongst the corn by the thrashing machine, and in other ways. The spores of rust germinate on the flag, or leaf, and on the stem or straw of the plant, and although in Australia they also affect the chaff-scales of the ear itself, they do not affect the grain directly; but by debilitating the host-plant they indirectly affect the grain to a very serious extent. As in the case of the potato disease fungus (*peronospora infestans*), the greater the luxuriance of the host-plant the greater scope there is afforded for the ravages of the fungus, and it cannot be too carefully borne in mind that, so far as our present knowledge of the rust fungus will warrant our speaking, there can be no remedy looked for in respect of pickling the seed, or in any form of management of the

wheat crop itself, although it is worth mentioning that Mr. Clark, F.L.S., has suggested that the softer-stemmed wheats are most liable to its attacks. This has been proved to be correct, and the suggestion is valuable so far as it goes; but it does not, in itself, point to any practical way in which

the fungus may be combated—it has to do with the effect, not the cause. We can only advise the indirect course of action to which attention has already been called, with the hope that greater light will be thrown on the subject hereafter.

AGRICULTURE IN BAVARIA

The condition of the agriculturists of Bavaria, portrayed by Mr. Cope in one of the latest publications of the Foreign Office, presents a striking analogy with the experiences felt in our own rural districts, whilst a study of the results may be productive of advantage and encouragement at the present time. In Bavaria it appears that a very large proportion, fully sixty-five per cent., of the population are engaged in agriculture, the tending of cattle, &c.; and the great variety of agricultural products makes so many demands on the weather that there cannot well be a year in which all crops succeed alike. The year 1875, except in so far that it was a good hop year, was an unfavourable one for agriculture. The scarcity of workmen had reached its culminating point, so that the proper complement of workmen for the harvest was not even to be obtained for high wages. The general rise in wages was a serious thing for the farmer, for the having to pay more to his farm-servants and day-labourers was not the worst part of it; he had also to pay for all utensils and their repairs at a much higher rate. Smiths, wheelwrights, harness-makers, rope-makers, masons, carpenters and joiners, in fact, all the people he was obliged to go to for indispensable work, greatly advanced their prices. The farmer could not turn the tables on them and raise his prices for corn, cattle, &c., owing to the competition of distant markets, and the low freight charged on through goods by the railways bringing corn from the east of Europe, the improvements in the transport of meat being, at the same time, not without its effect in preventing him from running up the prices of fattened stock.

The General Committee of the Bavarian Agricultural Society in their Report for 1875 take an exceedingly sensible view, and are not in any way carried away by the labour-question panic. They say that they consider that the scarcity of and difficulty of getting workmen has reached its highest point, and that matters will doubtless get into their proper order again in time, and they appear from subsequent favourable reports to

have been justified in their supposition. The financial condition of the farmers was far from satisfactory, for many were obliged to dip into their capital to meet their current expenses. From some parts of the kingdom there were reports of the splitting up of landed estates. This was no doubt owing in a great measure to the increased rate of wages and difficulty of obtaining workmen, the farmer who suffers most from this being he who has too much land for himself and sons to work, and not enough land for it to answer his purpose to supplement labour by machinery, or capital enough to tide over hard times by working his land for a season without profit from it. The land of such a man, if a proprietor, is at such times nearly sure to come, wholly or part of it, into the market. A proof of the hard times the farmers were passing through in 1875 was the circumstance that the artificial manure factories did a very bad trade.

In the following year affairs had taken a favourable turn. There was no Rinderpest, though its existence in other countries, and the precautionary regulations that it gave rise to, were felt by the cattle breeders of Bavaria. The visit of the phylloxera, which was much dreaded by the wine-growers of the Palatinate, happily did not take place, and Bavaria was free from this plague, but has not been so lucky in escaping the "Kleeseide" (dodder), which did a great deal of damage in many places to the crops of clover, lucerne, &c. The Agricultural Society desires that the non-destruction of this weed should be made punishable by law, as it is propagated entirely through the carelessness of the small farmers, who let it grow, and its seed get mixed with the clover seed. The Agricultural Society calls attention to the fact that it is easy for the farmers to escape this plague by growing their own clover seed for a few years, and taking care that there be no "Kleeseide" in the patch of ground they reserve for this purpose.

As to the financial condition of the farmers, reports were sent to the Bavarian Agricultural Society from all the provinces that this was in a

Apr. 27, 1939

favourable state. Credit seemed good, and as capitalists had burned their fingers lately in bubble loans and speculations, and were looking about for safe investments at a less inflated rate of interest, those proprietors and yeomen whose land was free from debt found they could get money on mortgage on tolerably easy terms. Forced sales by auction seemed to be on the decrease, and to have been in general few and far between throughout all the eight provinces in the year 1876, an increase in these being reported only from four districts of Lower Franconia, though throughout the rest of that province there was a decrease.

It is well known that hops form a very important crop in Bavaria, especially in Middle Franconia, in which province in the years 1875 and 1876 there were so many as 23,239 acres cultivated as hop-gardens. In an article by Dr. E. Pott, in the monthly publication of the Bavarian Agricultural Society for the month of July last, it was stated that up to 1875 there were in the whole world about 245,000 acres under hops, which in an average harvest yielded 1,309,000 cwt.; that of this number 93,637 acres were in Germany, with an average harvest of 477,111 cwt., and of these 43,751 acres were in Bavaria, with an average harvest of 212,556 cwt. It is calculated that on an average of the last ten years Bavaria required, for her own breweries, 80,000 cwt. of hops, so that, except in such years as there is a very poor harvest, hops form a large item of export; and taking a low average and the round number of 100,000 cwt. as the surplus for exportation, this would give the sum of £830,000 as the value of the exported hops. It is remarkable that although Middle Franconia is the great hop-growing province of Bavaria, it is beaten in productiveness per acre in this crop by four other provinces—viz., the Palatinate, Upper Bavaria, Suabia, and Lower Bavaria. Probably in consequence of the very large acreage in Middle Franconia under hop cultivation, there is a good deal

of land used for this plant which may not be exactly the best hop ground, whereas in the other provinces only that which is very suitable for hops is brought under that crop.

Before closing this notice of Bavarian agriculture Mr. Cope remarks that the disposal of the sewage of towns has occupied the attention of the Bavarian Agricultural Society in its late meetings, and has been a subject of a good deal of correspondence in its monthly publication. The municipal authorities of large towns have shown an inclination of late to get rid of sewage by turning it into rivers, and this has happily been protested against by two parties, firstly, by the agriculturists and landowners, who exclaim against such a waste of good manure; and secondly, by the medical profession, who protest against the fouling of the streams from a sanitary point of view, and refer to the mistakes made with regard to the Thames. The difficulty is to find a means of transporting sewage at so cheap a rate as to put it in the farmer's power to bring it into use on his land at a proportionately cheaper price than the purchase and haulage of guano and artificial manures. With the present system in vogue, that of removing sewage in air-tight casks, there is a tendency to pour sewage on the lands near towns, whether actually much required or not, whilst lands at some distance do not get their proper share of it, owing to the haulage. The expense of arranging a sewage irrigation system in the neighbourhood of Munich, and the severity and duration of the frosts, have caused any attempt on that system to be condemned; but an experiment is made of railway transport for the sewage, and hopes are expressed that it may be attended with success, and that useful matter may be cheaply deposited in the right place. A project for transporting sewage by rail, however, will seem strange, and not very promising, to English readers.

THE IMPORTATION OF LIVE STOCK.

The decrease in the export cattle trade of France with Great Britain has been cited as an instance of the effect of restrictive measures—of slaughter at the ports of landing—by the Marquis of Ripon, who quoted facts and figures supplied by the Duke of Richmond to the House of Lords last year. Thus, "During the six years ending 1869 this country imported from France 112,618 cattle; but in 1870 France was placed in the scheduled countries, which meant that all animals coming from France had to be slaughtered at the port of debarkation or

undergo a quarantine; and those restrictions were so stringent that the in seven years following 1869 the number imported was only 24,095, showing a very great distinction between the two periods."

Now, it will scarcely be necessary to call the attention of any ordinary reader to the difference between the six years preceding 1869 and the seven years following 1869 as affecting the cattle export trade of France. The war, and the Cattle Plague visitations following the war, in 1870-1-2, when there was an estimated loss of over 100,000

head of cattle, valued at twenty-five millions of francs, would suffice to account for much of the deficit. But from the Consular Report issued last year it is plainly evident that France is more an importing than an exporting country, in respect to cattle. On the 27th of August, 1877, we gave figures and details relative to the capabilities of France to send us cattle or dead meat, to which reference can be made; and when it is considered that in 1877 France imported 1,428,537 head of stock and exported only 190,519 head, and that in some districts the imports were twenty times as great as the exports, it will be a fair conclusion to make, that the consumption of meat in France is, on the whole, greater than the production. In Brittany there is a local excess of production, but the price of meat in France is now greater, in the principal markets, than it is in London; and, as we remarked in the article to which attention has been called, "although the climate (of France) is favourable to agricultural improvement, and, notwithstanding there are undeveloped resources, there is a want of the capital and enterprise which are requisite for an export cattle trade."

It is true that the large consignments of first-rate animals formerly received from France do not now make their appearance here: and those who were in the habit of seeing the very superior, thick, heavy, good-cutting beef which came *via* Southampton in 1866-7-8 will probably think with us that in point of consuming value those bullocks were at least twice as good, unit for unit, as the Danish and Schleswig Holstein cattle of to-day. It is stated by the Consuls, and by Professor Brown in his annual Reports, that our restrictions are thought by French consignors to be prohibitive; but why they should be so we do not understand. Some light may possibly be thrown upon the subject by a statement in the Veterinary Report of the Privy Council for 1876, which is as follows:—"The laws at present in force in France are some of them a hundred years old: the provisions are numerous, and confused, and often contradictory, and are admitted to be inadequate to meet the requirements of the present time. There seems to be a desire to bring these laws more into conformity with those adopted by other European countries, and this feeling has arisen doubtless chiefly from the heavy losses the French agriculturists have sustained through contagious diseases of animals, and also by reason of the falling off in the French exports to this country, which they attribute to the fact that their cattle must be slaughtered within ten days when landed in England." We are of opinion that the falling off is attributable to the fact of their

not having the cattle to send, rather than to their being afraid to send them.

Denmark tells us her cattle are not good enough, not thick enough, to be slaughtered at the ports and to travel inland in the form of dead meat; the Netherlands and Schleswig-Holstein grumble, but still send us very inferior animals to the French bullocks of ten or twelve years ago; the United States and Canada perseveringly send us good thick beef which has been slaughtered three thousand miles away from market; therefore, it appears to us that if France could send us the same quality of beasts which she formerly did, they of all others would bear slaughtering at the ports of landing, and subsequent transit as dead meat, better than those from any other Continental country. Be this as it may, we learn from the last Veterinary Report of the Privy Council that "Foot and Mouth Disease must have prevailed to a very considerable extent in the northern parts of France, as during the year (1877) more cattle affected with that disease were landed in this country than from any other country in Europe; out of 2,804 cattle imported in 1877, 428 were found to be affected with foot-and-mouth disease." So that to British stock-producers French imports of cattle are highly dangerous, because Foot and Mouth Disease is of greater importance than either of the other contagious diseases of animals. The Report continues:—"But although sheep from that country (France) were scheduled by Order of Council in January (1877) there is a slight increase under this head;" and this gives us the opportunity of calling attention to the fact that whilst the slaughter of cattle at ports of landing is so loudly protested against by all Continental countries, some of them, Germany especially, send us more sheep under those conditions than they ever did when inland transit was free. But with regard to France we think we have shown conclusively that the reason she does not send us as many fat cattle as heretofore must be sought for in France, and not attributed to the restrictions on the inland transit of French cattle which now obtain here.

FOR THE LOOK OF THE THING.—The system of a widow retaining her superior title on her second marriage occasionally leads to awkward mistakes. Not long ago a gentleman who had espoused a lady with a handle to her name was travelling in the North, and entered in the visitors' book at an hotel in Edinburgh "Mr. — and the Countess of —." Presently the landlord asked to see the gentleman privately, and on his request being gratified scandalised the unfortunate bridegroom by saying, "Ye ken, sir, I am a man of the world like yourself, and dinna you think you had better just put Mr. and Mrs. —, if its only for the look of the thing?" — *Am. Agricultur.*

THE PARIS CATTLE SHOW.

[FROM OUR SPECIAL CORRESPONDENT.]

PARIS, JUNE 18.

The show came to an end yesterday, when a large number of the cattle, sheep, and pigs were put up to public auction. There was a very slow sale, I understand; but most of the English stock were nevertheless disposed of by Mr. Thoruton. Some of them have brought to their owners in prizes more than enough to pay expenses; but where this is not the case the want of a good sale has been felt as a disappointment.

Last week I reported on the British exhibits. Next to these in the division for foreign (not French) breeds, bred and raised out of France, came the Dutch cattle, which were admirably represented. It was at first reported that to this breed had been awarded the prize for the best breed of animals for milking purposes, and if the report had been true I think the award would have given more general satisfaction to impartial judges than its presentation to the Flemish (Flamande) breed has given. The good milking qualities of Dutch cows are well known in this country, and the appearance of those at the Show fully sustained the character of the breed. They were certainly the grandest lot of dairy cattle in the yard, and, if I am not mistaken, the record of their achievements in filling the milk-pail is superior to anything that their rivals can boast of. But these Dutch cows are not only good dairy animals; they are fair butchers' beasts as well, and lay on flesh quickly when put up to be fattened. There were some grand cows amongst them, and for these high prices were asked, though not any approach to the sums for which cows of our fashionable English strains are sold for. The Danish, Swedish, and Norwegian cattle were few in number and of very uninteresting appearance. Next to these was the first "category" of the class for breeds of Central Europe, represented almost exclusively by the Simmenthal cattle—massive light-red-and-white animals, with rather long legs, better adapted for the dairy than for the butcher, but not especially desirable in any respect to the eye of a stranger. The second category of the class was of Swiss and analogous breeds, and here there were some handsome, useful-looking cows. These cattle are prized for their milking and working qualifications, in both of which they excel. In colour and some other points they resemble Jerseys, but they are bigger and altogether clumsier animals, varying less in tints—being uniformly of a dark grey, with what may be called black and yellow facings—and giving the general impression that they are better butchers' animals, as well as better workers, than the Channel Islands cattle, if not quite such good dairy cows.

In the class for breeds of the South-west of Europe there were some curiosities. As examples of picturesque baldness many of the entries in this miscellaneous collection were admirable; but they were admirable from no other point of view. One Portuguese beast that obtained a prize should have been fined instead, as an ex-

ample of all that a bull ought not to be, and there was a Romagnole bull with the most villainous expression and the most ungainly proportions of any living animal, not human, in the show-yard. The Portuguese cows were mostly wretched little things, with long horns, coarse tails, and thin bodies, the principal exceptions being simply a size larger in bovine badness. After these came the crosses of foreign (not French) breeds, a few of which were useful, and all showing the improvement which the use of Shorthorn bulls upon the Dutch, Italian, Portuguese, and other foreign dams of these animals had effected. But though the improvement was there it was not in all cases satisfactory, because some of the breeds deserve, not improvement, but extinction. This brings me to the end of the first division, which was for cattle of foreign breeds bred and raised out of France. Last week I said it was a mystery why there were no Channel Islands cattle; but the printer made me say, "Why there are Channel Islands cattle is a mystery." I expected to have seen a great number, and have not yet heard why there were none at the show.

The second division, for animals of either French or foreign breeds bred and raised in France, was, as stated last week, by far the more interesting of the two. The Normande breed came first in this division. These cattle are bred principally in La Manche and Calvados, but extend over a very extensive district besides. They are described in the summary at the beginning of the catalogue as remarkable for being good dairy animals, and for producing a fine quality of meat. As the French like lean meat this breed may be very suitable for home consumption, as they show very little aptitude for laying on fat. The bulls are brindled, narrow, rather leggy, very hard to the touch, and of somewhat unkindly appearance. The cows are much better-looking, somewhat resembling Ayrshires, but showing less quality and feminine delicacy. I remarked on looking at them that they were capable of great improvement as beef animals by means of a cross with Shorthorns, and when I came to the French crosses I saw several excellent crosses of the two breeds. There was a very large class of them, nearly all being brindled, with an approach to a mottled colouring in some. Amongst them were some beautiful cows, and, as a class, they were one of the most striking features of the show.

The Flemish (Flamande) were not quite so numerous, but still constituted a large class or category. They are mostly dark red, or red and white, the bulls in some instances being almost brown. They are bred principally in the districts of Dunkerque and Hazelbrouck, but are also to be found in considerable numbers in the departments of the Nord, Pas-de-Calais, and Aisne, as well as in the neighbourhood of Paris. As already stated, they obtained the prize, in value, 2,500, francs, for the best breed of milking animals.

They do not strike a stranger as being generally well-bred animals, which may perhaps be accounted for from fact that the bull calves are generally killed early for veal, thus allowing less opportunity for the careful selection of bulls. Some of the cows were excellent representatives of the breed, and their appearance fully sustained their character as good milkers, though, as before remarked, it is difficult to believe that they come up to the Dutch in this respect.

I now come to the most beautiful and perhaps the most highly-prized of the French breeds, the Charolais, or Nivernais—Charolais as the crack breeders prefer to term them. Nothing could be much more striking in the way of a display of cattle than the rows of these white, shapely, and handsome animals in the show-yard of the Esplanade des Invalides. They are by far the best butchers' cattle of all the French breeds, and they are also highly prized for their excellent working qualities. The description of them, which I translate from the preface to the catalogue, was amply borne out by their appearance.

"The Charolais is the finest and most important of the bovine breeds of the Centre. Originally from Brionnais and Charolais (the south-west part of the department of Saône-et-Loire), it is propagated throughout the departements of Saône-et-Loire, Nièvre, and Allier, as well as in some parts of Cher, Yonne, Cote d'Or, and Upper Loire. It is a breed for work, and, above all, a superior breed for slaughter. The Charolais is known by its white coat of fine, silky hair, its perfectly cylindrical form, its short, large head, ornamented with fine horns of medium size, white, and raised towards the points, its pink nose, large eye, and gentle expression. It stands close to the ground, and shows a tail well set on, a well developed rump, a straight and large back, well-rounded sides, a deep and spacious chest, a small neck, and good dewlap. The Charolais cow is not a good milker. * * The animals of the Charolais breed are bought at very high prices by agriculturists from the North, and from the environs of Paris, who use them first for working in the fields, and then fatten them for slaughter."

The Gascon and Carolais cattle are very similar in characteristics. In colour they are grey, with black markings. The cows are pretty, and must have a good appearance in a landscape. As dairy animals both breeds are fairly good, but they are chiefly prized as workers. They are derived from the Swiss breed, and are chiefly to be found, the Gascon in the district of Carolles (Haute Ariège), and the Carolais in the Department of Gers.

The Garonnais are striking animals to an English eye, from their uniform buff ("wheat colour" the French call it) colour. They are fair meat producers and milkers, but are chiefly prized as workers. Their principal seats of production are the valleys of the Garonne and the Dordogne.

The next breed, the Bazadais, was not well represented numerically, but there were enough to give an idea of a well-shaped handsome race. They are princi-

pally bred in the district of Bazas, but are found scattered about in the Departments of the Landes, Gers, Lot-et-Garonne, and Tarn-et-Garonne. In colour they are grey. The cows are not good milkers, as the irritability of their temperament indicates, but when carefully managed they are excellent workers, and the quality of their meat is said to be fine.

The Femmeline breed are like the Garonnais—dun, or "wheat coloured" (foment). The bulls are rather ungainly, and far from handsome animals, but the cows have a good feminine appearance, and look like being the excellent milkers which they are said to be. It is said that cattle of this breed fatten "slowly but easily"—somewhat of a contradiction in terms one might think. Judging from the appearance of the animals, I should say slowly and not easily.

Of the Pyrenean breeds the Lourdes cattle are perhaps the best for the dairy. They are small dun or "wheat coloured" cattle, and their home is in the valley of Argeles Hautes-Pyrenees. For beauty, however, the Bearnaise breed bears away the palm amongst these Pyrenean animals. These cattle are much used for work, though their high mettle renders them rather intractable. In colour they are "foment," sometimes approaching to a deep red.

To the Limousine breed was awarded the prize of 2,500 francs for the best working breed, though many judges thought the more powerful Salero or the Charolais better deserved the honour. These animals are of medium size, and of a reddish dun colour, and their general appearance supports their reputation for early maturity and aptness to fatten. They look more like good butchers' animals than many of the French cattle. The cows are only moderately good milkers. The home of this breed is in the Haute-Vienne.

Handsome, well-grown cattle are those of the Siders breed. They have a better skin and finer tail than most of the French races. In colour they are of a rich, deep red, marked with white under the belly. They are natives of the chain of the Auvergne mountains, of which they occupy the central plateau, the Cantal, and the Puy-de-Dome, spreading also into other departments towards the West. The cows are fair milkers. There was a grand show of these handsome animals.

The Aubrac cattle take their name from the mountains of that name, whence they originally came. In size and colour they resemble the Swiss, and like them they are good milkers and workers, and fairly good meat producers. Their principal breeding grounds are in Aveyron, Logere, and a part of Cantal. They are pretty cattle of fine quality.

Another of the "wheat-coloured" breeds is that of the Mezeuc, which chiefly occupies the departments of Ardeche and Haute-Loire. I did not notice these animals particularly. They are said to be good as workers, milkers, and beef producers, their meat being especially prized for its fine flavour.

The Pathanaise and kindred breeds, like several others

varieties of French cattle, have a strong resemblance to the Swiss, from which they are no doubt partially or wholly derived. The Tarentais, or Tarine, is a smaller breed, originating in the Alps. The Breton cattle are too well-known to need description, and of the mixed breeds not comprised in previous classes there were too few representatives to enable a stranger to them to form any trustworthy estimate of their characteristics.

The French Shorthorns (Durhams they call them here) made up the largest and best class in the whole show, there being no fewer than 138 entries, the general quality of which, considering the number, was of a very high order. Few Englishmen knew either how extensively or to what a high degree of excellence Shorthorn breeding had been pursued in France until this great International Cattle Show was opened. To refer individually to the meritorious animals in this splendid lot of cattle would alone require as much space as can be devoted to the whole of this letter. In such a large lot the character of the exhibits was, as a matter of course, somewhat mixed. It is also to be said that in some points on which Shorthorn fashion in England insists as of pre-eminent importance the French animals do not come up to the level of our best Shorthorns at home. For instance, very few of them have that stiffness of hair or that mellowness of touch which is so highly estimated in our own country. Either the French climate, or more likely the character of the pasture, or the feeding of the animals, tends to give to Shorthorns in France that closeness of hair and tightness of skin which is so characteristic of most of the breeds already noticed. The tip-top style and carriage of the most aristocratic of our Shorthorns were also, in most instances, lacking more or less. But in level excellence of form and general healthiness of appearance the French Shorthorns put their English competitors here quite into the shade, if they did not, as a whole, excel any lot of cattle that we meet with at our great shows at home. There is a less pampered look about these French Shorthorns than we are accustomed to notice in our English animals, and I think that it is quite "on the cards" that our French neighbours, after a few more years' experience in breeding and feeding, may beat us with our own breed of cattle just as they have so often done with our own breed of racehorses. As farmers' animals I have never seen so grand a lot of Shorthorns together as were at the show which has recently come to an end. The cows especially were—of course with several exceptions—a noble lot of animals, and we could very well do with some of them on the English side of the Channel. I should much like to see some of the best of these French Shorthorns in competition with our own at a Royal Society's show.

The Shorthorn crosses were also a splendid lot, and a most interesting exhibition to the breeder or critic of cattle. The best—if one can decide such a point—seemed to me to be the Shorthorn-Charolais, and of this there were many excellent examples. Other successes are the

Shorthorn Bearnais the Shorthorn-Normand, and the Shorthorn Manceau. In other instances the native breeds showed great improvement from crossing with the Shorthorns; but of course in some—perhaps in most—the produce was inferior to the Shorthorn in the chief points of excellence. To do justice to this part of my subject would require far longer and more studious investigation than could possibly be given to it during the show. There is much to be learned both in the way of example and in that of warning, from the experiments which the French breeders are making in their efforts to improve their native cattle.

I have left myself but little time for referring to the French sheep. Of Merinos and Metis-Merinos there was a very large and excellent show. The breeding of these sheep is encouraged by the French Government, a flock of fine Merino rams being kept on the national sheep-farm at Rambouillet. Of the native breeds I took careful notes, but cannot dwell upon them now. There is but little to be said in favour of any of them, and it is no wonder that the Merinos are prized for crossing with such generally inferior classes of sheep, though as mutton-producers other breeds than the Merino would of course be preferable. Fortunately for the mutton-eaters of France the Southdowns are getting more and more into favour both as a pure breed, and for crossing purposes. Of the breeds that can be called French the only one that seemed to me to possess any high degree of excellence is that of the Charmoise, a name given to a cross between the New Kent and the Berrichon, originally made in 1840 by M. Malinore-Novel. These pretty little lumps of mutton are nearly all that sheep should be, and that French sheep generally are not. The purely native breeds are chiefly remarkable for the absence of anything like what we are accustomed to regard as legs of mutton, for length of shanks and scrags, and for thinness of frame. The Berrichous, which are the best of them, have been so much crossed with Southdowns, Kents, and Charmoise that they can hardly be termed a pure breed, and in the other classes there is a great deal of similar blending.

Of the French pigs I did not take much notice, because a glance at most of them was enough. Such long, hungry animals as most of them were would not be considered fit for an English show-yard. The best of the pigs in the French division were of English extraction.

Of the awards in the classes of French and other foreign cattle and sheep I have not written, partly because it would have taken up too much space to refer to them individually, and partly because they were in many instances so questionable that to single out their recipients for especial notice would have been to give them a prominence which they do not deserve.

THE SEEDS ADULTERATION ACT AMENDMENT BILL, promoted by Mr. Charles Sharpe, Sleaford, and introduced into the House of Lords by the Marquis of Bristol and into the House of Commons by Sir Welby-Gregory, Bart., Mr. Sewell Read, and Mr. Butt, has passed through all its stages, and has received the Royal assent.

THE INTERNATIONAL AGRICULTURAL CONGRESS AT PARIS.

The programme embraced 11 sections which were appointed to meet daily at the Trileries at 8.30 a. m., while a general assembly was to be held each day at 2 p. m., at the Trocadéro. The subjects discussed by the sections were as under :—

1. Cultivation of Land—Manures.
2. Cattle, with special reference to Importation and Disease.
3. The Vine.
4. Sylviculture.
5. Horticulture.
6. Machinery in Agriculture.
7. Agricultural Industries.
8. Culture of the Silkworm.
9. Agricultural Economy and Legislation.
10. Instruction in Agriculture.
11. The Breeding of Horses.

WEDNESDAY, JUNE 12.

In the general sitting M. Godefroy read the report of the commission on the prizes offered for increase in the production of wheat.

IMPORTATION OF MEAT.

M. DE FELCOUET read the report on the importation of meat from America and Australia. After noting the immense quantities received from America, M. de Felcouet remarked that there was no immediate danger involved for the home rearers, because of the great increase in consumption and the generally inferior quality of the meat imported.

M. PERRAULT, delegate from the Canadian Ministry of Agriculture, combated the notion that the meat was of inferior quality, asserting his belief that animals sent from Canada rivalled the best English meat.

M. JOUBERT, representing Australia, took up the gage on behalf of his country, and spoke of the services which meat derived thence would confer on the public in the near future.

M. DE THIAZ proposed that the question should be settled, not by generalities, affirmation or hypotheses, but by actual comparison.

M. LE COMTE DE TOURDONNET pointed out that preserved meats had not in France taken that place in the daily supply which they had in England. He opined that the importation of foreign meat would lower the price of home produce, but that it was uncertain how far the new needs at the same time established would proceed.

M. DE FELCOUET maintained the views which he had enumerated, and the President confined himself to remarking that as the home production did not appear to be menaced there could be no necessity for taking a vote on the matter.

STEAM CULTIVATION.

M. DECAUVILLE, one of the most renowned manufacturers, who himself practises steam cultivation on a large scale at Petit-Bourg, passed in review the different systems.

M. DEBAINS, dwelling upon the slight progress hitherto made in France in cultivation by steam, assigned

as the cause the necessity of maintaining great numbers of cattle. But he thought it was practicable to combine the two things—cultivation by steam and production of manure.

THURSDAY, JUNE 13.

AGRICULTURAL CREDIT.

M. JOSSEAU, after dilating upon the importance of the question, remarked that while farmers could procure money at 4 per cent. in Russia, Hungary, and England, and at 6 per cent. in Holland, this was out of the question in France. He urged farmers to persist in the endeavours they had recently been making with the view of placing themselves on a like footing with tradesmen.

M. J. SERSTEVENS informed the assembly that the Central Agricultural Society of Belgium had this subject at present under consideration; the Superior Council of Agriculture had added their efforts to those of the Society, in the hope of removing the difficulties which stood in the way of farmers procuring funds. But the enterprise had proved a failure, and he was against further essays in that direction.

Baron LAVALETTE cited the example of the Bank of Nevers, a branch of the Bank of France, which had rendered the greatest services to agriculture in the département of Nièvre. The amount annually advanced to cultivators was about 15,000,000 francs (£600,000).

M. TACHARD reported a conversation which he had had with the German delegates, the substance of which was that in 1757 a number of proprietors associated themselves at the suggestion of Frederick the Great, and the results had been marvellous. Many societies of agricultural credit existed in Germany, and advanced loans at short dates. Here Raffeiden, too, has founded in Westphalia numerous agricultural banks, which have rendered real service to farmers.

COUNT VON DER STRAETEN-PONTHOZ could not adopt the views of M. J. Serstevens, and thought the conditions of credit might be ameliorated to the advantage of farmers.

COUNT DE TOURDONNET thought that institutions of agricultural credit were but of little use, as they were little by little led into speculations of a nature quite different from what was intended at their formation.

IRRIGATION.

M. COSTARD delineated the advantages of irrigation, and passed in review the systems in vogue in India and Egypt, and later in Spain and Lombardy.

M. BABRAL cited the départements of Vaucluse, and of Haute Vienne, where over 4,900 acres are irrigated. There, he said, the system had entered into the economy of the people.

FRIDAY, JUNE 14.

AGRICULTURAL TEACHING.

M. GOSSIN reviewed the progress of agricultural institutions in Belgium and America, and sketched the character and duties of a model Professor. He then

read the following resolutions, passed by the Committee.

That instruction in agriculture and horticulture ought to be included in the plan of primary instruction, and applied to infants equally with adults, and that to complete for adults a popular insight into agriculture conferences should be regularly organised amid agricultural centres, and, seeing that in France a project has lately passed in the Senate its first and second reading for the appointment of departmental Professor of Agriculture, the Congress votes:—

1. That this project should be promptly adopted in a definitive manner, and that the necessary funds should be liberally voted proportionately to requirements.

2. That the instruction so organised shall be applied in the provinces as in the districts of foreign countries.

3. That a competition shall be opened, and prizes awarded to the elementary works on agriculture most applicable to rural primary schools.

These resolutions were put to the vote and adopted.

CHEVALIER DE KAMERS said that in every province of Germany there were primary schools for the sons of small farmers. Above these were higher schools after the fashion of that at Grignon, and at the summit of all the Hohenheim Institute, in which the scientific portion of agriculture is inculcated.

M. DE LEMCHINE asked that foreign delegates might be admitted to vote with the French Commission, on the ground that if France took a step in advance all nations would profit thereby.

MANURES.

M. TANLIE, in a general view of manures, laid especial stress on the application of green manures made by burying in the soil plants cultivated for this end.

M. FOUQUEF said that in Flanders the employment of such manures from time immemorial had always given the best results with potatoes, turnips, &c. Farmers largely use marine plants, and thus make a true importation into their soil of the principles of fecundity placed at their disposal each day by the sea. In Saxony rye was grown year after year by a judicious use of green manures. When it was in flower rather over two bushels per acre of lupine were sown, the rye was garnered, and then the lupine was buried. But the crop thus buried receives appropriate mineral manures.

CHEVALIER DE KAMERS insisted upon the importance of a knowledge of chemistry and vegetable physiology for the maintenance and the augmentation of the fertility of the soil, and bore testimony to the value of the labours of the French, English, and German *savants* in this department.

SATURDAY, JUNE 15.

CONTAGIOUS DISEASES.

M. BOULEY read a Bill prepared by the Commission on these diseases. It had long been admitted, he remarked, that contagious diseases were engendered spontaneously at times. At the head of these he placed the Cattle Plague.

M. PERON, Canadian delegate, proposed the creation of an International Agricultural Society, with representatives sitting in the various countries—a Society which should hold an annual Congress. Questions

might then be elucidated which could not be solved in a single Congress.

M. TYDGADT, delegate from Flanders, mentioned that in Belgium the village veterinaries have the right to order the slaughter of animals affected by contagious diseases, and that thus the focus was quenched as soon as manifested. This measure, he said, was one of general interest and ought not to fall upon the proprietor. He urged, in conclusion, the necessity of an indemnity to the owner of the animal so killed.

M. BOULEY rejected the principle of indemnity, since, when an animal is attacked by a contagious disease its value is reduced to zero, or a minimum figure.

LEGISLATION ON ALCOHOL.

M. ROUS advocated free distillation; that each should submit to fermentation such matter as he pleased, the interests of the State being protected.

M. DUPONT objected to the proposal as being likely to encourage fraud.

MONDAY, JUNE 17.

THE PHYLLOXERA.

M. de la Loyere described the habits of these insects, and recounted the names of those who had treated of the plague. It had its origin, he said, in America, where its existence caused but little anxiety, because the damage it occasioned was of little importance. But while the native vine has escaped, the insects have destroyed the French stocks introduced there.

DR. FATIO recounted the comparative value of the vineyards of various countries as, France, which he placed first then Italy, Spain, Hungary, Austria, Portugal, and Germany. The surface and the number of hectolitres produced were, he said, largest in France. He said that the phylloxera did not in ordinary circumstances travel with great rapidity, and that the period to combat the evil was on its first establishment in a vineyard.

M. DE SAINT TRIVIER did not share the opinions of Dr. Fatio on the progress of the plague, for it could be transported by the wind great distances in a very short time.

Chevalier OHLSEN thought that precautions must be taken against the propagation of the phylloxera not only by waggons but by the carts used for transporting vine-stocks.

M. LICHENSTEIN informed the Assembly that in Spain the Cortes had recently been occupied in attempting to devise a check to their introduction into that country.

M. PAGERY said that in the department of the Hérault the progress of the plague was capricious, at times rapid, at others almost imperceptible. He considered the production of the vine in the Hérault as lost.

M. JULES MAISTRE said that in the department of the Gironde, the plague was of American origin. It had gradually spread in all directions, and invaded the Lot-et-Garonne.

M. MOUILLEFERN described the means employed up till now for the eradication of this scourge. He recommended the formation of societies for this purpose.

COUNT DE LA VERNE spoke of the good effect obtained by the use of sulfo-carbonate, and the sitting was brought to a conclusion.

TUESDAY, JUNE 18.

The PHYLLOXERA again formed the subject matter of the sitting.

M. ESPITALIER counselled the planting of the vine on sandy soils where they appear to be free from molestation.

M. SABATIER, COUNT DE LA VERGNE, and M. FALIERES continued the discussion of remedial measures.

M. DUFOUR and M. DE LA MOLERE gave particulars of the co-operation of the Paris Lyon Company, which had placed a quantity of sulphur of carbon at their disposal, and a vote of thanks was given to the Company.

Mdme. AMELIA DE BOMPARD spoke of the discovery of "the trombidion," an arachnid which has rendered certain vineyards of Bordeaux free from the plague.

WEDNESDAY, JUNE 19.

TREATIES OF COMMERCE.

M. TACHARD delivered a discourse on commercial treaties from a Free-Trade point of view.

It was then moved that the Congress be closed, since the discussion of interests peculiarly French was out of place in a mixed assembly.

M. RAOUL DEVAL endeavoured to show that it was precisely that which rendered the discussion opportune.

After two doubtful votes the Congress was pronounced closed.

FOREIGN DELEGATES TO THE CONGRESS --

- E. Andreef (St. Petersburg),
- G. Fouquen (Agricultural Society of Brabant).
- F. Judeich (Central Agricultural Society of Germany).
- B. S. Jorgenson (R. A. S. of Denmark).
- Jules Joubert (New South Wales A. S.)
- A. Darra (Agricultural Society of Algiers).
- Ferdinand Hiller (Bohemia).
- Wilbraham Egerton, M.P. (R. A. S. England).
- Baron de Faversau (Ag. Soc. of Limbourg).
- Dr. Victor Fatio (Geneva).
- Géza Tanyay (Hungarian Press).
- Baron von Ow (Germany).
- Canon Bagot (Roy. Ag. Soc. Ireland).
- Dr. Teufelberg (Ministry of Agriculture, Berlin).
- Bernhardt Forstmeister (Germany).
- F. P. Baker (United States Commissioner).
- Jules Cartuyvels (Belgian Government).
- James Caird, C.B. (R.A.S.E.).
- William A. Anderson (United States Commissioner).
- Thomas Bell (Newcastle Farmer's Club).
- C. Buffon (Government, Duchy of Luxembourg).
- A. Blumenfeld (Russian Government).
- H. M. Jenkins (R.A.S.E.).
- Franklin T. Johnson (Indiana).
- Colonel Kingscote (R.A.S.E.).
- Baron de Lenthe (Switzerland).
- H. de Lemicki (Agricultural Society of Cracow).
- E. de Lavaley (Belgium).
- P. Gloukofskey (Russian Commissioner).
- F. F. Gonzaga (Agricultural Society of Lombardy).

- Count de Lehndorff (Germany).
- T. Lyder (Agricultural Institute of Gembloux).
- Adam Muller (Germany).
- Sir A. K. Macdonald (R.A.S.E.).
- G. Melano (Paris Agricultural Society).
- F. N. Menzies (Highland Society).
- MacMuntrie (Commissioner Agricultural Department America.)
- L. Micheli (Geneva.)
- T. B. N. Martinet (Peruvian Government.)
- Dr. Jules Muller (Agricultural Society of Styria.)
- J. H. Perrault (Canadian Ministry of Agriculture.)
- Victor Prosch (Royal Agricultural Society of Denmark.)
- H. T. Petersen (Norwegian Commission.)
- The Duke of Bedford (R.A.S.E.)
- Albert Bedo (Hungary.)
- Baron de Caters (Anvers.)
- Leopold Dumont (Central Ag. Soc. of Belgium.)
- F. Fléchen (Ag. Soc. of Verviers.)
- Thos. E. Jenkins (U.S. Commissioner.)
- de Moyser (Grand Duchy of Luxembourg.)
- Count de Robiano (Belgian Government.)
- Earl Spencer (R.A.S.E.)
- T. Serstevens (Belgian Govt.)
- Albert de Quintana (Spanish Govt.)
- James Robertson (R.A.S. Ireland).
- Chevalier de Komers (Bohemia).
- M. Stoughton (U.S. Commissioner).
- R. Schlumberger (Imp. Ag. Soc., Lower Austria).
- V. Tschernaieff (Russia).
- Dr. N. Thiel (German Govt.)
- Jacob Wilson (R.A.S.E.)
- P. Wells (R.A.S.E.)
- Prof. Wilson (Highland Soc.)
- A. Zundel (Govt. Alsace-Lorraine).
- G. Locheri (Roy. Academy of Ag., Turin).
- Sewars (Burgomaster) Luxembourg.
- Isidore Jansens-Kauters (Lilbourg Ag. Soc.)
- Buxares (Uruguay Commissioner).
- H. M. Hartog (Govt of Holland).
- Mr. Chandos Pole-Gell (R.A.S.E.)
- Earl Cathcart (R.A.S.E.)
- Jules Neef (Belgium).
- Lord Vernon (R.A.S.E.)
- A. Smith (U.S. Commissioner).
- G. Van Viller (Ag. Soc. of Utrecht).
- Prof. de Werner (Ag. Soc. of Germany).
- A. Yormoloff (Russia).
- G. O. W. Campbell (American Pomological Soc.)

THE DINNER.

On Tuesday evening a dinner to the members of the Agricultural Congress was held at the Grand Hotel, the Marquis de Dampière in the chair, when about 400 sat down. In reply to the toast of the Royal Agricultural Society of England Mr. Jenkins made a short speech in French, which we translate:—

"As a general rule I abstain from expressing myself in a foreign language: but this evening, in consideration of the numerous kind attentions which I have received during a visit of ten days in this fine capital, and the very kind manner in which you have received this toast, I feel the necessity of trying to express my feelings to

you in French. The Society of French Agriculturists as the President has already appropriately said, is the younger sister of the Royal Agricultural Society of England, and I assure you that her elder sister follows with solicitude the development of her young relative's vigour, intelligence, and enterprise.

"The success of your Society has a great significance to all Englishmen, for it proves that what to us is the corner-stone of our social organisation—private enterprise—produces equally good results in this fine country of France as in the British Isles.

"The Royal Agricultural Society of England has sub-

mitted to the International Congress of Agriculture a Memoir on English Agriculture of which each article is open to discussion. It will be very interesting to us later on to read criticisms on our theories and practice by the agriculturists of other nations. That intelligent criticism will enable us to see ourselves as others see us.

"In the name of the deputies of my country I thank you gentlemen from the bottom of my heart for this kind reception."

Mr. E. C. Ransome also responded to the toast. Canon Bagot and Mr. Robertson replied to a similar compliment paid to the Royal Agricultural Society of Ireland.

ROYAL AGRICULTURAL BENEVOLENT INSTITUTION.

The anniversary dinner of this Institution was held last Tuesday evening at Willis's Rooms, and was attended by about 100 gentlemen. The chair was taken by Mr. J. J. MECHI, the founder of the Institution, and among those present were—Sir J. Heron Maxwell, Mr. J. Round, M.P., Mr. Phipps, M.P., Mr. Charles Shaw, Mr. Batson, Mr. Cantrell, Mr. Scott, Mr. Vivian, Mr. Hy. Grimmer, Capt. Edwards, &c. After the usual loyal toasts,

Mr PHIPPS, M.P., proposed "The Army, Navy, and Reserve Forces," Sir J. HERON MAXWELL responding.

The CHAIRMAN then gave "Prosperity to the Royal Agricultural Benevolent Institution." He said, as they all had before them a copy of the last Annual Report he need not enter into details, and he would only speak of what had been done in a general way. They were, no doubt, all agreed that an Institution of that kind was very much wanted at the time when it was founded. It was, as it were, by accident that it came into existence. Many years ago, while enjoying the beauties of nature, the sports of the field, and the hospitality of leading yeomen, he heard of the cases of two persons who, after having been well-to-do farmers, had, through adverse seasons, become greatly reduced in their circumstances, and having afterwards died, left a widow and children quite unprovided for. Feeling deep regret at the altered position of the survivors, he inquired of agriculturists if there were not some institutions through which assistance could be obtained for them, and he was told that there were none. That state of things appeared to him very singular. He knew that there was no class of men who were more hospitable than farmers and where hospitality abounded charity could not be far off. He wrote on the subject to his friends, Mr. Robert Baker and Mr. Richard Garrett, and they said to him in effect, "Ah! you may try to provide for such cases as you mention, but you will never do it." That seemed to him a very curious view of the matter, and he asked why agriculturists should not be able to do what had been done by other classes of society? It could not, indeed, have been done if the old postal system had remained, the cost of postage under that system being such as absolutely to prohibit the distribution of printed documents. The expense of sending such papers as were now sent to Liverpool for a penny would then have been 2s. 9d., and such charges made it absolutely impossible to diffuse the kind of information and appeals without which such an Institution as that could never have been established. The labour of forming that Society was, indeed, arduous, but it was a labour of love, and all obstacles

were at last overcome. He thought the thing would succeed, and it did. The late Duke of Richmond being a great favourite with agriculturists, he went to his Grace, told him what was being done, and asked him to become the President. His Grace said, "Let me see what you are doing," and on the evening of the same day he consented to accept the office, and gave him (the Chairman) a cheque for £50. Soon after the Institution began paying pensions of £20 a-year, and at the present time there were 450 persons in the regular receipt of pensions, the amount distributed last year being about £9,000, or nearly £200 a week. That Institution was what he might well call a growing concern, and it had £25,000 invested in the Funds. What had been done, however, was not enough to satisfy him. It was said that agriculture was poor, and that statement seemed to be supported by the fact that the Farmers' Club and other bodies of a kindred character had not yet been able to secure any great building for holding their meetings in common; but if they looked at the number of acres under cultivation they could not think there was any reason for assuming poverty. On the whole, agriculture might be regarded as the greatest interest in the country, and it would be a bad thing for the nation if it ever ceased to be in the main prosperous. No man, indeed, could farm successfully in the face of bad seasons, and unfortunately there had been three or four lately, which must have been especially trying to men with limited capital and inferior land (Hear, hear). One result of that was an increase in the demands made on that Institution, and when he said that they had now 360 applicants, and that the total number that could be elected for pensions was 44 they must all feel the deep need which there was for extending the usefulness of that Institution (Cheers). As yet its claims were far from being sufficiently known. He was astounded at the fact that in the great county of Lancashire they had only about £15 a year in annual subscriptions, while the amount supplied by Cheshire was about the same. From Derbyshire they received still less, and from Cumberland they received only two guineas. While he was in Cumberland 14 years ago he paid a visit to his old friend the late George Moore, and after his death he was delighted to find that he had left that Institution £1,000 (cheers). Though a keen man of business, Mr. Moore had a warm heart and he fully appreciated the necessity of an Institution like that for agriculture. Seeing Scotland so well represented by a gentleman who sat near him (Sir J. Heron Maxwell) he wished to avoid saying anything that would be considered disrespectful to that country (laughter), but he must remark that it appeared to him

that in not supporting that Institution better than it did with four annual subscriptions for the whole country Scotch agriculturists had made a great mistake (Hear, hear). In Ireland they had actually no subscribers at all. In reasoning on the matter it had occurred to him that the chief reason why the Institution had not received much larger support must be that what he had just mentioned, namely, that it was not sufficiently known. If the farmers would only give them a farthing an acre all round that would be an income of £50,000 a year. It appeared from the returns issued by the Board of Trade that a shilling an acre would yield £28,600,000. He much regretted that the Institution had been so seldom mentioned in wills; but at present it was young, and they might reasonably hope that as time advanced it would frequently benefit in that way. In concluding he must thank those whom he addressed for attending in such large numbers. When he heard who had presided before, and that amongst his predecessors was his Royal Highness the Prince of Wales (cheers), Lord Derby (cheers), and that wonderful man the Earl of Beaconsfield (loud cheers)—he said that although he was a Liberal in politics—he felt that for him to preside was like stepping from the sublime to the ridiculous (No, no). That Institution, which he regarded as his own child, had now lived for 18 years, and he hoped it would live and grow in prosperity as long as agriculture itself remained, and he now called upon them to drink the toast of “Prosperity to the Royal Agricultural Benevolent Institution.”

The SECRETARY (Mr. C. Boufield Shaw) then read a list of the donations and annual subscriptions connected with the anniversary, including subscriptions of 25 guineas from the Queen and 10 guineas from the Prince of Wales, and a donation of £50 from Mr. Mechi, in addition to various contributions of the same kind.

Mr. J. ROUND, M.P., in proposing “The Chairman,” said they could not forget that to him was in a great degree due the origin and continued success of that institution. It would be superfluous for him to speak of Mr. Mechi’s career in agriculture or to remind them how he converted a bad piece of land into a fertile farm. (Hear, hear). As an Essex man he was proud that Mr. Mechi belonged to that county, and had pitched his tent at Tiptree, where he had hospitably entertained agriculturists, not only from all parts of Great Britain but from almost all parts of the world. As regarded agricultural improvement, if it were true that the man who made two blades of grass grow where only one grew before was a benefactor to the nation, they must all feel that Mr. Mechi had done much in that way to advance the interests of the farmers and indirectly of the consumers (cheers.) He had grown old in the public service, having devoted a large portion of his life, and applied his intellectual powers and his capital to the advancement of agriculture, and there could be no question that agriculturists as a body owed him a deep debt of gratitude for what he had done by means of his experiments to enable them to farm better and more profitably (Hear, hear). It was not the least of their Chairman’s public services that he was the founder of an Institution from which there had flown a beneficial stream of charity for the relief of suffering humanity during the last 18 years (cheers).

The CHAIRMAN, in returning thanks, alluded to the number and amount of the holdings of land in Great Britain. The holdings under 5 acres were, he observed, 112,000, over 5 and under 20 acres 113,000, over 20 and under 100 acres 118,000, and above 100 acres 76,000, making a total of 422,000. In Ireland, he added, the number of holdings was 600,000. As

regarded Great Britain, he might ask, he said, whether instead of there being, as many persons supposed, too many large farms, there was not in fact a scarcity of such farms? It was impossible for agriculture to stand still, and he believed that if it were carried on with proper spirit and adequate capital they would not require importations from abroad.

Sir J. HERON MAXWELL gave “The Executive Council,” coupling with the toast the name of Mr. Charles S. Cantrell.

Mr. CANTRELL, in returning thanks, remarked that the Council was composed of men belonging to different counties, who came together from long distances, and of whom he might say that they made great sacrifices were not their labour a labour of love (cheers). That institution owed very much to the honorary local secretaries, who were, in fact, its backbone (Hear, hear). He regretted very much that there were not more gentlemen holding that office in the Northern and Midland districts (Hear, hear). He well recollected Lord Beaconsfield saying at the Anniversary at which he presided, that they ought to have a honorary local secretary in every village. If they had, that would be one of the richest institutions in the kingdom. As regarded Scotland, he might observe that many Scotch landowners appeared as subscribers under the head Middlesex. Since the Institution was founded the Council had elected 650 pensioners, many of whom had gone to their rest.

The CHAIRMAN then proposed “The Secretary,” Mr. C. Boufield Shaw, observing that that gentlemen had the entire confidence of the Council, they all felt that in him they had the right man in the right place (cheers).

Mr. C. BOUSFIELD SHAW, after returning thanks, proposed “The Honorary Local Secretaries.” No one in that room, he remarked, could be so fully aware as he was of the great obligation which the Institution owed to those gentlemen. Though it might appear invidious to make a selection from their number, he had to ask Mr. John Gee, of Rugby, to report, because, following the footsteps of Mr. Sherborne and Mr. Taverner, he had made a most successful raid on the hunting-field in his own part of the country, having obtained there a large amount in aid of the funds of the Institution. To meet the claims of the 850 applicants mentioned by the Chairman would require an addition of between £7,000 to £8,000 a-year to the Society’s income, and he hoped that the funds placed at the disposal of the Council would be largely increased.

Mr. JOHN GEE (Rugby), in returning thanks, acknowledged the valuable assistance which he had received from sporting newspapers in obtaining donations from gentlemen who entered the hunting field in the Midland districts. He added that he considered the President of that event a greater man in relation to that Society than even His Royal Highness the Prince of Wales, seeing that while the latter had supported it, to the former was due the credit of having created that Institution. He hoped he would live to see a great increase in the funds.

The CHAIRMAN in proposing “The Ladies” advocated the establishment of a school for the training and education of the children of unfortunate farmers—a suggestion which elicited loud cries of “No, no.” He also remarked that many successful London merchants had sprung, as it were, from the land in support of such an object.

Mr. BARNARD responded for the toast, and the Company then dispersed.

A selection of vocal music was performed under the direction of Mr. Winn, assisted by Miss Matilda Roby, Madame Marie Belval, Mr. Coates, and Mr. Winn.

CO-OPERATION AND ANALYSIS.

Mr. E. O. GREENING, Managing Director of the Agricultural and Horticultural Co-operative Association, has sent the following letter to the Royal Agricultural Society in explanation of a report read at the last meeting of the Society:—

The quarterly report of the Royal Agricultural Society's Chemical Committee, just published by you, contains an analysis of bone-meal supplied by the Agricultural and Horticultural Association to Mr. W. B. Lowe, of Eatington. This bone-meal, as the report itself shows, was analysed for us by Mr. Bernard Dyer, F.C.S., and pronounced by him "quite genuine, and unmixed with vegetable ivory." Mr. Lowe sent a sample to Dr. Voelcker, who analysed it and found "15 per cent." of vegetable ivory in the sample. The Chemical Committee sum up the transaction thus: "In the result the Association returned 15 per cent. of the price on one half of the quantity of 20 tons."

We find no fault with the publication of this analysis, but we think the public should have all the facts before them. We venture to ask you to permit us to add what is omitted in the report of the Chemical Committee. The bone-meal in question was fine bone flour, the produce of bone works, where knife handles and similar articles are made. We contract with the sellers to supply us pure bone-meal only, and we analyse each lot as it comes in. The bone meal out of which Mr. Lowe was supplied came in two lots, viz., one of 11½ tons analysed by Mr. Dyer, and showing:—

Equal to ammonia.....	3.84
Equal to tribasic phosphate of lime.....	52.74

The analyst pronounced the meal "quite genuine and unmixed with vegetable ivory." The other lot of 20 tons was also analysed by Mr. Dyer. It showed—

Equal to ammonia.....	4.29
Equal to tribasic phosphate of lime.....	53.81

Mr. Dyer pronounced this "a pure bone dust of excellent quality." If your readers will look at these two analyses they will see that we were careful to send our member the lowest of the two in quoting him, so that we were free from any desire to represent the goods too highly.

This is not all. So soon as we heard from Mr. Lowe that some vegetable ivory had been found in the bone-meal, I wrote him on Feb. 9th:—

"I propose to send over to your place at once, say on Monday, or I may come over myself on that day or Tuesday. I propose to sample every bag, and shall be glad if you will at once advise your tenants not to touch any left unused. We hold ourselves entirely responsible for all expenses incurred, and will take back at once and replace every bag found to be defective. I should like you to be at home when I come or send. Please telegraph if you will be so on Monday afternoon or Tuesday morning."

I accordingly went over to Stratford-on-Avon, and found about one half of the twenty tons lying in two stores. These lots were sampled by the aid of Mr. Lowe's own people, in the presence of Mr. Lowe and myself, a great many bags being opened in all parts of the two large piles and the extracted portions mixed together. This carefully-drawn sample of the bulk being sent to Professor Sibson he returned the following analysis and report:—

Phosphate of lime per cent.....	50.14
Nitrogen.....	4.10
Equal to ammonia.....	4.98

An excellent sample of bone-meal.

(Signed) A. SIBSON, F.C.S.

Of the sample thus drawn Mr. Lowe wrote me on February 15th:—

"I consider that we cannot do otherwise than allow that the whole is fairly represented by these parcels. It is at least as near as we can possibly get to it, and I only hope it may prove that the adulteration is not extensive."

(Mr. Lowe had not then received Dr. Voelcker's report on the sample previously drawn by himself from seven bags.) It will thus be seen that the bone meal was analysed by Mr Dyer before delivery, and found satisfactory. It was also analysed by Professor Sibson after delivery, and again found satisfactory. Almost immediately afterwards we had a further delivery of the same material, without the contractors knowing what had just occurred. We seized the opportunity to send a sample to Dr. Voelcker himself. The following was his report:—

†Organic matter.....	28.04
Water.....	7.75
*Phosphoric acid.....	24.84
Lime.....	34.07
Oxide of iron, alumina, magnesia, carbonic acid, &c.....	3.66
Insoluble siliceous matter.....	1.34
	100.00

*Equal to tribasic phosphate of lime.....	54.23
Containing nitrogen.....	3.49
†Equal to ammonia.....	4.24

This a sample of bone sawings and turnings of good quality. (Signed) AUGUSTUS VOELCKER.

The figures of this analysis of those of Mr. Dyer and Professor Sibson closely agree, and justify us in the conclusion that the admixture of a small quantity of vegetable ivory in the sample sent by Mr. Lowe to Dr. Voelcker was accidental. This might have occurred through the accidental sending to Mr. Lowe of a bag of adulterated material which had been rejected by us a little while before, and which was lying at our wharf with notice to the contractor to remove and pay costs upon. (This affair was reported by us in *The Agricultural Economist* of February, 1878, in recording the proceedings of the Association.) Mr. Lowe drew his sample from seven bags only. Suppose one to have been a bag of this material it would show 15 per cent. of adulteration in the sample sent to Dr. Voelcker. But the fact remains that no more could be traced in the bulk when sampled by Mr. Lowe and myself jointly, and Dr. Voelcker himself will admit that it could not have existed in the bulk generally without being detected by Mr. Dyer and Professor Sibson in their analyses of the samples carefully drawn first by us and secondly by Mr. Lowe and myself jointly.

As regards the allowance of 15 per cent. on one-half the twenty tons, let me say this was done without any bargaining compulsion, or even pressing of a claim by Mr. Lowe. About half the bone-meal had been used or sent to distant

farms where it could only be reached by separate railway, journeys and driving. We had found no adulteration of the large bulk which could be got at to sample, and I then wrote to Mr. Lowe expressing our belief that he could not have had any appreciable quantity of vegetable ivory, even accidentally in any of the 20 tons, but added:—

"I am willing, however, to assume that an allowance should be made you of 15 per cent. on half of all sent, and trust you will think this is meeting the case liberally. But if you would prefer the sampling and analysing to be carried further, so as to get an accurate result, it shall be done. I am chiefly anxious to satisfy you in the matter."

Mr. Lowe at once accepted this offer, and we believed the question was honourably cleared up and satisfactorily ended until we saw the report of the Chemical Committee five months later.

The Committee say in introducing the case to the public:—
"The Committee think it right to report the following case in order to point out the grave responsibility which is undertaken by co-operative and other similar associations, who give a guarantee of the quality of manure purchased through their

agency, which guarantee in this case was insufficient for the protection of its members."

We find no fault with these remarks, the kindly and courteous tone of which deserves our thanks. We may fairly assume that in the numerous tests of our manures and other goods made during the twelve years we have been at work, the Committee and their analyst have had proofs of the excellence of quality we secure to our members. We only think it would have been as well not to publish this analysis of a small sample without recording also the fact that the bulk was carefully sampled at once so far as was conveniently possible, and no farther trace found of the objectionable material.

I have not in this letter said a word about the difficulties caused to co-operative associations and individual consumers by the variations in analyses as made by the different eminent chemists amongst us. In another letter I may do so, if you grant me space. In the present case I assume that all the three chemists were right, and that vegetable ivory existed in the small sample sent to Dr. Voelcker, and not in the three bulk samples analysed by Mr. Dyer and Professor Sibson.

AGRICULTURAL MEETINGS IN 1878.

JULY 2 to 6.—General Danish Agricultural Society.—Meeting at Svendborg, Denmark. Agents, Hull, Yorkshire.

JULY 3 and 4.—Peterborough Agricultural Society.—Meeting at Peterborough. Entries closed. President, Marquis of Exeter. Secretary, Mr. J. E. Little, Minster Gateway, Peterborough.

JULY 5 and 6.—Ripon, Hanyeah, and Claro Agricultural Society.—Meeting at Harrogate. Secretary, Mr. Walter Scott, Ripon.

JULY 5 and 6.—East Lothian Agricultural Society.—Meeting at North Berwick. Entries closed. Secretaries, Messrs. Richardson & Gemmill, Haddington.

JULY 10, 11, 12, 13, and 14.—Royal Agricultural Society of England.—Meeting at Bristol. Entries closed. President, Colonel Kingscote, C.B., M.P. Secretary, Mr. H. M. Jenkins, 12, Hanover Square, W. [There will be no separate meeting of the Gloucestershire Agricultural Society this year.]

JULY 17.—Huntingdonshire Agricultural Society.—Meeting at St. Neot's, Hunts. Entries close July 2. President, Capt. C. S. Newton. Secretary, Mr. James Dilley, Market Place, Huntingdon.

JULY 18.—Bedfordshire Agricultural Society.—Meeting at Luton. Entries close June 29. President, Lord Charles I. Fox Russell, Woburn. Secretary, Mr. H. R. J. Swaffield, Ampthill, Beds.

JULY 20.—Cleckheaton Agricultural Society.—Meeting at Cleckheaton. Entries close July 13. President, Henry Mann, Esq. Secretary, Mr. B. Bastow, Cleckheaton.

JULY 23, 24, and 25.—Worcestershire Agricultural Society.—Meeting at Broughton. Entries closed. President, Rt. Hon. Lord Lyttelton. Secretary, Mr. Edward T. Goldingham, 6, Foregate Street, Worcester.

JULY 24.—Dorchester Agricultural Society.—Meeting at Dorchester. Entries close July 9. President, Lord Alington. Secretary, Mr. G. J. Andrews, Dorchester.

JULY 24, 25, and 26.—Lincolnshire Agricultural Society.—Meeting at Louth. Entries closed. President, W. H. Smyth, Esq., Elkington Hall, Louth. Secretary, Mr. S. Upton, St. Benedict's Square, Lincoln.

JULY 24, 25, and 26.—Shropshire and West Midland Agricultural Society.—Meeting at Ludlow, Shropshire. Entries closed. President, J. E. Severno, Esq.,

M.P. Secretary, Mr. W. L. Browne, Castle Mills, Shrewsbury.

JULY 25.—Cleveland Agricultural Society.—Meeting at Saltburn-by-the-Sea. Entries close July 10. President, J. T. Wharton, Skelton Castle. Secretary, Mr. T. Gisborne Fawcett, Stockton-on-Tees.

JULY 25 and 26.—Cambridgeshire and Isle of Ely Agricultural Society.—Meeting at Cambridge. Entries close, for Stock, June 29; for Poultry and Implements, July 6. President, E. Hicks, Esq. Secretary, Mr. A. T. Grain, 2, St. Andrew's Hill, Cambridge.

JULY 26.—South Durham and North Yorkshire Horse and Dog Show.—Meeting at Darlington. Entries close July 8. President, Right Hon. Lord Eldon. Secretary, Mr. W. Sewell, Darlington.

JULY 30, 31, and AUGUST 1 and 2.—Highland and Agricultural Society of Scotland.—Meeting at Dumfries. Entries closed. President, the Marquis of Lothian. Secretary, Mr. F. N. Menzies, 3, George IV. Bridge, Edinburgh.

JULY 31.—Crook Show, at Crook. Entries close July 18. Secretary, Mr. T. Pickering, Crook.

JULY 31 and AUGUST 1.—Glamorganshire Agricultural Society.—Meeting at Swansea. Entries closed. President, H. Hussey Vivian, Esq., M.P. Secretary, Mr. W. V. Huntley, Welsh St. Donatts, Cowbridge.

JULY 31 and AUGUST 1.—Leicestershire Agricultural Society.—Meeting at Leicester. Entries closed. President, Duke of Rutland. Secretary, Mr. J. T. A. Ardron, Syston, Leicester.

AUGUST 1.—Coquetdale Agricultural Society.—Meeting at Morpeth. Entries close July 17. President, S. F. Widdington, Esq. Secretary, Mr. Robert Durkin, Rothbury, Northumberland.

AUGUST 3.—East Berwickshire Agricultural Society.—Meeting at Berwick-on-Tweed. President, John Wilkie, Esq., of Foulden. Secretaries, Messrs. Bowhill and Doughty, Ayton, N.B.

AUGUST 3.—Northumberland Agricultural Society.—Meeting at Alwick. Entries close July 25th. Secretary, Mr. H. Wallace, Trench Hall, Gateshead.

AUGUST 5.—Border Union Agricultural Society.—Meeting at Kelso. Entries close July 12. President, The Duke of

- Roxburgho. Secretary, Mr. John Usher, 25, Bridge Street, Kelso.
- AUGUST 6.—Flintshire and Denbighshire Agricultural Society.—Meeting at Ruthin. President, Sir W. Grenville Williams, Boddyddan. Secretary, Mr. George Bellis.
- AUGUST 6.—Pembroke Agricultural Show.—Meeting at Pembroke. Entries close July 23. President, T. T. Mousley, Esq. Secretary, Mr. Joseph Powell, Pembroke.
- AUGUST 6, 7, and 8.—Yorkshire Agricultural Society.—Meeting at Northallerton. Entries close July 6. President, The Hon. G. E. Lascelles. Secretary, Mr. Marshall Stephenson, York.
- AUGUST 6, 7, 8, and 9.—Royal Agricultural Society of Ireland.—Meeting at Dublin. Entries close . . . President, Duke of Leinster. Secretary, Mr. Seymour Mowbray, 42, Upper Sackville Street, Dublin.
- AUGUST 7.—Blackpool and Fylde Agricultural Society.—Meeting at Blackpool. Entries close July 24. President, William Henry Cocker, Esq., Mayor of Blackpool, Secretary, Mr. Richd. Gorst, Clifton Chambers, Blackpool.
- AUGUST 7.—Badminton Farmers' Club.—Meeting at Badminton. Entries close July 22. President, The Duke of Beaufort, K.G. Secretary, Mr. Richard W. Lloyd, Badminton, Chippenham.
- AUGUST 9.—Northumberland Agricultural Society.—Meeting at Alnwick. Entries close June 25. Secretary, Mr. H. Wallace, Trench Hall, Gateshead.
- AUGUST 13.—Whitby Agricultural Society.—Meeting at Whitby. Entries close July 20. President, Col. The Hon. Octavius Duncombe. Secretary, Mr. William Stonehouse, 2, Esplanade, West Cliff, Whitby.
- AUGUST 14.—Beamish, Pontop, and Consett Agricultural Society.—Meeting at Chester-le-Street, Co. Durham. Entries close August 3. President, Lieut.-Col. Joicey, Newton Hall, Stocksfield-on-Tyne. John Richards, Beamish, and George Ridley, Stanley, Chester-le-Street.
- AUGUST 21 and 29.—Durham County Agricultural Society's Show (including dogs, poultry, &c.)—Meeting at South Shields. Dogs second day only. Entries close August 3. President, C. M. Palmer, Esq., M.P. Secretary, Mr. Thomas Wetherell, 32, Claypath, Durham.
- AUGUST 23 and 24.—Cheshire Agricultural Society.—Meeting at Knutsford. Entries close, Farms and Cottages, July 1; Cattle, &c., August 1. President, The Right Hon. Lord de Tabley. Secretary, Mr. William Beckett, Oulton Farm, Tarporley.
- AUGUST 29.—Lytham and Kirkham Amalgamated Agricultural Society.—Meeting at Lytham. Entries close August 17. President, J. Talbot Clifton, Esq., Lytham Hall. Secretary, Mr. Joseph Parkinson, 5, Chapel Street Preston.
- AUGUST 29.—Worsley and Swinton Agricultural Society.—Meeting at Worsley. Entries close . . . President, The Earl of Ellesmere. Secretary, Mr. Alfred Spencer.
- AUGUST 31.—Halifax and Calder Vale Agricultural Society.—Meeting at Halifax. Entries close August 17. President, Lieut.-Colonel Sir H. Edwards, Bart. Secretary, Mr. William Irvine, 13, Cheapside, Halifax.
- SEPTEMBER 3 and 4.—Derbyshire Agricultural Society.—Meeting at Derby. Entries close July 30. President, T. W. Evans, Esq., M.P. Secretary, Mr. Geo. Corbett Canal Office.
- SEPTEMBER 3, 4, and 5.—Royal Manchester, Liverpool and North Lancashire Agricultural Society.—Meeting at Lancaster. Entries close August 1. President, Lord Winnarleigh. Secretary, Mr. Thomas Rigby, 1, Old Ropery, Liverpool.
- SEPTEMBER 4.—Leominster Agricultural Society.—Meeting at Leominster. Entries close August 23. Secretary, Mr. Edwin Grey, 9, Broad Street, Leominster.
- SEPTEMBER 4.—North East Somerset Farmers' Club.—Meeting at Chowton Mendip. Entries close . . .
- President, The Earl of Warwick. Secretary, Mr. John Tudball, Chew Magna, near Bristol.
- SEPTEMBER 5.—Carlisle Agricultural Society.—Meeting at Carlisle. Entries close August 29. Hon. Secretary, Thos. P. Brakes, Esq., Balin Temple, Tullow, County Carlow
- SEPTEMBER 10.—Cartmel (Lancashire) Agricultural Society.—Meeting at Cartmel. Entries close August 28. President, J. S. Younge, Esq., J.P., Abbott Hall, Kent Bank. Secretary, Mr. William Cragg, Cartmel Carnforth, North Lancashire.
- SEPTEMBER 10 and 11.—Warwickshire Agricultural Society.—Entries close August 17. President, The Earl of Warwick. Secretary, Mr. John Moore, 2, Northgate Street, Warwick.
- SEPTEMBER 11.—Royal and Central Bucks Agricultural Society.—Meeting at High Wycombe. Entries close, for Stock, August 21: for Poultry, August 31. President The Right Honourable Lord Carington. Secretary, Mr. George Fell, Aylesbury.
- SEPTEMBER 11.—Wayland Agricultural Society.—Meeting at Watton, Norfolk. Entries close August 26. President, The Right Hon. Lord Walsingham. Secretary, Mr. Henry F. Grigson, Watton, Norfolk.
- SEPTEMBER 11 and 12.—Wirral and Birkenhead Agricultural Society.—Meeting at Birkenhead. Entries close August 27. President, John Laird, Esq., Mayor of Birkenhead. Secretary, Mr. A. F. Gardiner, Hamilton Street, Birkenhead.
- SEPTEMBER 12.—Waterford Farming Society.—Meeting at Waterford. Entries close September 5. President, The Marquis of Waterford. Secretary, Mr. Robt. S. Blee, Waterford.
- SEPTEMBER 13.—Stanhope Agricultural Society.—Meeting at Stanhope. Entries close . . . President, John R. W. Hildyard, Esq. Secretary, pro tem, Mr. Wm. Morley, Sweet Wells, Stanhope.
- SEPTEMBER 13.—North Shropshire Agricultural Society.—Meeting at Newport, Salop. Entries close August 10. President, J. C. B. Borough, Esq., Chetwynd Park. Secretary, Mr. John Pearce, Market Drayton.
- SEPTEMBER 13.—Loughborough Agricultural Association.—Meeting at Loughborough. Entries close August 29. Secretary, Mr. Wm. Berridge, Town Hall, Loughborough.
- SEPTEMBER 18 and 19.—Staffordshire Agricultural Society.—Meeting at Leek. Entries close August 17. President, Robert Heath, Esq., M.P. Secretary, Mr. W. Tomkinson, Newcastle, Staffordshire.
- SEPTEMBER 19.—Farnworth (near Warrington) Agricultural Show.—President, Robert Whalley, Esq., Bold. Secretary, Mr. John Hough, Widnes.
- SEPTEMBER 20.—Brampton (Cumberland) Agricultural Society. Secretary, Mr. John Smith, Cote Hill, Brampton, Carlisle.
- SEPTEMBER 20.—Carmarthenshire Agricultural Society.—Meeting at Carmarthen. Entries close September 7. President, Sir John Mansel, Bart. Secretary, Mr. D. Prosser, Carmarthen.
- SEPTEMBER 21.—Tarpoley Agricultural Society.—Meeting at Crewe. Entries close September 7. President, Dr. Atkinson, the Mayor of Crewe. Secretary, Mr. William Vernon, 4, Lane-Ends, Tarporley.
- SEPTEMBER 25.—Frome Dairy Show and Agricultural Society.—Meeting at Frome. President, T. K. Harding, Rodmead. Secretary, Mr. Walter Harrold, The Auction Mart, Frome.
- SEPTEMBER 26.—Barnard Castle Agricultural Society.—Meeting at Barnard Castle. Entries close September . . . Hon. Secretary, Mr. R. Graham, Barton House, Staindrop, Darlington.
- SEPTEMBER 26.—Richmondshire Agricultural Society.—Meeting at Beulah. Entries close September 3. Secretary, Mr. J. Wetherell, Richmond, Yorkshire.

AGRICULTURAL SOCIETIES.

ESSEX.

MEETING AT DUNMOW.

It would have been difficult to select a more awkward place for an agricultural show than Dunmow, situated as that place is on a branch "one-horse" line upon which trains run seldom and slowly. The Great Eastern Company put on several special trains, and no doubt did their best to accommodate visitors; but on a single line the working of extra trains necessarily involves much waiting about, as steam-horses unfortunately cannot turn out when they meet, and people are apt to make a fuss and claim damages when a collision occurs. So the bulk of the visitors did not arrive very early at the show-yard on Tuesday, especially where, as was the case with the present writer, they had to get from one branch line to another. When Charles Lamb was reprimanded for being constantly late at the India Office, he made the characteristic defence, "It is true I come late, but then I leave early;" and that was just the case of many who were present at the Dunmow meeting. To "do" a great show, like that of Essex, thoroughly, when only arriving at 11 a.m., and leaving at 4 p.m. (the last to get home by), is an impossibility, and under such circumstances minute criticism could not be attempted.

People who expected to see either a small show or a small attendance of visitors at little Dunmow were agreeably disappointed. The first day, for a wonder, was fine, and in the afternoon the ground was well filled with visitors. The show of implements was much smaller than that of last year, and there was but little to attract special attention. The live stock show was in some of its departments surprisingly good. There has seldom, if ever, been a better lot of cattle and sheep at the Essex meeting, though Shorthorns usually muster pretty strongly there, while the show of Channel Islands cattle has long been one of the best in the kingdom. On the other hand the show of horses was rather small and far below average. In the agricultural horses there was only one really good class, though there were many gems scattered amongst the other classes.

In Class I. for stallions of any age, open to the United Kingdom (Dunmow Town Prize), there were only nine entries, and one of these, Tom Muir, did not put in an appearance, his owner prudently resting on his laurel-won at Hadleigh, perhaps. Mr. Walter Gilbey won with Tip Top, by Young Matchless, dam Trip, Mr. Christy's Nelson taking the reserve ticket. The next class was for Suffolk stallions three years old and upwards. Here there were only three entries. This fact leads to the remark that, out of their own county, the glory of the Suffolk horse is departing. More than one person on the ground said in my hearing, "In a few years more there won't be a Suffolk horse at a show out of Suffolk," and the predic-

tion is probably one that will be verified. For heavy land there is no better plough-horse than the Suffolk; but farmers now-a-days can do better with a good young horse than keep him on the land. They can pocket a hundred pounds or more for him and breed another; and for the market the Suffolks are "nowhere" as compared with the English or Clydesdales. But, to return to Class 2, Mr. Manfred Biddell won the first prize with his good horse Ben, by Captain Snap, owned by Farmer, beating Mr. Richard Garrett's Crown Prince, which was second. Ben was third in his class at Liverpool. Mr. Betts took first honours in the class for stallions (not Suffolks) three years old and upwards with his well-made, substantial Sir John Falstaff, whose chief fault is that he cannot walk, only hobble. Mr. Knight was second with Captain. Class 4, for two-year-old colts, confined to the county, was a poor one, and Mr. Sewell's Cambridge Tom, bought at the Earl of Ellesmere's sale, won easily. Mr. Jiffy gained the second place with a colt by his Heart of Oak. The open class for two-year-olds was as good as the close class was bad. In fact it was the only really meritorious one amongst the agricultural horse-classes. Here there was a good deal of competition; but Cambridge Tom was too good a stamp of horse to be beaten on Tuesday, in spite of the complaints of his turning in his fore feet, complaints that were greatly exaggerated by jealous critics, but for which, unfortunately, there was some foundation. For the second place the competition was between Mr. Garrett Taylor's stylish colt by Master's England's Wonder, and Mr. Beart's Waywork, a good stiff one of thorough cart-horse character, which was highly commended and reserved. The former gained the second prize, and with a little more substance, his good style and action would probably have placed him first. In this class Mr. George Street showed his very useful roan colt by Stokes's Champion, dam Cardiff Lass, which has won several prizes. Mr. Sewell succeeded in carrying off the special prize given by Mr. T. C. Buring, M.P., for the best animal in Classes 1 to 5, and is to be congratulated on the success which has already rewarded his spirited conduct in bringing, at a great expense, so valuable a horse as Cambridge Tom into the county. In the class for cart mares Mr. D. A. Green, of East Donyland, was *facile princeps* with his two beauties Bonny and Smart. The latter is a well-known prize-winner, and a perfect model of a Suffolk mare as far as form goes, though one size too small. She has never been beaten before, and Mr. Green is fortunate in having bred the mare that has beaten her. Bonny is not yet filled up like the older mare; but she is a size larger, and a very good one indeed. These mares were first in the piles of plough-horses—in fact there was nothing to stand against them for a moment. The other classes of agricultural

horses do not call for particular notice; but Earl Spencer showed a good mare in Class S, and Mr. D. A. Green a very promising filly in Class 11. The mares and foals were a miserable lot

The show of hunters, thoroughbreds, and hacks was, as usual, a large one, and quantity, rather than much that was special in quality, was the order of the day.

There was a capital show of Shorthorns, the bulls being an unusually good lot for a county show. In the aged class there were only two entries, Lieut.-General Fytche's Royal Charmer's Duke, and Mr. D. A. Green's Roan Duke, which were awarded the first and second prizes. Mr. James Christy carried off both prizes in the two-year-old bull class. In the yearlings Mr. Green was to the fore with Lionel, a very promising young bull, and took the reserve number for another, Colonel Erise being second. There were several other meritorious exhibits in this class, which was confined to the county. In the open class Mr. Thos. Willis won the prize of £15, given by Lord Braybrooke, with Vice Admiral. Mr. Green again came to the front in the class for bull calves, with Prince of the Roses, and amongst the cows he again took honours. Altogether he did remarkably well, and his success cannot fail to help his sale on Tuesday. With 17 entries he carried off no less than 19 prizes—a very great feat in show competition, and one that reflects great credit on his skill and judgment. The Havering Park Challenge Cup, given by Mr. David McIntosh, was taken by Mr. Linton, with his strangely famous bull Sir Arthur Ingram. For the successes of other breeders amongst the Shorthorns the reader must be referred to the prize list.

There was, as before observed, a capital show of Channel Islands cattle, the winners of prizes being Earl Rosslyn Mr. G. Simpson, Mr. T. E. Miller, and Mr. James Odams.

Of sheep there was one of the best shows, if not the best, ever held at a meeting of the Essex Society. Lord Braybrooke, Mr. Hugh Gorringe, Mr. George Jonas, Mr. Colman, M.P., Mr. George Street, Mr. Giblin, Mr. Lambert, and other well-known exhibitors sent sheep, and in most of the class the competition was greater than it usually is in Essex, which is not a great sheep-grazing county. There was hardly any competition in the lamb classes. In fact, for the Dunmow prize of £5 for the best pen of five longwools there was no entry.

The pigs were a very poor lot, and the donkey show could not be called a success.

PRIZE LIST.

JUDGES.—CART HORSES: W. T. Lamb, Grantham; W. Biddell, Suffolk; V. B. Watts, Dorset. RIDING and COACHING HORSES: J. E. Bennett, High Bosworth Grange; R. Garrett, Saxmundham; Y. K. Graham, Birmingham. SHORTHORNS: R. Marsh, Hitchin; J. Lynn, Stroxtou, Grantham; F. Tallant, Midhurst; CHANNEL ISLANDS and DAIRY CATTLE: —, Sampson, Hauts; —, Tait, Prince Consort's Shaw Farm. SHEEP and PIGS: H.

Fookes, Bandford; A. Crisp, Wickham Market. DONKEYS and MULES: J. F. Bott, Dunmow; H. Salins, Hafield Heath.

HORSES

FOR AGRICULTURAL PURPOSES.

Cart Stallion.—Prize, £30, W. G. Hey, Bishop Stortford (Tip Top).

Suffolk Stallions, three years old and upwards.—First prize, £20, M. Biddell, Ipswich; second, £10, R. Garrett, Saxmundham (Crown Prince).

Stallions (not Suffolk), three years old and upwards.—First prize, £20, W. H. Betts, Diss (Sir John Falstaff); second, £10, J. Knight, Great Radham, Herts (Captain).

Two-year-old colts.—First prize, £10, D. Sewell, Colchester (Cambridge Tom); second, £7, J. Jillings, Saffron Walden.

Two-year-old colts.—First prize, £20, D. Sewell, Colchester (Cambridge Tom); second, £10, G. Taylor, Norwich.

Special Prize.—The best animal in classes 1, 2, 3, 4, and 5.—Prize, £25, D. Sewell, Colchester (Cambridge Tom).

Yearling entire colts.—Prizes withheld for want of merit.

Cart mares, four years old and upwards.—First prize, £10, D. A. Green, Doyland (Bonny); second, £5, D. A. Green (Smart).

Cart mares, four years old and upwards (open class).—First prize, £10, D. A. Green (Bonny); second, £5, D. A. Green (Smart).

Two-year-old fillies.—First prize, £8, D. A. Green (Blossom); second, £5, J. F. Bott, Dunmow.

Yearling fillies.—First prize, £7, T. W. Lambert; second, £5, C. Bates, Dagenham.

Fillies (under four years old).—Prize, £10, D. A. Green (Pride).

Mares and foals.—First prize, £10, D. A. Green (Brisk); second, £5, T. W. Lambert, Ongar (Bonny).

Mares and foals.—First prize, £15, C. Beart, Stow, Norfolk (Lioness); second, £7, D. A. Green (Brisk).

Foals.—First prize, £5, E. Cowell, Bishop Stortford; second, £3, D. A. Green.

Pairs of plough horses.—Prize, £10, D. A. Green (Smart and Bonny).

THOROUGHEREDS.

Stallions.—First prize, £30, the Earl of Rosslyn, Dunmow (The Rake); second, £10, C. J. Bedford, Dunmow (Guy Dayrell).

Hack stallions.—First prize, £15, T. Harper, Bury St. Edmund's (Magnate); second, £5, H. J. A. King, Braintree (Flying Buck).

HUNTERS.

Weight-carrying hunter (up to not less than 14 stone, open class).—Prize, £20, P. C. Barker, Ingatestone (Vigour).

Hunter, up to 14 stone.—First prize, £20, B. Sparrow (Ferryman); second, £10, J. R. Chaplin, Northampton.

Light-weight hunters.—First prize, £10, P. C. Barker (Victim); second, £5, W. Clayton, Dunmow (Glow-worm).

Four-year-old hunters.—First prize, £10, P. C. Barker, Ingatestone (Vicar); second, £5, G. S. Hall, Ely (Woodman).

Mares in foal, or with foal at foot.—Prize, £21, G. J. Rust, Braintree, (Yorkshire).

LEAPERS.

Dunmow town prizes.—Prize, E. Faux, Maldon (Erin).

Dunmow town prizes.—First prize, £10, H. Sharp, Essex Hall, Ridgwell (Sophia); second, £5, J. D. Gibbs, Chelmsford (Conceit).

HACKNEYS.

Hackney mares or geldings.—First prize, £15, J. A. Pledger, Great Baddow (Lady Golightly); second, £10, W. Clayton, Dunmow (Glow-worm); third, £5, H. Wayman, Downham Market (Maritana).

Hackney mares or geldings.—Prize, £15, J. A. Pledger (Lady Golightly).

Four-year-old riding mares or geldings.—Prize, £10, P. Portway, Great Sampford.

Three-year-old riding mares or geldings.—Prize, £8, S. Scruby, Broxsted (Tappertiti).

Two-year-old riding mares or geldings.—Prize, £6, W. G. Small, jun., Bradwell-on-Sea.

Hackney mares, with foals at foot.—Prize, £10, G. J. Rust, Brain-tree, Yorkshire.

Hackney mares or geldings.—First prize, £10, J. A. Pledger (Lady Golightly); second, £5, F. Young, Chelmsford (Clarissa).

Cobs.—First prize, £10, H. Wayman; second, £5, S. Hall, Ely (Beauty).

Ponies.—First prize, £6, Professor Pritchard, London (Nicodemus); second, £4, H. J. A. King, Bardfeld, Braintree (Flora).

PURE SHORTHORNS.

Bulls.—First prize, £15, Lieutenant-General A. Fytche, Havering-atte-Bower; second, £7, D. A. Green, East Doyland (Roan Duke).

Two-year-old bul's.—First prize, £15, J. Christy (Oxford Du'ley); second, £7, J. Christy (St-cunus).

Yearling bulls.—First prize, £20, D. A. Green (Lionel) second, £10, Lieut.-Colonel S. B. Ruggles Brise, Finchley field (Sweet William).

Yearling bulls.—Prize, £15, T. Willis, junr., Carperby, B-dale (Vice Admiral).

Special prize for the best bull in these classes.—Prize, £25, Lieut.-General Albert Fytche (Royal Charmer Duke).

Bull calves.—First prize, £7, D. A. Green (Prince of the Roses); second, £5, D. A. Green (Blush Rose).

Bulls of any age.—First prize, £20, the Marquis of Exeter (Telemachus 6th); second, £10, C. W. Griffin, Peterborough (Telemachus 10th).

COWS.

First prize, £15, D. A. Green, East Doyland (Lovely); second, £10, D. A. Green (Myrtle Flower).

Cow or heifer, not under three years old.—Prize, £20, Marquis of Exeter (Telemachus).

Two-year-old heifers.—First prize, £10, D. A. Green (Blush Rose); second, £7, J. R. Chaplin, Halsted (Lady Chancellor).

Two-year-old heifers.—Prize, £10, C. W. Griffin, Peterborough (Lady Blanche 3rd).

Yearling heifers.—First prize, £10, Lieut.-Colonel S. B. Ruggles-Brise (Lilias); second, £7, J. Christy, Roxwell (Azalia 2nd).

Yearling heifers.—Prize, £10, B. St. John Ackers (Third Lady Carew).

Heifer calves.—First prize, £8, J. Christy, Roxwell (Auricula); second, £5, D. A. Green (Clove).

Yearling bull and pair of yearling heifers.—Prize, £20, D. A. Green (King of the Roses, Myrtle Leaf, and Puffy Gwynne).

Bull and cow, with calf their offspring.—Prize, £20, W. H. Wodehouse, Hertford (Royal Havering 2nd, Countess, and bull calf).

EXTRA STOCK.

The Second Havering Park Challenge Cup. For the best pure-bred Shorthorn in any of the classes. Value 100 guineas, to be held by the winner for one year, when won three years in succession by the same exhibitor, to become his bona fide property.—Prize, W. Linton, Sheriff Hutton, York (Sir Arthur Ingram).

Shorthorns (without pedigree).—First prize, £7, C. H. Hall, jun., Brentwood; second, £5, J. H. Thurgood, Harlow (Handsome Rose).

Heifers, under three years old.—First prize, £7, D. A. Green (Buttercup); second, £5, J. O. Parker (Raspberry).

Pair of yearling heifers.—First prize, £10, J. O. Parker (Daisy and Lily).

DAIRY CATTLE (without Pedigree).

Cows in milk.—First prize, £10, A. Durraut (Daisy); second, £5, J. H. Thurgood, Harlow (Sallie).

CHANNEL ISLANDS BREED.

Bulls exceeding two years old.—First prize, £10, the Earl of Rosslyn (Golden Ear); second, £5, the Earl of Rosslyn (G-indstone).

Bulls not exceeding two-years-old.—First prize, £10, G. Simpson, Reigate (Prince Albert Victor); second, £5, J. A. C. Tabor, Great Baddow (Bridegroom).

Jersey bull calf.—Prize, £10, G. Simpson (Rival).

Cows.—First prize, £10, T. B. Miller, Bishop Stortford (Duchs); second, £5, G. Simpson (Her Majesty).

Heifers not exceeding three-years-old.—First prize, £10, G. Simpson, Woolmer (Lassie); second, £5, G. Simpson (Sanspareil).

Heifers not exceeding two-years-old.—First prize, £10, J. Odams, Bishop Stortford (Fancy); second, £5, G. Simps n (Queen Dora); third, T. B. Miller, Bishop's Stortford (Beauty). Class commended.

SHEEP.

Southdown ram, any age.—First prize, £8, Lord Braybrooke; second, £5, H. Gorringe.

Shearling Southdown ram.—First prize, £10, Lord Braybrooke; second, £7, H. Gorringe.

Short-wool ram.—Prize, £6, J. M. Green, Suffolk.

Five shearling Southdown ewes.—First prize, £7, F. M. Jonas, Saffron Walden; second, £5, J. J. Colman, M P, Norwich.

Five shearling short-wool ewes.—First prize, £6, H. Lambert, Great Abington; second, £4, J. Smith Woodbridge.

Shearling Cotswold ram.—First prize, £8, J. Giblin, Bardfield; second, £4, J. G. blin.

Shearling Lincoln or Leicester ram.—First prize, £8, T. Gunnell, Cambs. (Lincoln); second, £4, C. Sell, Bassingbourne.

Cotswold, Lincoln, or Leicester ram.—Prize, £6, J. Giblin.

Shearling Suffolk ram.—Prize, £6, J. M. Green, Newmarket.

Shearling Hampshire ram.—No entry.

Shearling Oxfordshire or Shropshire ram.—First prize, £8, G. Cooke, Linton, Cambs. (Shropshire); second, £4, C. U. C. Doerner, Banbury.

Oxfordshire or Shropshire ram.—Prize, £5, G. Street, Maulden, Amptill.

Five shearling Oxfordshire or Shropshire ewes.—Prize, £5, G. Street.

Five shearling long-wool ewes.—Prize, £5, T. Gunnell, Milton, Cambs.

Five ewes with lambs.—First prize, £6, H. Lambert; second, £4, J. Smith.

Three fat Southdown wethers.—No entry.

Three fat short-wool wethers.—First prize, £5, H. Lambert, Great Abingdon; second, £3, T. Trigg.

Three fat cross-breed wethers.—First prize, £5, J. Frankham; second, £3, J. Frankham.

Five short-wool lambs.—Prize, £5, F. M. Jonas, Saffron Walden.

Five long-wool lambs.—No entry.

Three short-wool ram lambs.—Prize, £5, F. M. Jonas, Saffron Walden.

PIGS.

Boar, large breed.—No merit.

Sow in pig, large breed.—No entry.

Three sow pigs, large breed.—No entry.

Boar, Berkshire breed.—Prize, £5, J. Giblin Braintree.

Sow in pig, Berkshire breed.—Prize, £5, W. H. Walker, Brentwood.

Three sow pigs, Berkshire breed.—Prize, £5, J. Giblin.

Boar, small black.—Prize, £5, the Rev. G. Raynor, Maldon.

Sow in pig, small black.—Prize, Rev. G. Raynor.

Three sow pigs, small black.—Prize, £5, W. Gibbey, Bishop Stortford.

Boar, small white.—No merit.

Sow in pig, small white.—Prize, W. Tippler, Roxwell.

Three sow pigs, small white.—No entry.

Sow and pigs, large breed.—No entry.

Sow and pigs, small breed.—No entry.

Boar, large breed.—No merit.

Boar, small breed.—Prize, Rev. G. Raynor.

DONKEYS.

First prize, £4, C. Bright, Great Loddow (Sandy); second, £2, G. J. Rust, Braintree.

Mule.—Open to the United Kingdom.—No entry.

H A D L E I G H.

The spring show of this Association was held in Holbeck's Park, on Friday week. In connexion with this meeting prizes are awarded to labourers and servants for length of service, and for ploughing. The entries of live stock were quite up to the average. In the agricultural stallions Mr. Isaac Everett took the first prize with Tom Muir, a rather leggy bay colt, out of the renowned Mrs. Muir, bought at the Earl of Ellesmere's sale recently. Or neat stock the number was larger than usual, and that of sheep rather limited. The following is the list of prizes:—

JUDGES.—AGRICULTURAL HORSES: D. Sewell, Beaumont Hall, and J. Skeet, Rushmere. RIDING AND NAG HORSES: G. M. Sexton, Wherstead Hall, and J. Goodwin, Woodbridge. NEAT STOCK, SHEEP, AND PIGS: A. Crisp, Oxford, and D. A. Green, East Donyland. PLOUGHING: L. Chapman, —, Schofield, R. Alderton, L. Juby, W. Richardson, and H. Grimsey.

HORSES.

AGRICULTURAL.

Stallion.—Prize, I. Everett, Boxted.

Brood mare.—First prize, J. Scott, Hadleigh; second, R. Makens, Bineshall; third, W. Coppin, Copdock.

Gelding.—First prize, J. Scott; second, S. Coppin, Washbrook.

Mare without foal.—First prize, B. Stearn, Elmsett; second, R. W. Fryer, Brent Eleigh.

Three-year-old filly.—First prize, R. Turner, Hintlesham; second, R. Makens.

Colt under 27 months old.—First prize, D. Green, Somersham; second, W. Wilson.

Gelding under 27 months old.—First prize Mr S. Coppins, second, E. W. Archer, Semer.

Filly under 27 months old.—First prize, W. Byford, Glemsford; second, W. Wilson.

Colt or gelding under 15 months old.—First prize, J. Norfolk, Burstall; second, W. Byford.

Filly under 15 months old.—First prize, C. P. Beadel, Hintlesham; second, R. Turner.

Foal.—First prize, J. Scott; second, E. W. Archer.

Pair of cart horses.—First prize, P. Makens; second, B. Stearn. Commended: W. Kersey, Hadleigh; F. Grimwade, Hadleigh.

Best mare or filly in any of the classes.—Prize, R. Makens.

RIDING AND NAG.

Hunter not less than 14½ hands high.—First prize, silver cup, value £5 5s., C. J. Grimwade, Hadleigh; second, H. Newman, Hadleigh; third, E. W. Archer.

Mare or gelding exceeding 15 hands high, exhibited in harness.—First prize, W. Beer, Hintlesham; second, G. Grimwade, Kersey.

Riding cob not exceeding 15 hands high.—First prize, H. W. Spooner, Colchester; second, E. W. Archer.

Cob not exceeding 15 hands high, exhibited in harness.—First prize, W. Kersey; second, E. W. Archer.

Best jumper in the foregoing classes.—First prize, E. W. Archer; second, C. J. Grimwade.

Pony not exceeding 13 hands high.—Prize, E. Clover, Kersey.

Pony not exceeding 15 hands, exhibited in harness.—First prize, W. Beer; second, I. Strutt.

Pony not exceeding 12 hands high.—First prize, W. Kersey; second, J. Erown.

Pony not exceeding 12 hands high, to be exhibited in harness.—First prize, J. C. Norman, Hadleigh; second, W. Tye, Hadleigh.

Best jumper in the pony classes.—Prize, W. Kersey.

CATTLE.

Ball of any breed.—First prize, J. F. Robertson, Hadleigh; second, J. Everett, Hadleigh.

Polled cow.—First prize, W. Kersey; second, J. F. Robertson.

Horned cow.—First prize, J. Everett; second, W. Grimsey, Layham.

Fat steer or heifer of any age.—First prize, J. Rand, Hadleigh; second, W. B. Emerson, Bildeston.

Fat steer or heifer under 30 months old.—First prize, W. Kersey; second and third, J. Scott.

SHEEP.

Tup of the Southdown breed of any age.—Prize, Sir C. R. Rowley, Tendring.

Blackfaced Suffolk tup of any age.—Prize, J. Hicks, Flowton.

Shearling tup of long-wool breed.—Prize, S. Robinson, Bramford

Top of long-wool breed of any age.—Prize, W. Smirrell.
 Pen of three Southdown hoggets.—Prize, G. Smith, Stratford.
 Pen of three blackfaced ewe hoggets.—Prize, E. Partridge, Kersey.
 Pen of three wether hoggets of any short-wool breed not before mentioned.—Prize, J. Cooper, Hadleigh.
 Pen of three ewe hoggets of any short-wool breed not before mentioned.—Prize, G. Smith.
 Pen of three long-wool wether hoggets.—Prize, G. Smith.
 Pen of three long-wool ewe hoggets.—Prize, W. Kersey.
 Pen of three fat wether sheep.—Prize, J. Rand.

PIGS.

Boar.—First prize, F. Crimwade ; second, J. F. Robinson.

Breeding sow.—First prize, J. F. Robinson ; second, J. Hicks.

Sow with pigs.—Prize, J. F. Robinson.

PLOWING.

First class.—First prize, H. Grimsey ; second, B. Grimsey
 Second class.—First prize, W. Eaulham ; second, R. Wright ; third, J. Crisp.
 Third class.—First prize, W. Woods ; second, J. Gardin cr.
 Fourth class.—First prize, A. Clarke ; second, B. Briggs.

SHEEP SHEARING.

First class.—First prize, J. Scowen ; second, G. Kistruck.
 Second class.—First prize, S. Green ; second, T. Ramplin.
 After the show Messrs. Sexton and Crimwade sold a number of the prize and other animals by auction.

CHAMBERS OF AGRICULTURE.

DONCASTER.

A meeting of the members comprising this branch Chamber was recently held at the Guildhall, Mr. R. S. BRUNDELL presided.

Mr. HICK, the Secretary to the West Riding Chamber intimated that there were three Bills, all of which affected the agricultural public, now before Parliament at the present time. These were the proposed Highway Bill, the County Boards Bill, and the Valuation of Property Act. As to the Highway Bill, he thought that most present would have some knowledge of it. There were one or two clauses in which he believed farmers were especially interested, and these he would read.

After reading some of these, the CHAIRMAN, referring to that giving power to form a highway district, remarked that he did not think the proposed Bill would affect Doncaster as a highway district. In some instances the existing state of things might be altered ; for instance, where the limits of present highway boards were co-extensive with the districts of Rural Sanitary Authorities, in which case the latter had the power to take charge of the roads. Even in this case the highway district differing from that of the Rural Sanitary Authority, he did not think that Doncaster would be affected. In the clause providing for a special rate to be imposed in parishes where from extra traffic, from extraordinary circumstances, the roads may be more than ordinarily damaged,

Mr. FISHER pointed out that roads differed very much, owing to the material of which they were made. To make a common charge, therefore, would be very unfair, and though objection might by some be taken to this clause, still he thought that some provision should be made for the maintenance of those roads requiring more than ordinary attention. In this respect, therefore, this clause was very valuable.

The CHAIRMAN intimated that the waywardens for the District of Lower Strafforth and Tickhill had petitioned against this clause, though he was of opinion that had the point been discussed, they would not have done so. There was at the present time a separate charge for the district roads, but some were of opinion that these charges should come out of the district fund.

Mr. FISHER pointed out that the Bill gave the County Board power to divide highway districts, but if the district was divided, he thought there would be a common fund to support the roads in each of them.

The CHAIRMAN considered that inasmuch as the roads in one parish were used to a considerable extent by the people in the parishes adjoining, the clause was a most valuable one. In his opinion all property should be equally rated for the maintenance of the roads in one district. They were used by everybody, and it would be to everyone's advantage that they should be in good repair. Providing the clause was agreed to, all property would be equally rated for their support.

Mr. FISHER remarked that towns would be excepted.

The CHAIRMAN was of opinion there was a special clause charging towns for special traffic.

Mr. PENNINGTON reminded those present that farmers came to the towns and to the markets with their waggons and carriages, and still pay nothing for the repair of the roads. If they considered this, he thought that the amount of traffic would be about equal.

Mr. HICK also remarked that the expenses to the towns for maintaining their roads and streets was far greater than the cost of the county roads.

Mr. FISHER, however, could not see that the repair of half a mile of road just outside the limits of the towns would cost more than half a mile further outside.

The CHAIRMAN was of opinion that all roads should be supported out of a common fund, and in that case only one surveyor need be engaged. If any unusual damage was done, then there was a clause by which the cost of this could be recovered from the person who had been the cause of it.

After some further discussion, Mr. FISHER, who thought that the existing highway law would be better than the proposed Act, moved that those present were of opinion that the proposed Bill was unnecessary, and that it would be no improvement on the existing law.

Mr. PENNINGTON seconded this resolution ; while, on the other hand, Mr. CHATTERTON moved, and Mr. BURTON seconded, an amendment, to the effect that the Chamber approve of the proposed Highway Bill now before Parliament.

On the resolutions being put, the amendment was carried.

HOWDENS HIRE

The annual meeting of the members was recently held at the Half Moon Hotel, Howden. Mr. J. S. Lockwood presided, and there was a numerous attendance of members. Mr. Lockwood was re-elected President and Mr. G. T. Jacques Vice-president, and the retiring committee were all

re-elected. Several new members were proposed and elected. The report presented by M. H. Green, hon. secretary, spoke of the year 1877 as having been most disastrous to the agricultural community. One of the principal matters which had engaged the attention of the Chamber was the report of the Select Committee of the House of Commons on cattle plague and importation. Last year the Howdenshire district was under stringent regulations owing to the sudden and severe outbreak of cattle plague in the spring of 1877. Thanks to the prompt measures adopted the outbreak was confined to the neighbourhood in which it first appeared, and the county was spared a recurrence of the scourge of 1836. The report of the Select Committee of the House of Commons on the subject resulted in the introduction of a Bill into the House of Lords by the Duke of Richmond, which embodied the recommendation of the Committee that all cattle imported from certain scheduled countries should be slaughtered at the port of embarkation, and all store stock be placed under strict quarantine before their removal into the country. The County Administration Bill had not yet received the attention of the Chamber formally, but its opinion would shortly be solicited upon its merits. Amongst local matters, the most important has been the proposal broached at the last annual meeting for forming an Association of the Northern Chambers of Agriculture. As the result of this proposal, a meeting was held on October 9th, 1877, at which the desirability of the project was affirmed, and, in consideration of its influential position the York Chamber was requested to take the initiative in the matter. A meeting was afterwards held at York, at which it was decided that, if practicable, such an Association should be formed, and a form of constitution and rules were agreed upon on January 21st. The amalgamation proposed has not yet however, been effected, and the committee consider this a matter for regret, as many questions are continually arising in which it is desirable the Chambers in the district should take united action. The accounts and report were unanimously passed, with a vote of thanks to the hon. secretary for his services. The annual dinner took place in the Assembly Rooms, Mr. Lockwood presiding. Mr. W. Hutchinson, at the request of the President, gave an outline of the provisions of the Duke of Richmond's Bill introducing new regulations for preventing the spread of cattle plague, pleuro-pneumonia, and foot-and-mouth disease, and spoke at some length in its favour, meeting some of the objections which are urged against it with great force, and pointing out where its provisions appeared to him to be deficient or unwise. The "Health of the President" was next drunk, and several matters affecting the interest of agriculture were referred to by him in his reply. Mr. R. Brown suggested the desirability of the Howdenshire Agricultural Society being resuscitated, and on the proposition of Mr. Papper, seconded by Mr. Bonn, it was resolved to appoint a committee to consult as to the best time for holding the April cattle fair, and also to try to arrange for holding an agricultural show on the same day.

N O T T S .

The ordinary quarterly meeting of the Notts. Chamber of Agriculture was recently held in the Town Hall, Newark, when the Highways Bill and Contagious Diseases (Animals) Bill were down for discussion. Mr. John Walker occupied the chair.

The first question for consideration was the County Government Bill, with special reference to its bearing on highway legislation.

Mr. GODBER proposed, "That this Chamber, whilst expressing its approval of the extension of area liable for the maintenance of main roads, as proposed by the County Government Bill, regrets that no adequate remedy is offered for the injustice of charging the whole cost of such roads upon one description of property alone." Mr. Godber went on to say that the old system having been abolished, the question arose who was to maintain the roads. Toll-bars had been abolished in many parishes that used the roads, and they had been relieved from any payment whatever. As matters now stood the whole of the burden was thrown upon the land. This was a class of property upon which it seemed convenient to throw any additional burden. The farmers considered, however, that it was not fair to put the whole of the weight upon them. A suggestion had been made that some of the money should come out of the Consolidated Fund, and the other out of the general taxation of the county. There were, however, so many flaming swords surrounding that fund, in consequence of so many desiring to put their fingers into it, that there was not much probability of being able to obtain anything from that source. Mr. Godber went on to argue that the carriage and other licences of a local character, such as the dog and gun taxes, should go towards that fund, which should help to maintain the cost of repairing roads.

Mr. GILBERT seconded the resolution, and it was supported by Mr. V. WRIGHT.

The CHAIRMAN considered that those who used the roads ought to pay for them directly or indirectly. Several years ago he had advocated that the horse and carriage tax should be applied for that purpose.

The motion was then carried.

A resolution was next proposed by Mr. VEKE WRIGHT in support of the Contagious Diseases (Animals) Bill, expressing a hope that when it was introduced into the House of Commons it would receive the support of the county members.

Mr. PATE seconded the motion, and it was adopted.

S W I N D O N .

THE CATTLE DISEASES BILL.

The annual meeting of this Chamber was held recently, at Swindon, and subsequently to the transaction of the formal business, a resolution in favour of the Cattle Diseases Bill now before Parliament was on the paper for discussion. Mr. S. Colbourne (the President) occupied the chair. After the Report had been received, and other business transacted,

The CHAIRMAN said that they now came to the particular business of the day; he had to ask Mr. W. Stratton to introduce the discussion on "The Cattle Diseases Bill." He need not say more than that the matter they were about to discuss was most important, and had fallen into able hands.

Mr. STRATTON was received with applause, and commenced by saying he had written to their Secretary to say that meetings should be called to express the anxiety of the farmers that the Cattle Diseases Bill should be passed. He did not think any farmer who had had any experience in keeping cattle and sheep could have any doubt as to the importance of passing a Bill to control contagious diseases. In that hour (the Bell Hotel) 13 years ago (when the cattle plague broke out, there were no Chambers of Agriculture in existence, and the country was panic-stricken on an outbreak of rinderpest),

he and Mr. Puckeridge were at a farmer's dinner there, and agreed to put an advertisement in the papers calling a meeting on the subject; the meeting was held, and he submitted a series of resolutions to it for the purpose of keeping the rinderpest out of the country. They were passed, as they were at a subsequent meeting at Faringdon; the magistrates of the two counties adopted the suggestions; a Bill was hastily passed through Parliament enabling magistrates to take such measures as they thought proper to keep the rinderpest out of their districts; power was given to the Quarter Sessions, and they appointed inspectors; their suggestions were acted upon, and they managed to keep rinderpest out of this county altogether. Cheshire lost a great amount of stock, and the losses in the country were very frightful. In the year 1869 Parliament passed a Bill to deal with cattle diseases; the Bill was as good as could be expected at the time; the principal object was to control and keep out rinderpest, other diseases having been looked upon as a fatality. That legislation had the effect of getting rid of pleuro-pneumonia and foot-and-mouth disease. The regulations of 1856 had wonderful effect in suppressing the foot-and-mouth disease, and it soon became apparent to thinking men that it only required a rational mode of regulation to keep pleuro-pneumonia under control. So the matter remained for some time. The magistrates have power under the 1869 Bill to deal with the matter, and to place practical men on committees. When the Committee for Wilts was formed, about a dozen farmers were placed upon it, of whom he was one, and since 1869 they had managed contagious diseases so far as Parliament allowed. But it had been evident that the powers given were not sufficient, and the Privy Council conferred upon them power to adopt regulations for the foot-and-mouth disease. As soon as the power was given the committee adopted it, but they had not been able to keep the foot-and-mouth disease out of the country. The results were really very serious; and it was worthy of remark that foot-and-mouth disease affected the animals in very different degrees. In 1871 he bought 75 beasts in different parts of Durham; he was three or four days collecting them, and then found that the foot-and-mouth disease was among them; there was no help for it but to bring them home, and at the end of the 300 miles journey they were all affected with it, three or four dropped down on the road, and a number of others ought to have died, for they suffered more and cost him more than they were worth. At a neighbour's at Inglesham, he had seen five heifer worth £85 each, down together, with their hoofs falling off, and maggots between their claws, that could be gathered up in spoonfuls. It was very truly said that foot-and-mouth disease did not kill, and when he was one of a deputation to wait upon the Duke of Richmond, his Grace was perfectly staggered when he was told by the speaker that foot-and-mouth disease inflicted more harm than all other cattle diseases put together; the speaker was the only man on the deputation that was not an M.P. Colonel Kincaid afterwards spoke and remarked that he saw his Grace was staggered at Mr. Stratton's statement; but Mr. Randell (whom his Grace knew) had made to him precisely the same statement, which was within the mark. Colonel Kingscote and Mr. Randell were both on the Council of the Royal Agricultural Society. The Duke was perfectly staggered by the statement, although he called himself a practical farmer. He (the speaker) had induced the chief constable of the county to make out a form, showing the number of cattle affected by foot-and-mouth disease in the county from 1872 to 1877. There was a half-year

in 1873-4 in which there were no returns, in consequence of the report of Mr. Foster's Committee, and until May, 1874, when the returns were again ordered to be made; the returns for 1873 and 1874 were, therefore, incomplete. In 1872, according to the returns, there were 37,400 beasts, 6,500 pigs, and 113,000 sheep affected, and the returns did not at all represent the actual number affected, as the police were unable to get all the information. When it was said that foot-and-mouth disease was not fatal, it was perfectly true, and out of those numbers only a small proportion—439—died; but they knew that after foot-and-mouth disease more pined away and died. There were 75,000 cattle in the county, so that nearly one-half of the stock was affected. When an animal was affected they could not reckon much less than £2 loss, and an average loss of 59,000 cattle was considerable. One-seventh of the sheep were affected, and they could not put the loss on those at less than 5s. per head. (A Voice: Not enough). So this matter was not to be trifled with. In 1875 24,000 cattle, 6,000 pigs, and 65,000 sheep were affected. The losses in this county from foot-and-mouth disease were larger than from pleuro-pneumonia, and many farmers were nearly ruined by it. In December, 1872, the Central Chamber of Agriculture considered a report of the Royal Agricultural Society, who had sent their Secretary to Ireland to investigate the cattle traffic between Ireland and England. The result was that the Royal Agricultural Society's Council drew up a set of regulations, and submitted them to the Lord President of the Council with a view to deal with this disease. Those recommendations were read at the Council of the Central Chamber, and it was nearly the first time he had spoken there when he got up and characterised them as inadequate and as of no good. The report recommended inspection as a means of preventing the spread of the disease; but an animal might have the germs of the disease in its body for days, and the most acute veterinary surgeon could not detect it. For instance, when the Smithfield Show of 1871 was held, every animal was inspected by one of Professor Simpson's staff, and 20 or 30 animals were rejected; yet, within three days of the careful inspection he (Mr. Stratton) saw 50 beasts down with the disease. After such an experience as that, how could any man ask them to accept inspection as a means of preventing the spread of disease? It was absurd. Pleuro-pneumonia might be in any animal for six weeks without detection. Yet a gentleman of high agricultural authority (Mr. Caird) recommended it. What did he say? The agriculturists of England had been working together for the last seven or eight years, and the Government had at last granted the Bill they had been asking for—after having thrown their representations back in their faces time after time, they had now given it. And Mr. Caird said it was unnecessary for them to altogether prohibit the importation of store stock, except under quarantine, they would then be distributed among the dairies of England. He did not deny it, but they must legislate for some quarantine. A few animals must be brought in for breeding purposes, or if any were sent to France or elsewhere for exhibition it would be very hard to prohibit them coming back. Many animals would not be brought in under quarantine. Mr. Caird advocated that under inspection fat stock might be imported and distributed to the slaughterhouses of the country. The speaker had replied in the same strain as he had now spoken, and asked if he would send a policeman with each animal to see that it really was slaughtered. Could he guarantee that every animal imported under such a restric-

tion would be slaughtered? Mr. Caird had not replied, and *The Times* in a leading article said "We pause for a reply." He (the speaker) thought they would have to pause a long while, if he did not think that logic could be disputed. A more illogical and absurd suggestion he had never heard. He was quite sure the farmers of England would never put up with the resolutions of that Bill unless they had imported beasts slaughtered at the ports, or placed in quarantine; if they were going to cut out those strict regulations the farmers would not accept. The Government were honestly anxious to pass it, and he hoped the farmers would press their member to support it. It was no question of politics; it was necessary that the matter should be legislated upon in the interests of the consumer as well as the breeder, in fact the consumers were the most interested in it. Mr. James Howard, in favour of regulations like these, and in a pamphlet published two years ago advocated most stringent regulations for the proving of diseased stock, as well as its importation. It was imagined by some that it would have the effect of lessening the importation of meat. But it would rather have the effect of converting the live meat trade into a dead meat trade. It was perfectly absurd to think that meat could not be slaughtered at Hamburg and brought to London, which was only 12 hours' journey, as well as it now is in Edinburgh, which is 24 hours'. The dead meat trade was growing into a very important one. In 1876, 788,000 cwt. was imported being 287,000 cwt. more than in the previous year, and the next year (1877) it was 490,000 cwt., more still. It was continually said that we must expect a temporary rise in the price of meat as the result of the Bill; however, a temporary rise would be better than a permanent one. But what was the fact? In 1876 the average price of beef in the London market was 6½d. per lb., and in 1877, 6¼d.; mutton was 7½d. in 1876, and 7d. in 1877. In 1877, when they had restrictions, the meat was lower than in 1876, when they had none. That was a fact there was no getting over. It was hardly necessary he should say more; he had been a member of the Contagious Diseases Committee of the Central Chamber since 1872, and it was formed in this way. After reading the Report of the Agricultural Society, recommending inspection, he met Sir Michael Hicks Beach (then President of the Chamber) and suggested that Chambers of Agriculture should propose a set of regulations, saying "They were constantly complaining that the Government did not do what they ought; let them tell them what they wanted." He asked the Council for the Committee and it was immediately appointed. He drew up a code of regulations, and getting a number of copies printed took them up to the Committee, where for over six hours they discussed them *serialim*. They were altered so as to meet the requirements of all the counties, and at the Council meeting the next day they were gone over and finally adopted. They asked for an interview with the Lord President, the Duke of Richmond having just taken office. Mr C. S. Read was with them and expressed an opinion somewhat adverse to the legislation of the Government, and it was thrown back in their faces, as it had been once or twice since. Then a committee of the House of Commons said it was a right thing to do; then the Duke of Richmond found it was right, and now it only remained for the farmers to do their part and support the Bill of the Government; if the farmers did not they could not expect the Government to go on with it. He proposed supporting the Contagious Diseases (Amendment) Bill, and desiring that without any material alteration it might become law this session.

In the discussion which ensued Mr. Stratton's views were unanimously supported.

EAST RIDING.

The monthly meeting of this Chamber was recently held at Beverley, Mr. J. Crust, of Carwick, the President, in the chair. The Secretary (Mr. T. Turner) laid before the meeting copies of the Thrashing Machine Bills and Highways Bills, together with a letter from the Upton-on-Severn Farmers' Club, advocating that among the extra subjects to be taught in rural schools should be included the elementary principles of practical agriculture, including the operations of farm labour. A discussion on the Highways Bill was resumed, the general opinion of the members being adverse to its clauses, and the Clerk, with the Parliamentary Committee, were requested to draw up a resolution on the subject, and report at the next meeting. The Chairman stated that Colonel Wilson, commandant of the 5th Brigade depot, had placed a Herd Book at the disposal of the members, and moved that the thanks of the meeting be accorded to that gentleman. This was unanimously agreed to, and the meeting closed with the usual vote of thanks to the Chairman.

WEST RIDING (DONCASTER BRANCH).

A meeting of the members of the Doncaster branch of this Chamber was held in the Guildhall, Doncaster, on Saturday 25th May, Mr. BRUNDELL, of Doncaster, in the chair, and a good attendance of members. The Highways Bill, the County Government Bill, and the Valuation of Property Bill, were submitted for discussion, but the Highways Bill occupied all the time of the meeting. At the conclusion of the discussion Mr. J. J. FISHER, of Tickhill, proposed, and Mr. PENNINGTON, of Rossington, seconded, the following resolution:—"That this Chamber is of opinion that the Highways Bill is unnecessary, and will be no improvement on the present system of highway legislation." Mr. CHATTERTON, of Hatfield, proposed, and Mr. BURTON, of Goole, seconded, the following amendment:—"That this Chamber approves generally of the Highways Bill now before Parliament." On the amendment being put it was declared carried by a considerable majority, when it was again put as a substantive resolution, and carried *nem. con.* The Secretary stated that the Chamber now consisted of close upon fifty members, which he thought satisfactory for the short time of its existence, and he hoped to double the number before the close of the year. A vote of thanks was accorded to the Chairman at the termination of the meeting.

LAND RECLAIMED.—In the construction of the railway which now conveys many thousands of visitors every summer to Abergystwith—the Brighton of Wales—the line had to pass through a tract of country covered with sea-water which attracted the notice of an enterprising firm of Manchester men, who have for three or four years been reclaiming it by the use of a set of steam cultivating machinery constructed by Howard of Bedford. The surroundings of the locality are so treacherous and difficult that the engine had to be placed some 700 or 800 yards distant from the land cultivated, indeed before the aid of steam was called in, the attempt to do the work by horses was not only dangerous but impracticable. With the aid, however, of steam the difficulties of the work were all overcome, and it may now be said that this great scheme has become a remarkable success; for, where but three years ago, all was a watery waste, this year there are hundreds of acres of promiseful corn crops.

BREEDING AND MANAGEMENT OF FARM HORSES.

At a recent meeting of the Blandford Farmers' Club, the following paper on the above subject was read by Mr. H. S. SENIOR.

I must apologise for my appearance in this position this evening, and wish that this subject had fallen to some more experienced person to introduce, and my only excuse is that it seems to be the wish of the Club the younger members should take their part in bringing forward subjects for discussion. The subject I have chosen is the "Breeding and Management of Farm Horses," the importance of which cannot, I think, be for a moment disputed. The large amount of capital invested in farm horses must be nearly equal to the annual rent of the land cultivated by them, and the annual cost of keeping these horses is not less than two-thirds of their actual value. Thus, if we take the total acreage under all kinds of crops, bare fallow, and grass, in Great Britain, as returned to the Board of Trade in 1876 as 37,544,081 acres, and the number of horses used solely for agriculture as 968,587 at an acreage value of £30 per horse, we have the net value as £29,057,610, which will be very nearly equal to the annual rent of the land cultivated by them, and the annual cost of keeping them will be £19,371,740. These circumstances are sufficient to demonstrate the national importance of the subject, whilst its individual consequence to agriculturists may be enforced by the fact that not only is a snar nearly equal to the annual rent required for the purchase, and two-thirds for the yearly keep, of the horse-power on a farm, but it is a constant weight that cannot to any great extent be shaken off. As therefore so many horses must be kept for agricultural purposes it will be well to understand and to adopt the best and most economical method of breeding and managing them. There is no branch of a farmer's business to which so little attention is generally paid as to the breeding of horses. It is often regarded as a matter of chance whether the produce will turn out valuable or worthless, whilst on the other hand there is nothing so true as that unhealthy parents will not produce healthy offspring. It is very possible that when one parent is sound and the other diseased the progeny may turn after the former, but then it is just as likely to turn after the latter, and therefore it is very unwise to risk the expenses of breeding on such an uncertainty. There are few subjects connected with breeding more interesting than the relative influence of the male and female parent, and few on which such different opinions prevail. The freaks of nature (as they appear to us) are certainly very curious, and people are often more struck by a remarkable exception than even by the rule, and are disposed to found their theories accordingly. The Arabs of the desert, so celebrated for their scrupulous attention to the purity of their breed of horses, are comparatively indifferent as to the stallion, but prize and preserve their mares with the most rigorous care. They will part with the former for equivalent remuneration, but scarcely anything will induce them to dispose of their mares if they belong to the true breed. From this well known fact it has been naturally inferred that they consider the influence of the female as pre-eminent, and the supporters of this theory adduce the fact just mentioned as a strong argument in its favour. Indeed, at first sight it would appear, when we consider the more intimate connection

of the female with the offspring, kept up during a long period, that the influence of the dam must be greater than the sire. Facts, however, appear rather to support an opposite doctrine, the male being a case in point. We may therefore, from facts which could readily be adduced, be justified in concluding that, so far as regards the size, general appearance, external form and muscular development, the influence of the male is superior to that of the female. But although in obedience to this principle I believe that it is principally by means of the male that various improved breeds will be rendered more perfect, yet I by no means wish it to be inferred that I consider the qualities of the female a matter of indifference; so far from this being the case, I would censure in the strongest terms that utter neglect of the qualifications of the female which is so frequently displayed, particularly with horses, regarding it as the most grievous error appertaining to breeding. It is of equal importance to study the qualifications of the female as of the male, though their respective excellencies may not be the same. Hereditary disease and weakness of constitution are much more likely to be communicated to the offspring by the dam than by the sire, which is in keeping with the fact of the long and intimate connection kept up between the dam and the offspring, both before and after birth till weaning takes place; as the same blood nourishes both, both are likely to become affected by an unhealthy change in this fluid. Soundness of constitution is therefore an indispensable requisite in the female. The breeding of farm horses resolves itself into two branches, the principles of breeding and the practice; unless the former are correct the latter will be continually at fault, and it will be a matter of chance and uncertainty whether success or failure is the consequence. "Like begets like" is a maxim that cannot be disputed, and it is vain to expect valuable progeny unless the parent possesses the qualifications which we seek to obtain in the offspring. The principal object in breeding cart horses as in other animals is gain. The breeder is desirous of breeding animals that will yield him the largest pecuniary return. Consequently the most profitable animal to rear (if the pasturage is sufficiently nutritious and abundant) is that which is likely to suit the London market, and so realise the highest prices which the London brewers are willing, or rather are obliged, to give. Although the breeding of cart horses more frequently forms a part of the farmer's business than that of any other description of horse, it has not received that attention that its importance merits or that the necessities of agriculture will for the future obtain for it. Too frequently have the infirmities of the mare caused her to be selected for breeding and too often has the size of the stallion been his only recommendation. It would be well if instead of this the following rule was observed—viz. never breed from an old, infirm animal, but select for the purpose the youngest and best mares on the farm. There is not even the excuse amongst farm horses which exists amongst others for breeding from inferior mares, as the cart brood mare will not require more than two months' rest, and that during a leisure period of the year, thus being otherwise adequate to most of the ordinary requirements of the farm. The object, however, to be kept in view ought to be to endeavour to breed the most valuable description of animal, and one that will afford the

highest pecuniary return. Due regard must of course be paid to the nature and quality of the land, for it is useless to attempt on ordinary or inferior land to rear those immense dray horses which command such high prices in London. There is, however, a smaller description of horse that can be bred to advantage, being more suitable to agricultural purposes and yet large enough to command a good price in London or elsewhere. Such an animal, averaging about 16 hands, short in the back and round in the barrel, with well proportioned limbs, is sure to command a good price and pay well for breeding. Such horses, however, can only be bred by devoting the best mares to the purpose and keeping the colt well through the first two winters, so that his growth shall not be stunted and his symmetry destroyed. The breeding of farm horses can be entered into with far less inconvenience than that of any other description of horse, and if due care be taken in the selection of the best and finest mares that can be obtained and the most desirable stallion, the breeding of no description of animal will pay better than cart colts; they can be reared with less risk will produce a quicker return than any other kind, and do not involve the expense and risk in breaking by which so many half-bred horses are ruined. It is necessary to consider before beginning to breed horses whether the land designed for it is fit for the purpose of breeding sound, healthy animals. If it is, the starting-point is right; you have reason to hope for success; if it is not it is far wiser not to make the attempt, but to buy when required. It is thoroughly well-known that sheep bred upon wet, undrained, boggy soils have defective constitutions, diseased livers, decayed feet, and inferior wool, and are so thoroughly unsound in many instances that they die in great numbers without remedy. Horse breeding may be attended with similar risks, which should be steadily kept in view. Horses should be bred upon a dry subsoil to make them sound in constitution, sound in wind, and sound in colour, by which I mean that whatever be the horse's colour it should be a deep, not a faint one. The surface, moreover, should be fertile, abounding in carbonate and phosphate of lime, to grow horses of full size with plenty of bone and muscle. Upon this subsoil and this surface you may expect sound, full-sized, healthy animals. A wet, spongy, clay soil produces delicate constitutions, defective wind, pale colours, and large flat feet. If your land is not dry naturally, perhaps it can be made so by effective drainage; if it cannot do not attempt to breed—horses, every kind of disappointment is liable to follow such a course. The next step is to procure good mares to breed from. These should not be used because you have them, still less because they are unsaleable either from age or natural defect, as is frequently done, but should be bought for this special purpose and selected with great care. The best time to buy them is in the autumn at two-and-a-half years old, and commence breeding at four or five years old. They should be of moderate size, from 15½ hands to 16 hands high, long, low wide, and handsome, compactly made with short backs and wide and able shaped loins; the legs should be short and clean, bone large, and thorough good walkers with good action. They should have foals before the grass comes in May, when the work of the farm is somewhat abated, and the mares can be spared for a time; they will do much better if worked moderately and regularly up to the time of foaling if not put to distressing work. As soon as the mare is put to work after foaling, the colt, when shut up, should be fed with bran and bruised oats daily, which should be continued throughout the first winter. When the foals are weaned in

the autumn they should have shelter and be thoroughly well kept, as this time and the following winter is the most critical time of their existence, and if stunted at this period they will rarely, if ever, entirely recover it; for if, as is too frequently the case, they are half starved the loss from deficiency of symmetry, size, and strength will be much more than can be compensated by any saving of food. The selection of the stallion will be a most important point. He should be large and powerful and yet compact, standing at least 16½ hands and yet comparatively short in the legs, so as to deceive a bystander with regard to his height; there is no point more desirable than that the horse should appear smaller than he really is; it is at once a sure proof that the animal is symmetrically formed. The fore legs should be strong and flat below the knee, and by no means round and gummy either before or behind, for cart horses having always a stronger predisposition to swellings and humours than other horses it is most essential to guard against this evil by selecting the stallion as free as possible from such a predisposition, and for the same reason there should not be too much hair about his legs. The hocks should be broad in front and neither too straight nor too crooked, nor yet cat-hammed. When we consider that a cart horse working in the shafts has perhaps a load of three or four tons behind him, which in going round a corner devolves on him alone, and in the action of walking must thus be thrown alternately on each hock, the importance of having this joint free from disease and from all tendency to disease must be very apparent. The eyes should be full without being too convex, for the small sunken eye is certainly much more liable to disease than the large clear eye, and is also indicative of a sullen temper. The forearm should be strong and muscular, and should not stand too much under the body; for although this is not of the same importance as with other horses yet it is extremely desirable. So likewise with regard to the shoulders; they should be tolerably oblique, for when the shoulders are good the horse is likely to be a good walker. The elbows should not be too close to the chest, but there should be plenty of room to put the hand between them. This turning of the elbow to the rib is a fault which causes the animal to have very bad action; the neck had better be too thick than too thin, of average length, and if moderately arched so much the better. It is a great fault in cart horses to have a ewe neck. The angles formed by the juncture of the neck with the body and by the head with the neck should not be too acute, for such horses are very liable to poll coil from the disposition induced of throwing up the head suddenly, and striking their poll violently against some object above them, such as a low doorway. The chest should be deep and wide, the back straight and broad, the ribs well arched, and the false ribs of due length, so as to give them the abdomen capacity and roundness, the tail well set on, and the quarters full and muscular. The foot is a matter of much importance; the tendency of many heavy horses is to have flat feet, but a stallion so constructed is exceedingly objectionable. An abundance of horn, so as to afford a firm holding for the large nails and heavy shoes which such animals are obliged to wear, is extremely desirable, and the feet had better be too large than too small. The amount of horse power required on an arable farm must, or rather ought to be, regulated by the requirements of spring turnip and wheat sowing. Unless a sufficient number is kept to take advantage during these periods of the most suitable weather, so constantly varying in this country, great will be the loss experienced, and on the other hand if more are kept than the

sowing season demands a heavy expenditure is uselessly incurred. It is a drawback upon a horse as compared with steam power, and more particularly as relates to farming operations, that whereas a steam engine when not in work consumes no fuel, and does not waste very materially from wear and tear, a horse must be fed whether he is at work or idle, and thus through out the winter months, when there is but little work to do, he must be kept in condition in order to perform properly the labours of the spring. It is therefore of imperative importance to keep such horses on a farm as are capable of performing properly a horse's work, for if weak, undersized infirm animals are kept, each of which is only capable of doing one-half or three-fourths of a day's work, not only is there the loss of this one-fourth of the day in the busy periods of the year, but an additional number of horses must be kept all the year round. It is only begging the question to say that this infirm horse does by hook or by crook continue to get through his day's work in the busy periods, for if he is able to do this then an able-bodied horse is capable of doing with no extra fatigue one-fourth more work at least. During eight months of the year—namely, from October to June—there can scarcely be a doubt that it is far more desirable in every respect to keep working horses in the stable. The effect of exposure to cold and wet throughout this period of the year is indeed tantamount to the waste of so many quarters of oats; for if the animal heat is permitted to be thus lost by exposure an additional quantity of fuel in the form of food is necessary to supply this deprivation. It is therefore a very costly method of procuring animal heat when such heat or a good portion of it can be retained by keeping an animal in a comfortable stable. Besides, the effect of turning a horse into the open air is to cause him to have a long thick coat, and when a horse is worked with such an external covering he sweats profusely in consequence, and is faint and weak after very little exertion. It is a good plan when the horses are taken in for the winter in October to have them partially clipped, leaving the leg below the knee and hock and back; by this means they can perform more easily the hard work of wheat sowing during the autumn, and by the time the cold weather sets in, about the beginning of January, their coats will have grown up again as a protection. Too little attention is generally bestowed on the construction of farm stables by which horses are frequently more liable to injury in their health and usefulness than might arise from the artificial treatment to which these animals must in some degree be necessarily subjected in order to command their labour economically. There are certain properties essentially common to all stables wherein the preservation of the health and usefulness of the animals is kept in view, whether for the plough horse, carriage horse, or hunter. A stable to be perfect for its purpose should be well lighted, perfectly dry both from above and below, have the means of preserving cleanliness at all times and have perfect ventilation and means to regulate the temperature without subjecting the animals to direct draughts. There should be no loft, as this renders a less height of wall necessary and ventilation more perfectly and easily attained. Each horse, or at least each pair of horses, should have a stall to themselves, by which means much injury is sometimes prevented from their kicking each other, and slow-feeding horses are enabled to obtain their share of food, which they are unable to do when many are feeding together. Immediately adjoining should be a house to contain straw, chaff, corn, &c., for immediate use. Feeding at different seasons is a most particular part of the subject, for

the expense of keeping the horse-power on a farm is very great, and forms a very considerable proportion of the annual expenses, so much so indeed that it is worthy of the utmost consideration whether some saving cannot be effected in this large item of expenditure. It should be borne in mind, however, there are two methods of effecting, or endeavouring to effect, this saving—one, the lessening the quantity or quality of the food, the other the retaining the quantity of the food but reducing the number of horses, as two horses thoroughly well fed will be capable of performing the work of three under-kept animals. If a horse is to be kept in working condition he must have a certain amount of concentrated food, and no form is more suitable than oats, with a fair proportion of beans; at seasons when the work is most severe a few roots daily given whole or pulped and mixed with the chaff and corn will materially assist in keeping them in health and condition. As the stomach of the horse is comparatively so small, and the usual working day of eight hours' duration, it is much too long for them to be without food, and is often the cause, especially in the sowing seasons, when they are occasionally worked longer, of their getting colic and other inflammatory diseases, which may be to a great extent remedied by giving them a feed in a nosebag during the time the ploughman is having his luncheon. The following will, perhaps, give about the average cost:—Thirteen weeks on $1\frac{1}{2}$ bushels of oat, 4s. 6d.; ditto $\frac{2}{3}$ ditto beans, 4s.; ditto 2 ditto pulverised roots, 9d.; ditto $\frac{1}{2}$ cwt. hay chaff, 2s. 6d.; ditto straw, 2s.—13s. 9d. Thirteen weeks on $1\frac{1}{2}$ bushel of oats, 4s. 6d.; ditto $\frac{1}{2}$ ditto beans, 3s.; ditto 2 ditto roots, 9d.; ditto $\frac{1}{2}$ cwt. hay chaff, 2s. 6d.; ditto straw, 2s.—12s. 9d. Twenty-six weeks on 1 bushel of oats, 6s. 6d.; tares, trifolium, Lucerne, clover, and run of grass at per week (*ay ad libitum*), 8s.—14s. 6d. making 10s. 3d. per week, or £26 13s. per annum per horse. This amount varies of course with the value of oats and other provender, and is more frequently above than below the estimate I have given. The horses thus fed are kept in good condition, and are able to perform any work they are required to do. Of course there is some variation as to the time at which these changes of feeding begin or end, according to various circumstances, but the difference of expense is not material.

LONGEVITY IN IRELAND.—The Irish Registrar-General reports that there were 93,509 deaths registered in Ireland in the year 1877, and that in 67 instances the deceased was described as aged 100 years or upwards. Some of the local registrars inquired into the truth of these statements. In the return which has been recently issued for the last quarter of the year 1877 the Registrar of Bantry reports the death of a woman 102 years old, and says he had personal knowledge of her, and has every reason, from inquiries made to believe that the age was not exaggerated. She had full use of her faculties, and up to a few weeks before her death was able to move about. The Registrar of Portaferry, Downpatrick, records the death of a woman also 102 years old, and 'has good reason for believing that her age was understated.' The Registrar of Coolmountain, Dunmanway, who registered the death of a man 100 years old, 'has no doubt from inquiries made, that the age is given correctly. He used to smoke, but never drank to excess. He was accustomed to undergo great hardship in wet and cold, but always took the precaution as soon as he entered his house to undress and dry himself perfectly with a towel.'

HISTORICAL SURVEY OF FRENCH AGRICULTURE.

[TRANSLATED FROM *Les Débats*.]

One of the officials at the Ministry of Agriculture and Commerce, Mous. Mauguin, recently presented to the Central Society of Agriculture in France some interesting historical studies upon the administration of agriculture in that country. The Society has hastened to publish this treatise in three volumes, which not only contains the administrative but ranges over the entire history of agriculture in France. It would be unfortunate were this publication of Mous. Mauguin's to remain hidden amongst the numerous works in the possession of the Central Society: such a treatise deserves, indeed, to rank amongst the most notable productions, since it records the actions of obscure personages who have deserved well of their country. Commencing this review at the earliest times of ancient Gaul, it states that agriculture was then carried on by four different classes of persons: these were the free proprietors of the soil; the military colonists; the half-freedmen, who held certain rights in their own persons which enabled them to attain to freedom; and the serfs. By none was agriculture held in honour, and the Romans who were established in Gaul even despised the labours of the field, whilst the natives themselves abandoned the cultivation of the soil to their captives. Under the influence of the Church and the monasteries which prevailed from the sixth to the tenth century, immense tracts of forest and waste lands were reclaimed, bridges were constructed, roads created, and agriculture acquired the rank to which it properly belonged. As yet, however, royalty was in too unstable a condition and too ignorant of the economic laws of labour to intervene successfully on behalf of the cultivator.

Louis VI. was the earliest of the French kings who espoused the cause of the serfs and the villeins (1125). He put an end to the civil wars of that period, re-established order, guaranteed the maintenance of the charters of freedom, and regulated the taxes by placing them under the royal jurisdiction. It is to him that we owe the creation of the Halles or markets of Paris. His immediate successors continued to follow in the same course by increasing the exemptions. The Crusades likewise produced a favourable influence upon the fortunes of the cultivators. Many of the seignorial lords, in order to provide for the expenses of these distant expeditions, sold to the serfs upon their domains charters of freedom which extended to entire villages. Saint Louis encouraged the tillage of waste lands, and leases granted by the chapters or convents to the villages, or individual cultivators for this particular purpose, were confirmed by the royal sanction. The same monarch passed certain regulations to grant to the poor their gleanings, to suppress the taxes affecting the products of the soil. He published decrees affecting communal properties, the fisheries, and

the rearing of bees. By instituting the masters and guardians of the waters and forests, Philip-le-Bel became the founder of the earliest organisation of a service having for its object the defence of agricultural interests, which eventually found in Charles V. an intelligent protector. This king diminished or regulated the tolls levied upon the transit of produce and merchandise; he suppressed severely the excesses of the military classes who practised extortion upon the cultivators, created the "gardes champêtres," and exempted from certain taxes the implements of husbandry. Charles V. encouraged in like manner the scientific study of agriculture. It was he who, in 1379, caused the compilation and publication of a work upon sheep farming in all its then known branches, by Jehan de Brie, who was called the "good shepherd." He ordered the translation, under the title of "*Prouffits champestres et ruraux*," of a work by the Italian Crescenzi, of Bologna.

Under Charles VII. appeared "*Le Grand Coutumier, la Somme Rurale, les Decisions*," the productions of legists employed or encouraged by the King, who gradually accustomed men's minds to a re-arrangement of the relations between owners and occupiers. The reign of Louis XII. was especially remarkable for its agricultural prosperity. Aided by his Minister, the Cardinal Georges d'Amboise, the King defended the labourers against the exactions of the nobility and the military classes; and he reduced still further the taxes upon the serfs, alleviated the charges upon agricultural labour, and rendered a marked service to the rural classes by causing an account to be drawn up and published of the customs followed in nearly fifty different localities, or provinces of the kingdom. Thus was created a veritable Magna Charta, wherein all questions, uncertain or doubtful, affecting personality, family, patrimony, or the relations between labour and exchange were collated, discussed, and defined under the royal guarantee. Francis I. was the first King of France who legislated in an intelligent manner with regard to the commerce in grain. Under the feudal system the possessors of fiefs held supreme administrative control over their domains. Each fief was separated from all those around by various prohibitions upon the disposal of produce, in comparison with which the regulations of the modern custom-house are but trivial matters. Each fief was compelled to exist upon its own produce, and for this purpose was obliged to retain the surplus harvests—whenever such occurred—so as to make up the deficiencies of bad years. The sale of grain, wine, cattle, and other commodities was forbidden, in order that neighbouring States, too often in a state of warfare, should not be benefited. Francis I. published in 1534 a decree whereby the commerce in grain was rendered free, both for the home and foreign market, and

other edicts followed that renewed the engagements undertaken by his predecessors.

Under Henry III. roads were newly formed or repaired, and walnut, elm, and other forest trees were planted along the borders of the highways. Agriculture had much cause for complaint, owing to the sufferings that were endured in the midst of the religious wars. At the death of Henry the tillage of the fields had been almost universally abandoned, and corn was at an extraordinary price, about equivalent to 350 francs per hectolitre of our present coinage.

Henry IV. whilst putting an end to the religious troubles served to restore the prosperity of the country districts, in which work he was aided by Sully and Olivier de Serres. The ancient right was revived that prevented the seizure of the person of the labourer, his implements, or his cattle for debt, and other regulations were made for the protection of the cultivators. Everything affecting the tillage of the soil received the special care of the King and his Minister. The drainage of the marshes was handed over to the Dutchman Bradley, called the Master of the Dykes, and by him was effected the cultivation of the waste and swampy lands of the Medoc. The existing highways were widened, lengthened, and improved; new roads and canals were created; and whilst Sully and his Royal master accomplished so much for the rural population, Olivier de Serres published, at the King's expense, his "Theatre d'Agriculture et Message des Champs," which had a prodigious success amongst all the agricultural classes.

Under Louis XIII. agricultural education was commenced by the formation of the "Jardin Royal des Plantes." Cardinal Richelieu encouraged the foundation of the Societies of St. Vincent de Paul, more especially the Lazaristes, who were intended to instruct the country people, the Sisters of the Cross, and the Sisters of Charity, who devoted themselves to the education of the children and the care of the sick amongst the peasantry. With Louis XIV. was associated Colbert, who held that a great nation like France should combine at the same time agriculture, commerce, industrial, and seafaring pursuits, a *role* for which she was pre-eminently well fitted. In order to lessen the burdens upon the country districts he abolished some taxes and reformed abuses in the collection of others. He encouraged the multiplication of stock, prohibited the right to seize property or person, and devoted especial attention to the improvement of communal finance, and the protection of the peasantry from the tyranny of their feudal lords. At Clermont the "Cour des grand jours" was held, before which a number of the influential persons were summoned from all parts to make reparation for their illegal violences. Purchases of horned cattle were effected in Switzerland, of sheep in Spain, Flanders, and England, and by Colbert distributed gratuitously amongst the chief sufferers by the civil wars. The breed of horses was at the same time greatly increased and improved; and horticulture advanced under his influence and that of Le Nôtre to a position of un-

precedented excellence. Unfortunately, towards the close of his career, owing to the exigencies caused by the wars, and the extravagances of the Court this Minister was compelled to resort to the same odious methods which had previously been in existence for obtaining money. A favourable impulse had nevertheless been given, and the public mind was henceforth prepared for regular and permanent organisation in the administration of agriculture.

Desmarets, the nephew of Colbert, when he became the Controller of Finance, directed the operations of the newly created "Bureau de Commerce," which undertook besides the affairs relating to agriculture. In 1739 the King was compelled to issue an "ordonnance" prohibiting the importation of cattle from countries infected by the cattle plague. A commission was likewise formed to investigate the causes of the diseases in cattle. Trudaine, the successor to Desmarets, gave immediate effect to the recommendations of this learned Commission, whose valuable regulations, issued on the 19th July, 1746, responded so completely to the requirements of agriculture and the public health that they have survived the shipwreck of ancient royal decrees, and remain the guiding lights at the present day. Vincent de Gournai succeeded Trudaine, bringing to the "Bureau de Commerce" the principles which form the basis of the existing economical system. Gournai declared himself in favour of freedom for all branches of industry, thereby to facilitate competition whence would result the highest perfection in the manufacture of articles, and the creation for the purchaser of the greatest amount of choice by opening up to the seller every possible market. These ideas, so novel in their nature, found, as may be supposed, most determined opponents amongst the members of the "Bureau," the majority of whom were disposed to carry out old traditions, by the continuance of the then existing routine. Vincent de Gournai, however, found a useful ally in Turgot, whom he at once introduced to the office; he likewise received much assistance from the co-operation of Quesnai, one of the founders of economical science. Under the ægis of these enlightened men was seen to arise the Society of Agriculture of Paris, since become the central Society of the agriculture of France, and which has exercised so perceptible an influence upon the progress of French agriculture. To them is due the formation of veterinary schools, the encouragement given to the reclamation of waste lands, and the unrestricted transit and export of grain.

Bringing this historical notice to more recent times, since the creation of the Ministry of Agriculture, we are indebted to the "Institut Agronomique" of Versailles for some agriculturists of the highest merit. Established in 1848, and abolished in 1852, we have seen its revival again in Paris, at the "Conservatoire des Arts-et-Métiers." It must not be forgotten that to the Minister of Agriculture much of the progress realised is due, and although warm advocates of private enterprise we are willing to admit the stimulating influence of the State

has not been without its uses. Colbert once receiving a celebrated agriculturist is reported to have said:—"What can we do to assist you?" when the latter replied, "Sir, leave us alone." And the farmer was right, for at that

time his occupation was confined and fettered by numberless regulations. The same principle still holds good, and without doubt will in time guide the agriculturists of France, equally with those of other countries.

FIELD EXPERIMENTS IN IRELAND.

(From *The Kilkenny Moderator*.)

In August last we announced in this journal that important field experiments with different varieties of manure were ordered to be carried out on the model farms in Ireland in connection with the National Board of Education. In that article we endeavoured to express our sense of all that is due by the country at large to Professor Thomas Baldwin, the eminent and able chief of the agricultural department of the National Board. Professor Baldwin has done more in his time than, perhaps, any one man in this kingdom to disseminate by his writings enlightened views on the science and economy of agriculture, as well as by his eloquent advocacy on every available opportunity of anything that was calculated, to forward the material interests of Ireland. The experiments which we then referred to were, we believe, suggested by Mr. Baldwin and have been carried out under his direction. About a year and a half ago the Commissioners of National Education disposed of a number of their model farms, and this step was taken on Mr. Baldwin's advice; for through some cause, into the nature of which it is not now necessary to inquire, they had signally failed to fulfil the object for which they had been established, and we must commend the prudence which dictated their abolition. Five, however, of these institutions, which had proved most prosperous and successful, were retained—namely, the Albert Farm, Glasnevin (under the immediate superintendence of Mr. Baldwin), the farms at Kilkenny, Cork, Limerick, Athy, and Ballymoney. Being then, as we are still, of opinion that those establishments could be made eminently useful in the country, it was with surprise we learned a short time ago that the Commissioners were giving up all their farms, with the exception of the Albert institution and the farms at Ballymoney and Athy. In the latter, we know, the Duke of Leinster has always taken a great interest, and no doubt it is owing to this interest on the part of his Grace the Athy farm has been preserved to the district for a longer period. We mention this to show that if a like interest were manifested by the nobility and gentry of the districts where the other model farms are situate, they would not now be abolished, especially at a time when they are yielding a fair profit. Indeed, we are reliably informed the farm at Kilkenny alone is at present yielding the handsome profit of fifteen per cent. on the capital originally invested by the Government. It was with still greater surprise we learned that those farms were to be given up at a time when England and Scotland are crying out for experimental stations; at a time, too, when the Government of India are actually establishing model farms; at a time when the Government of New Zealand are instituting an agricultural college or school; at a time when America, rightly appreciating what she has already done in this direction, is developing her present extensive arrangements for spreading knowledge throughout the United States on the important subject of how to cultivate her teeming soil properly; and at a time when Germany and France are founding similar establishments.

When introducing the field experiments on the model farms of Ireland to the notice of our readers, we trusted that Mr. Baldwin would be enabled to give the public in due time the full results of them. Through his courtesy and kindness we are now in a position to lay the details in relation to the experiments on the Kilkenny farms before the country, and we hope they will receive that attention which they deserve from agriculturists and agricultural societies under whose notice these observations may come. We may here remark that Mr. Baldwin has formed the highest opinion of the care and ability with which Mr. George Ross, superintendent of the Kilkenny model farm, conducted the experiments entrusted to him. The nature of the experiments, it will probably be in the recollection of our readers, had a two-fold character. Briefly stated it was as follows—Two crops were experimented on—namely, oats and swedes. Land of uniform quality was selected, and the following table shows the results of the experiments on lea oats:—

LEA OATS.

No. of plots	Manures used—kinds and prices.	Quantity applied per statute acre.	Acreable yield.	
			Grain.	Straw.
		wt. st. lb	ton ct. qrs.	ton ct. qrs.
1	Peruvian guano at 14s. per cwt. rate, 21s. per acre	1 4 1	1 0 1	1 5 3
2	Nitrate of soda at 15s. ...	1 3 2	1 2 3	1 12 2
3	Sulphate of ammonia 21s.	1 0 0	1 1 1	1 8 0
4	Bone superphosphate 7s.	3 0 0	0 17 0	1 0 1
5	No manure	0 0 0	0 17 0	0 19 2
6	Mineral superphosphate 6s.	3 4 0	0 17 0	1 0 0
7	Kainite 4s.	5 2 0	0 18 1	1 2 3
8	Sulphate of ammonia ...	0 4 0	1 0 0	1 6 2
9	Mineral superphosphate	1 6 0	18 2	1 5 1
	Sulphate of ammonia ...	0 2 9		
	Mineral superphosphate, kainite ...	1 1 4		

Since these experiments were commenced we have watched with much interest for the results, knowing how important they were likely to prove not only to agriculturists throughout the country but also to the manufacturers and vendors of artificial manures. The results of the foregoing table show that the natural power of production of the land is indicated by the plot where there was no manure, which is No. 5 on the list. The results in plots 2 and 3 show that such high-priced manures as nitrate of soda and sulphate of ammonia, which depend for their efficacy on their nitrogen, are by themselves so much money wasted, and, for turnips particularly, useless. It will be seen that bone superphosphate and mineral superphosphate produces about the same result. Next

to them comes Peruvian guano, which contains both nitrogen and phosphate of lime. The next plot is No. 8, on which sulphate of ammonia and superphosphate were mixed, and which slightly exceeded Peruvian guano. The best result was on plot No. 9, where the principal constituents—ammonia, phosphate of lime, and potash (which was supplied in kainite—were to be found.

For the swedes the ground was selected and marked in the same way as for the oats, the manure being supplied in the same way also, but at a different rate per acre. The following are the results:—

SWEDE TURNIPS.

No. of plots	Manures used—kinds and prices.	Quantity applied per statute acre.	Acreable yield of roots.			
			cwts. st. lb.	tous. cwt.	qrs.	lb
1	Peruvian guano at 14s. per cwt.; rate 84s. per st. acre	6 0 0	11	5	2	24
2	Nitrate of soda at 15s. per cwt.	5 14 11	2	14	2	16
3	Sulphate of ammonia 21s. per cwt.	4 0 0	2	15	1	12
4	Bone superphosphate 7s. per cwt.	12 0 0	9	11	0	8
5	No manure	0 0 0	2	17	3	12
6	Mineral superphosphate 6s.	14 0 0	9	11	3	4
7	Kainite at 4s.	21 0 0	3	5	0	0
8	Sulphate of ammonia	2 0 0	12	12	0	16
	Mineral superphosphate	7 0 0	12	12	0	16
9	Sulphate of ammonia	1 2 9	4	5	4	24
	Mineral superphosphate, kainite	4 5 4	13	8	0	24
		7 0 0				

What a pity, then, in view of such interesting experiments—the utility of which Professor Baldwin had only just begun to make manifest when they must be abandoned—that the model farms of Ireland, with the three exceptions already named, should be discontinued. If it is not too late even now, we would urge upon every man of influence in the community to use their influence with the Commissioners in order that they may be induced to forego their determination. We consider—and all who appreciate the importance of useful agricultural experiments will agree with us—that the results we have recorded above are worth more to the nation at large than the entire cost of the maintenance of such establishments, no matter what that cost might be. In Ireland, we believe, the model farms have never been tried, strictly speaking, as agricultural schools. Pupil teachers have been maintained in them, and this must have in a measure interfered with the object primarily in view. We would suggest, therefore, to the Commissioners that these farms should be granted another trial in the way indicated, and the Irish Executive might appoint committees in the different districts to assist the heads of the department in working the farms to full advantage. We trust also that what we have said will even now awake an interest in the model farms, and that the public will strive to retain them, for if properly availed of they would constitute an invaluable boon to the agriculturists of the country.

COVERED YARDS.—I am a copyist of Mr. Mechi, as regards covered yards and boxes with sparred floors. As to the latter, after many years' trial of them, I think as highly

of them as ever; but as to the covered yard, I should be glad to hear if his experience confirms mine. The fact is, the same butcher has bought the bullocks fed in it last year and this, and he finds in the majority of them that the bone in the rump, the round bone and hip joint, is diseased and very offensive. The beef is perfectly good, but the bone is diseased. Can Mr. Mechi throw any light upon it? Last year the bullocks were always lying upon a hot bed, as the stable manure is used over again in the covered yard, and the men negligently deposited it generally in the same place, and the bullocks always lay upon it; but this year I have had that altered, and the stable manure has been regularly spread over the whole yard, and I do not think there has been any heated bed anywhere. [To this Mr. Mechi replies:—My butcher never complains of the meat. I should be afraid to use stable manure under the cattle. Horse dung of a very heating nature, the reverse of cattle dung. I imagine that this has caused the disease you mention. I presume that your yards and boxes are well ventilated.—J. J. M.]

THE RAINFALL.—The heavy rainfall of the past fortnight has occasioned a certain amount of anxiety as to the character of the season now opening, and this has been quickened by the prevalence of an opinion that the summer will prove more wet than warm, and fail to ripen the produce that increases on every hand. Without pretending to any knowledge of the future, we feel bound to offer a grain of comfort on the subject of the recent rainfall. In the first place, then, we have had a dry winter, and considerable arrears of rain were due to us. Thus we may regard the extra humidity of the past two or three weeks as the restoring of a balance that had been disturbed, and from which we have derived a considerable advantage, for the dry winter favoured out-door work, to the advantage of the crops generally. In the next place, the districts that have been flooded are mostly in grass, and it is a truism that spring floods on grass land make great hay-stacks and abundant after-feed. Whatever may be in store for us, there is no occasion for fear or discount at present.—*Gardener's Magazine.*

SUPPOSED EXPLOSIVENESS OF FLOUR-DUST.—The explosiveness of flour-dust when diffused through the air, says the *American Architect*, of which we made mention at the time of the explosion of the Greenfield Candy Factory, in New York, has apparently received a startling illustration in the destruction of the flouring mills at Minneapolis. The manner in which the accident occurred can never be made clear, for every man perished who was in the great Washburn Mill where the first explosion occurred. But no other cause than the flour-dust has been seriously argued, so far as is known. The material, which could, by its detonation, throw down in an instant all four solid stone walls of the great mill, more than 100ft. square, and lift the roof bodily some hundreds of feet into the air, must have been pretty thoroughly diffused throughout the building.—*Bilder.*

THE GARDENER BIRD.—Under the title of "The Gardener Bird," *The Gardener's Chronicle*, some weeks since, gave a very interesting description, illustrated by cuts, of a bird which is not only an expert architect but also a gardener, laying out a garden in front of his singular domicile. The bird is a native of New Guinea, and makes a nest of the stem of an orchid. He forms a lawn of moss in front, on which he places day by day, for the delectation of his mate, flowers and fruits of bright and pleasing flavour.

THE LAND AND THE PEOPLE.

(From the Echo.)

X.—FREE TRADE IN LAND—(Continued).

The current number of *The Contemporary Review* contains an article by Dr. Gilbert W. Child, on "The Homes of the Poor," which strikingly shows the defectiveness of house accommodation and sanitary provisions in the rural districts, and dwells especially upon the failure of the much-vaunted sanitary legislation of the present Government to bring about anything approaching to an adequate remedy for these evils. The reasons for the failure are that nearly all our sanitary legislation is permissive, and that those who have to administer it are, generally speaking, the very persons who have an interest in opposing it, on account of the expenses in which its enforcement would involve them. Imperfect drainage, defective water supply, unhealthily situated, dilapidated, or diminutive cottages, and nuisances dangerous to health—all these evils require expenditure to remove them, and the expenses mainly fall indirectly, if not directly, upon the owners of real property. Such owners are usually members of, or directly represented in, our rural sanitary authorities, and they have a wide and powerful influence upon the other members and officers. As many of them are limited owners, their interests are directly opposed to all expenditure for new cottages, or for improving the condition and sanitary surroundings of old ones, however greatly such works improve the value of the estates which they hold. It is true that the worst cottages, as a rule, are not to be seen on the large estates, but are the property of small owners, speculative builders, or mere squatters on bits of waste land; but on all but comparatively few of the entailed estates there is a great want of better house accommodation for the agricultural labourers, and especially so on or near the farms on which they work. The bad effects of limited ownership are still more strongly shown in the neglect to carry out the most necessary works of village reform, such as schemes for drainage and water supply. Thus here, as in all other directions, we see the blighting effects of our Land Laws.

But we have yet to consider an evil arising from the trammelled condition of the bulk of the land of this country far more deeply seated than any of those just alluded to. Compulsory legislation might enforce sanitary reform, even to the extent of making a proper provision for housing the people necessary to the cultivation of the soil by those who hold the stewardship of the land; or, if the peasantry were in a more prosperous condition, their rapidly improving education and cultivation would lead to the providing of better house accommodation and sanitary improvements by the natural process of demand and supply. But, unfortunately, the English peasant has hardly any inducement to try to better his condition, because, if he remains where he is, there are so few openings for him. The few may become bailiffs, or dealers in stock and other kinds of merchandise; but there is no high road to prosperity by means of economy and enterprise available to the many. They may save in their young days, and make provision against sickness and destitution in old age, if they care to make sacrifices with the laudable object of rendering themselves independent of the pauper's dole; and it is much to be regretted that a larger proportion of them do not show this sturdy independence. But the Poor

Law and the inaccessibility of land together have demoralised them for the necessary sacrifice of the indulgences which they can at the best only enjoy in their young days, before they have families to support. They need the stimulus of a near prospect of personal advantage, and something more substantial than independence of poor relief; and this can only be adequately supplied by placing land within their reach. The only form of investment which the mass of them are fitted to avail themselves of is investment in farming or market-gardening. They understand no other business, and no other business is near at hand or easy to be established in their own district. If land either for peasant-proprietorship or for co-operative farming were easily obtainable our farm labourers would have something to save for. I am not an advocate for an extended system of peasant-proprietorship in England, though in Ireland it would probably be the very best system that could be applied. In many respects the *petite culture* is inimical to agricultural advancement, in respect of both arable cultivation and stock-breeding. Co-operative ownership would be economically superior, if the people were fitted to carry out the system effectually. But before co-operation can attain to the perfection which it is ideally capable of, those who take part in it need to be educated and trained to the work; and I am disposed to believe that such education and training can only be attained by means of small ownership, or at least small farming. Men who have been accustomed only to work for others, especially at low wages, are by their habits and associations unsuited to take part in an undertaking which requires a conscientious and enlightened regard for the common weal for its success. It is true that a modified form of co-operation, known as industrial partnership, would afford such training in an equally efficacious, or even a superior, manner; but industrial partnership in farming is not likely to be very rapidly established. Apart from the necessary training there is another essential to co-operation, and that is the acquisition of the habit of saving, which, as already stated, the farm labourers require a stimulus for, such as can only be fully supplied by rendering land accessible to them. Let them, or rather the best of them, once become small capitalists, and co-operative farms may be started with some hope of success.

I have said that I do not believe that an extended system of peasant-proprietorship is suited to this country, but I am quite as strongly of opinion that the introduction of that system on a limited scale is not only suited to the country, but is very urgently needed by it. Dairy produce, poultry, eggs, fruit, and vegetables are all rising in price, and the tendency, in spite of imports, is towards a more and more rapid rise, as population increases and the home supply remains stationary or decreases. The swallowing up of small tenancies, which has been going on for the last fifty years, has greatly reduced the supply of these commodities. In the arable districts there are probably fewer cows kept on five hundred acres than were formerly kept on one hundred, as farmers who do not go in for dairying on a large scale will not be bothered with cows at all, unless it be one for their own use. Those who keep two or three cows will not trouble to sell milk by retail, and in many country districts there is quite

a milk-famine, the effects of which are most injurious to the children of the poor. Similar remarks might be made with respect to poultry and eggs, and, to a less extent, with respect to fruit and vegetables also. For the supply of these two scarce articles of food small farmers are the natural purveyors, and a few peasant-proprietors in every village would be of the greatest advantage to all the inhabitants, while the possibility of becoming owners and farmers of land would afford hope, and an incentive to save to the labourers. I could enlarge on this branch of my subject, but my space is exhausted, and I must conclude the present article with a few words in reply to a stock objection to the application of these remarks.

It is commonly asserted that if all the existing trammels upon land were removed—if, in short, we had Free Trade in Land to the fullest extent—land would still accumulate, as it has done, in the hands of the rich, and not be any more obtainable by the peasantry than it is at present. I cannot here fully reply to that objection, which I believe is a complete fallacy. It is enough to answer, let us try! Let all settlements which tie land up for the future possession of the unborn be prohibited by law, and let the transfer of land be made simple and cheap, and then let us see if the market-gardener and cowkeeper, and the poultry-breeder, or the man who combines these occupations cannot compete with the large capitalist. He can in France and Belgium, and it remains to be proved that he cannot here. The laws which hold land back from sale have been shown to be utterly mischievous in their effects, and it is not enough to say in their defence that their repeal will not ensure all that we hope for. Let us have Free Trade in Land, and then, and not till then, will there be a fair field for all forms of agricultural enterprise, peasant proprietorship included. I ask for no nursing for that or any other system, but only freedom to entitle it to run alone if it can. With such freedom, it will establish and maintain itself where, and to whatever extent, it can profitably exist, and there and to that extent only.

XI.—THE GAME LAWS.

There is probably no reform connected with our land system in which the people at large have shown a stronger interest than in the modification or repeal of the Game Laws; yet that question has never had any appreciable effect upon a general election, except in Scotland. It is impossible to estimate with any degree of certainty the amount of loss to the country annually occasioned by the over-preservation of game. The loss can by no means be measured by the amount of damage actually inflicted by the ravages of game. That loss, we know, must be enormous; but, even if it could be approximately estimated, a still larger sum would have to be set down to represent the loss occasioned by the discouragement to agricultural expenditure and enterprise, which is a direct result of game devastation. It is sad enough for a farmer to see his crops hopelessly diminished by the results of untoward seasons; but it is positively heart-breaking for him to be compelled to look on hopelessly while game vermin are destroying the promising results of his labour and expenditure, enhanced to the utmost in value by the fructifying influences of favourable weather. Scores of industrious and deserving tenants are every year driven out of their farms, ruined by game, to become absolute paupers, or to eke out a scanty livelihood afforded by the kindness of friends, or the bounty of the Royal Agricultural Benevolent Institution. Amongst the reasons given for destitution by applicants for the bounty of that society "loss by game" is by no means the less frequent. It

is commonly urged that tenants who take game farms had only themselves to blame, and it must be admitted that they too often show a lack of judgment. But they are generally tempted by a comparatively low rent, which, however, they almost invariably learn to their cost is not low enough to be a sufficient set-off to loss by game damage. Quite as often they are deceived by the promise that the ground game shall be kept down within tolerable limits—a promise too frequently made only to be broken. A short time back, too, the demand for furs was so great that a man who knew no business but farming, and was not inclined to emigrate, had often no choice but to take a game farm or none at all. Now that hundreds of farms are going begging for tenants, there is less excuse for the rashness of those who hire farms on which the ground game is strictly reserved, and of the vacant holdings a large proportion will be found on inquiry to be game farms. If landlords acted in accordance with their pecuniary interests, they would not be guilty of over-preservation; but many of them think nothing of the sacrifice of a few hundreds a year for the delights and the fame of battue-butchery, and in many instances rich townsmen offer such sums for the shooting as to recoup the landlords for the loss of farm rents proper. The evils of game preservation have of late years greatly increased, and if the country continues to grow in wealth in the future, as it has grown in the past, those evils are certain to increase still more. The lying waste of pastoral districts in Scotland for the formation of deer forests is a modern abomination, but if it is not put down with a strong hand it is impossible to say how far it will extend.

In the matter of game devastations, as in that of the emigration of tenants' improvements, I do not rest my case upon the desirability of protecting farmers' interests only. Desirable as that object undoubtedly is, it might not be considered by the public at large to be sufficient to call for interference with freedom of contract between landlord and tenant. They might leave farmers, who have so large a share of political power, to insist on the reform or repeal of the game laws. But here, as in the other case of tenant wrong, the public are as deeply interested as the farmers are; and in this matter, as in the other, it would not be safe for them to leave the farmers to deal with the evil in their own interest only. Farm tenants are, as already observed, often deluded into putting up with the damage done by game in consideration of low rents; and, although these do not afford sufficient indemnification for the loss occasioned by the game, they at least give a partial compensation to the tenants while they afford none whatever to the people at large. There has surely been enough written by able pens than mine to show the national loss which is occasioned by the operation of our Game Laws, and people who have not been convinced by these writings, probably would not be convinced "though one rose from the dead" to endorse them. As a matter of fact, however, there is an almost universal opinion amongst disinterested persons that the Game Laws are utterly mischievous, and should be entirely swept away or rigorously amended. All that is wanted is to act upon that conviction.

Those who are opposed to the complete repeal of the Game Laws urge that if that takes place a more stringent law of trespass will be requisite, and I am disposed to think that the plea is a valid one as far as it goes. The objections to such a law are very strong, and if it should ever be passed it will be necessary to draw it up very cautiously, in order to avoid infringing the already too much restricted rights of those of the

public who have no improper objects in view when they "take their walks abroad." In Scotland, where the game evil is at its worst, there exists a very general feeling in favour of total repeal; but English farmers, as a rule, would be satisfied with a less sweeping reform. It is generally admitted the winged game do comparatively little harm—perhaps less harm than good, except in the immediate vicinity of preserves. It is the ground game—hares and rabbits—which are an unmitigated evil on agricultural land. English farmers, consequently, would be satisfied with a law which would give them the inalienable right to kill ground game. In the absence of an agreement to the contrary tenants have in England, though not in Scotland, a right to kill game of all kinds, if they take out a game certificate. That right, however, is very commonly overruled by the conditions of leases and agreements, and no reform short of one that would render all such conditions illegal would be of any avail. That, then, is the smallest measure of reform that should be for a moment entertained, and if the public would be satisfied with that the farmers would have nothing to say against it.

Of the demoralising effect of the Game Laws I leave others to speak and write. There is no doubt that the swarming of game round their cottage doors is a strong temptation to our peasantry, especially as game has never been recognised as property. It is true, too, that poachers are tried before tribunals which cannot be said to be impartial. I have no sympathy, however, with the poacher, and am, on the contrary, of opinion that a great deal of false sympathy has been wasted upon him. As long as poachers are not convicted when they are innocent—and such cases I am convinced are exceedingly rare—I cannot admit that they have any substantial grievance in the Game Laws, beyond that which they are subjects of in common with all other consumers of agricultural produce. If game preservation leads to a diminished demand for labour, then the labourers have undoubtedly a special grievance against the Game Laws; but this is a disputed point, upon which I confess I am unable to pronounce a decided opinion. Fortunately, on such a great question it is not necessary to stop to split hairs. Apart from all minor considerations, the Game Laws constitute an evil of gigantic proportions, which should be dealt with without delay, and in a drastic manner. Wretched little Scotch Game Bills are every session brought before Parliament only to be consigned to the oblivion which they deserve. Ineffective compromises, one and all, they are utterly unworthy of a moment's consideration. If any one of them should unhappily pass, with a counterpart for England which would probably follow, it might stave off effectual reform for another generation. Happily the landlords who rule us are opposed to all concessions in the matter of their precious game, and it is to be hoped that they will stand obstinately in defence of their unrighteous privileges until a storm of popular indignation arises to sweep these privileges clean away.

XII.—LAND TRANSFER.—DISTRESS AND HYPOTHEC.

In dealing with the subject of Free Trade in Land I referred very briefly to the necessity of a simpler and cheaper system of land transfer. That branch of the question has recently been brought into prominence by the debate on Mr. Osborne Morgan's resolution in favour of the appointment of a Select Committee to report what steps ought to be taken to simplify and secure the title to land, to facilitate the transfer thereof, and to pre-

vent frauds on purchasers and mortgagees of land. Almost everyone admits that a better system of land transfer than the cumbersome one that troubles us now is desirable, though great difference of opinion exists as to the best means of effecting what is required. But the strongest opposition to an effectual reform of the land transfer system is that raised by landowners, who object to the compulsory registration of either titles or deeds on the ground of the expense, the exposure, and the danger (in the case of bad or doubtful titles) that would be involved. These objections should not be allowed to stand in the way of a much-needed reform, and one which, while it would be advantageous to every class of the people, would benefit that of the landowners most of all. It is quite certain that nothing worth doing in this way can be done without compulsory legislation; and if our present Parliament cannot for once overcome its extraordinary repugnance to making a law that will be something more than a mere leave giving, it is useless for it to attempt to deal with the oft meddled-with and muddled question of Land Transfer. This is one of the questions connected with the land that the people are generally so strangely indifferent to. Every man who desires, or is likely ever to desire, to purchase a piece of land to build a house on, or a house already built, or a piece of garden land, has a direct interest in reforming an abuse that, in many instances, more than doubles the cost of small properties; yet the subject is one that attracts but little attention beyond a limited circle.

Amongst the evils of our land system I must not forget to include the continued existence of those barbarous relics of feudalism—the Laws of Agricultural Distress and Hypothec. The English Distress and the Scotch Hypothec differ in some material points, which it is not necessary here to specify in detail; but their effects are the same, although much more keenly felt in Scotland than in England. The chief of those effects are to unduly enhance the rents of farms, to defraud other creditors for the landlord's benefit, and to injure the farmer's credit. Under the unfair protection of these laws a landlord may let his land to a tenant with insufficient capital, perfectly secure of his rent, though all other creditors are left unpaid. In England, though not in Scotland, the landlord's claim has priority over even that of the farm labourer for wages. Yet the landlord is the man best able to test the solvency of an applicant for his land, and should be the first to lose if, by accepting a tenant with insufficient capital, he leads others to trust where they otherwise would not. Under the English Law of Distress, too, stock belonging to another taken in to graze may be seized by the landlord for rent due; and even a thrashing machine sent to thrash the tenant's corn for hire is liable to be sold with the tenant's own effects under a distress warrant. Indeed, the English Law of Distress is so extremely harsh and oppressive that landlords hardly ever put it in force to the full extent, while its needlessness is shown by the fact that it has very rarely to be acted upon at all. For what might be done under that law, if there were any occasion to apply its worst provisions, and if landlords were callous enough to avail themselves of such effete barbarism, I must refer my readers to an admirable paper on "The Law of Distress as Applicable to Agricultural Holdings," read before the Norfolk Chamber of Agriculture last October by Mr. J. O. Howard Taylor, and since printed in the form of a pamphlet, to be obtained, I believe, of the Secretary of the Norfolk Chamber. In his paper Mr. Taylor draws a distinction between rural and urban distress. He says:—

"Distresses for rent of small town dwelling-houses are far more capable of justification from mere theory than for rent of agricultural land.

"A house may be conceived let on the security of the furniture of the tenant brought in. From the house there is no production, as out of the farm.

"Every man must have a house, not every man a farm; the tenant of the first adds nothing to the house; the second is increased in value by labour and capital. Society requires that the poorest should have shelter; that farms should be leased by insolvents, as certainly not; the owner of land can and does inquire into means, the proprietor of cottages rarely does or can with use.

"The hiring of a farm is at least for a year, that of dwellings generally by the quarter, frequently by the week.

"Many a cottage tenant has none but furniture and daily wages; no farm tenant would be accepted in England, eyes open, *minus* all but household chattels. The occupation of a house is not calculated to deceive; all want a roof. The hiring of a farm may delude, as no one with an empty pocket should try farming, or be accepted as a tenant.

"Without a summary remedy the value of cottage property would decrease. Where payers are not worth suing such process is indispensable, and to persons living from hand to mouth the owner's remedy secures a home otherwise refused.

"The small tenants of town-houses *quoad* the house and its furniture are neither in trade nor commerce, but a farmer *quoad* the farm has no little business. In the one case the living arises outside the hire; in the other from the demise.

"Here the house is the prime subject; there the land and the house, if any, merely an appendage.

"A summary preferential remedy in towns benefits lessor and lessee without damaging the public."

But he adds:—

"Even in towns there is often needless hardship in distresses, and every advantage of the present law might be retained while protecting the occupier."

There is much force in these distinctions, and while I am not prepared to admit that, even in the case of houses, the landlord's priority of claim in respect of debt is justifiable, it is certain that there is much less to be said in defence of that priority in the case of farms.

As already remarked, the hardship of agricultural distress very seldom appears in its worst form in England, and its evil effects work themselves out for the most part in a silent and unobserved manner, though none the less surely English tenants have never concerned themselves much about the grievance, and few of them know to what a great extent the competition for farms is artificially increased by the action of the Law of Distress. Scotch tenants, on the other hand, place the repeal of Hypothec only second to the reform of the Game Laws in their demands, and there is hardly a member for a county constituency in Scotland who is not pledged to vote for that repeal. In this fact we may see the ill effects of slightly palliating the harshness of a bad law instead of abolishing it altogether. In some respects Hypothec has been rendered less objectionable than the English Law of Distress. For instance, in Scotland the landlord's right under the Law of Hypothec only extends to the rent of the crop of which it is the produce; while in England the landlord's prior claim extends to arrears of rent, and is only restricted

by the Statute of Limitation and the Bankruptcy Law. There are also other limitations of the landlord's prior claim in Scotland which do not apply in England. On the other hand, the Scotch landlord can sequester the growing crops before rent is due; and he can also, if any memory is not at fault, seize farm produce that has already been sold to a merchant, provided that he asserts his claim within a specified period. But although in many respects the Scotch Law of Hypothec is less objectionable than the English Law of Distress, as far as agricultural holdings are concerned, the evil effects of the first law in Scotland are much more keenly felt than those of the second in England. The competition for farms is keener in the northern than in the southern country, and, chiefly owing to that greater competition, tenants are more frequently in difficulties, and thus the law is more often put in force. For several sessions a Hypothec Abolition Bill has been brought into Parliament, to be rejected by the majority of English members, who fear that, if they let Hypothec go, Distress will follow.

The Scotch members have made a sad muddle in bringing forward their Bills on this question in the present session. There were two before Parliament. One was brought forward so late on a Wednesday afternoon that it was easily "talked out;" and the other was down for second reading on the 1st of May, during the Easter holidays. Thus, I fear, the hopes of the abolition of a mischievous and indefensible law are over for this session. Perhaps our Scotch friends have reason to ask whether their professed friends are in earnest.

XIII.—LAND TRANSFER.—DISTRESS AND HYPOTHEC.—CONCLUSION.

In the course of the preceding articles I have roughly described some of the effects of the worst land system that exists on the face of the earth—a system which artificially preserves land in comparatively few hands, and renders its transfer difficult and costly even when it is distributed, keeps agriculture at a comparatively low ebb by divorcing capital from the soil and wasting the outcome of what is applied to it, and generally deals out injustice, inconvenience, and loss to all classes of the people. The system is kept up for the purpose of preserving the prestige of a few noble and wealthy families, although, as already intimated, to the disadvantage of the majority of their members, and at a very serious cost and inconvenience to the rest of the community. Under that system, to speak more particularly, landlords, for the most part, have no interest in improving their property, even when they possess the capital, knowledge, and enterprise requisite for enabling them to carry out such improvements effectually; tenants are deterred from doing what the landlords leave undone, because their capital is not legally secured as it should be; hares and rabbits devour what human beings should have to eat, and keep at naught from being produced what would be forthcoming if it were not for the fear of their ravages; immense sums of money are annually sent out of the country to buy food that might be grown at home; the demand for labour is unnaturally kept down, and its best rewards are withheld by what is virtually a land monopoly; the payment of agricultural rent is so secured as to give the landlords an unfair precedence at the expense of other creditors of the tenants, and with the result of unduly increasing the competition for farms, and the commercial prosperity of the country at large. Depressed as a general result of these disadvantages this system has become, and is, kept up by Parliaments unadvisedly composed. D 2

and their friends and dependents, and in all probability will be preserved as long as the people are so foolish as to send their worst enemies to represent them in the House of Commons; and this, it is to be feared, they will continue to do for some time to come, as they have not yet so much as shown that they are at all generally conscious of their interest in the reform of the Land Laws. It must be borne in mind that this is peculiarly a reform that must be carried out by the people for the people. It differs materially from such a reform as the improvement of our system of national education, for instance, obstinate as the prejudices that once opposed advancement in that direction were, and still are to a less extent. The need of universal education impressed itself upon the minds of the upper and middle classes by the pure force of conviction, strengthened materially by the successes of an educated soldiery in the Franco-German War. But in the case of the reform of our Land System there is something more than prejudice to be overcome. There is also the love of power and class ascendancy in the way. It is not enough in this case to prove that reform would be advantageous to the nation at large, or even that it would result in pecuniary benefit to the owners of real property; for I venture to assert that the opposition does not rest upon any sincere denial of these advantages. Land would undoubtedly rise in value, and rents would be advanced, if Free Trade in Land took the place of the present system of Protection and encumbrance. But the fear is that political and social preponderance would be lost, together with other privileges which are valued more highly than an increase of wealth. It is no doubt conceivable that the landowners might become so enlightened to their best interests, or so just or philanthropic, as to renounce voluntarily the unfairly-held position which they now occupy; but such a consummation is improbable in the extreme. They have themselves built up the system which fences them round and preserves the prestige and privileges which they love, and the rule of fashion in their "order" is as much opposed as ever it was to renunciation. No; the reform of our Land System will never commence from within. All history is against such a hope. Wherever the power and unjust privileges of landowners have been curbed or swept away it has been at the instance of an autocrat or at the demand of a democracy.

I end, then, as I began, by declaring that the people, as distinct from the oligarchy, must set themselves resolutely to remove the encumbrances on land if that great and much-needed reform is to be carried out. I also repeat what I stated at the commencement of this series of articles—that the people need to be educated and led to insist on this great reform by truly Liberal politicians, and by a truly Liberal Press. While the War craze lasts, and the present Parliament sits, it will be hopeless to attempt the great work of reform; but both are coming to an end, and then the best opportunity of the present century will have come. The country is in a state of depression, and the Liberal party is in a like condition of collapse. The people want renewed prosperity, and the Liberals a quest. Both may find their Sangrael in a new Land System. In the meantime this great question should take the prominent place which its transcendent importance entitles it to in Liberal journals and on Liberal platforms. Supplies must be collected and armies trained before the great campaign can be commenced with any hope of victory. When the agricultural labourers obtain the franchise there will be an effective force to rely upon, trained, as they are being trained, by leaders thoroughly in earnest on this question, though not all as wise as earnest, unfortunately. A

commander-in-chief has yet to be found. The "Coming Man" is, perhaps, somewhere hidden in the rank and file, or training for his great vocation in a school of learning, or a not less effective school of commerce. We need not fear, however, that when the time comes we shall lack a second Cobden to take the place in the League for Free Trade in Land which the first Cobden occupied in the League for Free Trade in Corn. That truly great liberator declared that the reform which he was not young enough to lead would be a greater one than that which he did so much to bring to pass; and the noblest ambition, the most enlightened philanthropy, and the purest patriotism might seek in vain through the whole realm of politics for a more glorious work than that of delivering the people of this country from the most abominable Land System that has ever been imposed upon a civilised community.

A FREE FARMER.

NARCOTICS AND STIMULANTS.—Mr. Jez. Keelgrew, Commissioner of Agriculture in Tennessee, has published some interesting statistics as to the consumption of narcotics and stimulants throughout the world. Paraguay tea, it is computed, is used by 10,000,000 human beings, cocoa by 10,000,000, chicory by 40,000,000, cocoa by 50,000,000, and coffee by 100,000,000. The consumers of betel are set down at 100,000,000, those of hashish at 300,000,000, and those of opium in one or another form at 400,000,000. These figures are, however, eclipsed by the proportions of the demand for Chinese tea, which is said to be used by half a billion; while the consumers of tobacco are not only still more widely distributed, but present the astonishing aggregate of 800,000,000. According to a careful estimate prepared for this report, tobacco is more generally used than any other single article of commerce consumed by man. The United States in 1866 produced more than 430,000,000lb. of tobacco, but ten years afterwards the yield of the plantations had dwindled to 260,000,000. The report does not state the exact quantity grown in any subsequent year; but it seems that the exports alone in 1875 reached about 220,000,000lb., valued at more than 25,000,000 dollars. According to the United States Bureau of Statistics, leaf tobacco valued at nearly 25,000,000 dollars was sent out of the country in the year ending June 30, 1877. These figures would make tobacco rank sixth in the list of exported staples from the United States, cotton, breadstuffs, petroleum, and the precious metals alone exceeding in importance. In 1875 the best customers of the United States for tobacco was Germany, who, notwithstanding the large quantity grown in Prussia, took 56,000,000lb.; while Great Britain, which produces none, took only 54,000,000lb.

SEWAGE.—The most important lesson that we Britishers have to learn is the economy and utilisation of human voidances. It should form part of the early instruction of our youth. We not only consume all our own produce, but import much more than £100,000,000 worth of human food and drink, which, if applied to our land, would enormously increase its fertility and produce. For want of this common-sense practice our agriculture languishes and retrogresses (see the statistics), and we become more and more dependent on foreign supply. We thus court and invite poverty, instead of wealth and plenty. It is a national and disgraceful neglect.—J. J. MECHI.

AGRICULTURAL SOCIETIES.

ROYAL OF ENGLAND.

MONTHLY COUNCIL, Thursday, June 6, 1878. Present: Colonel Kingscote, C.B., M.P., President (in the chair), the Duke of Devonshire, K.G., Earl Cathcart, the Earl of Leicester, the Earl of Ravensworth, Viscount Bridport, Lord Skelmersdale, the Hon. W. Egerton, M.P., Sir A. K. Macdonald, Bart., Mr. Aveling, Mr. Booth, Mr. Bowly, Mr. Cantrell, Mr. Davies, Mr. Bowen Jones, Mr. Randell, Mr. Rawlence, Mr. Russell, Mr. Sanday, Mr. Stratton, Mr. Shuttleworth, Mr. Torr, M.P., Mr. Wakefield, Mr. Whitehead, and Dr. Voelcker.

The following new members were elected:—

Agate, Alfred, of Broom Hall Farm, West Street, Horsham.
 Armitstead, Rev. John L., of The Vicarage, Sandbach.
 Ashlee, John K., of Colkins, Feversham.
 Balls, Thomas John, of 6, Priory Terrace, Colchester.
 Barber, George, of Babdown Farm, Beverstone, Tetbury.
 Barber, Richard C., of Charlton Court, Tetbury.
 Barton, Jas. T., of Elmstree, Tetbury.
 Bate, Thomas, of Kelsterton Hall, Flints.
 Borton, Hebben, of Barton-le-Street, Maltot.
 Briscoe, John, of Hill Croome, Severn Stoke, Worcester.
 Burton, W. Schoolcroft, of Walton Hall, Bletchley.
 Bryde, Colonel Henry Charles, of Goytre House, Pontypool.
 Carter, R. H., of Fernhill, Cradley, Malvern.
 Child, Charles, of Park House, Slinfold, Horsham.
 Cooke, Colling, of Breadenheath, Whitkurch.
 Cooke, Henry Lewis, of Ellesmere, Salop.
 Copeland, Stephenson, of Beverly.
 Cox, Henry, of Iron Mills, Minchinhampton.
 Cross, William, jun., of M.nerne Magna, Dorchester.
 Dickin, Samuel, of Little Ness, Baschurch, Salop.
 Drew, Lawrence, of Merryton, Hamilton, N. B.
 Dymond, Thomas, of Burntwood Hall, Barnsley.
 Edwards, John, of Pentre David, Oswestry.
 Evans, Edward, of Newhouse Heulle, Whittington, Oswestry.
 Fell, Alexander Lonsdale, of Knells, Carlisle.
 Fell, James Alexander, of Knells, Carlisle.
 Foster, Launcelot, jun., of 88, Walmgate, York.
 Fowler, Edward Pope, of Aston Farm, Avening, Stroud.
 Galton, Erasmus, of Loxton, Weston-super-mare.
 Garlick, James, of Beverston Castle, Tetbury.
 Garrett, Frank, of Aldringham House, Saxmundham.
 Griffiths, William, of Chirk.
 Hillier, Douglas, of Sherston, Malmesbury.
 Holmes, George Thomas, of Prospect Place Works, Globe Lane, Norwich.
 Hornsby, James, of Castlegate House, Grantham.
 Hornsby, William, of Elsham House, Grantham.
 Hughes, Edward, of St. Martins, Chirk, Ruabon.
 Ison, Edward, of Ashby-de-la-Zouch.
 Kingscote, Nigel R. F., of Kingscote, Wotton-under-Edge.
 Knapman, John, of "East Ash," South Tawton, Okehampton.
 Limbrick, William, of Down Farm, Tetbury.
 Maxwell, Capt. J. R. Heron, of Springkell, Ecclefechan, N.B.
 Mirehouse, Henry John, of St. George's Hill, Euston-in-Gordano, Bristol.

Mitchell, J. Forbes, of Thaniston, Kintore, N.B.
 Moon, James Stocks, of Starborough Castle, Edenbridge.
 Morgan, George, of 11, College Lane, Liverpool.
 Morrell, George Herbert, of Headington Hill Hall, Ox'ford.
 Osbourne, J. Smyth, of Heath House, Stapleton, Bristol.
 Palmer, J. Foster, of Wilby, Attleborough.
 Palmer, Roger, of Venn Farm, Beaworthy, Exbourne.
 Porter, William, of Breadsell Hill Top, Derby.
 Potter, Worthy, of Queen Charlton, Keynsham.
 Price, J. E., of The Rhadyr, Usk, Mon.
 Pursler, Charles, of The Beanhouse, Cradley, near Malvern.
 Ridalord, Thos. S., of Mount Pleasant, Church, Broughton, Derby.
 Ridge, John, of Rhysnant, Llanymynech, R.S.O., Salop.
 Ryland, Howard Proctor, of 24, Carr's Lane, Birmingham.
 Saunders, John Oakley, of Forston, near Godmanstone, Dorchester.
 Smith, Sydney, of Burnt Leys, Whitwell, Chesterfield.
 Stallard, William, of Ivy Bank, Worcester.
 Stephens, George Alexander, Greenwood, St. Dolough's, Co. Dublin.
 Stubbs, William E., of Hawksworth, Eingham.
 Symonds, Frederick, of Lichfield.
 Thornily, Samuel, of Shooter's Hill House, Wem, Salop.
 Till, John, of Barton Hastings, Nuneaton.
 Tomasson, Hugh, of Plumpton, Penistone, Yorks.
 Tremaine, William, of Pulsue House, Grampond.
 Trotter, William, of Sydenhurst, Chiddingfold, Godalming.
 Vellacott, W. H., of Pristacott, Barnstaple.
 Walford, John H. N., of Rayton Towers, Shrewsbury.
 Wells, Arthur Isaacs, of Hatfield, Doncaster.
 White, Edward Albert, of Beltring, near Tunbridge.
 Wood, Edmund T. W., of Henley Park, Ludlow.

FINANCE.

Viscount BRIDPORT 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 bankers on May 31 was £5,290 10s. 1d., while £3,900 remains at deposit. This report was adopted.

JOURNAL.

Mr. BOWEN JONES reported that the Committee recommended the payment of the bills for the *Journal* and Paris Memoir, and that the *Journal* of the Society, as published, be sent to the Editor of the *Journal of Forestry* in exchange for that publication. This report was adopted.

CHEMICAL.

Mr. BOWEN JONES reported that the Committee had received two reports from the Woburn Sub-Committee, the first referring to the manuring of the barley at Crawley Farm, and the second recommending that in future the banking accounts be kept in Hanover Square, that all cheques be signed by a member of the Sub-Committee, and countersigned by the Secretary—Mr. Malden to send the weekly labour sheets to Hanover Square as soon as

possible after the end of each week. Applications having been made for permission to visit the experiments at Woburn, the Committee recommended that instructions be given to Mr. Mallen to admit visitors provided with orders from Dr. Voelcker or the Secretary, to the experimental field on Tuesdays. The Committee further recommended that the cost of the manures used in the experimental plots be added to the annual report, and that Mr. Wells be added to the Woburn Sub-committee. In accordance with the resolution passed at the last meeting, the plans connected with the establishment of a laboratory on the Society's premises had been submitted to Lord Harewood's surveyor and legal adviser, and the Committee were informed that no objections had been raised on his part to the carrying out of the scheme as proposed, subject to some minor reservation in his interest, to which the Committee see no objection. They therefore recommended that the proposed alteration to the Society's premises be carried out. This report was adopted.

The following Quarterly Report of the Chemical Committee was received, and on the motion of Mr. BOWEN JONES, seconded by Mr. AVELING, was ordered to be printed in the agricultural newspapers.

The Committee think it right to report the following case in order to point out the grave responsibility which if undertaken by co-operative and other similar associations who give a guarantee of the quality of manure purchased through their agency, which guarantee, in this case, was insufficient for the protection of its members:—

Mr. John William Lowe, Eittington, near Stratford-on-Avon, sent, on February 8th, a box containing a sample of bone-dust, taken from seven bags of a lot of twenty tons, at £7 12s. 6d., from the Agricultural and Horticultural Co-operative Association, 47, Milbank Street, Westminster. Previous to the purchase Mr. Lowe received the following letter from the manager of the Association:—

Agricultural and Horticultural (Co-Operative)
Association (Limited),
47, Milbank Street, Westminster.
October 5th, 1877.

DEAR SIR,—We beg to quote you for "English Bone Meal", of best quality, for delivery end of November next for 20 tons, free into railway trucks in London, would be £7 12s. 6d. per ton. I enclose a copy of analysis recently made for us from our stock by Bernard Dyer, Esq., F.C.S., which will speak for the quality itself.

I shall be pleased to receive your order per return.

Yours faithfully,

P.P.—E. OWEN GREENING, Man, Dr.
GEO. BELL.

Wm. B. Lowe, Esq., Eittington, Stratford-on-Avon.

P.S.—Our prices in the "A.E." do not include cartage to rail in London as you suppose.

The copy of the analysis referred to was as follows, and was accompanied by the following statement:—

Composition of a sample of bone-dust sent by the Agricultural Association marked $\frac{AB}{3}, 110$

Moisture	5.95
*Organic matter	29.86
†Phosphoric acid	24.16
Lime	29.96
Magnesia, carbonic acid, alkaline salts, &c.	4.36
Insoluble siliceous matter... ..	1.71
	100.00
*Containing nitrogen	3.16
Equal to ammonia... ..	3.84
†Equal to tribasic phosphate of lime	52.74

(Signed) BERNARD DYER, F.C.S.

From BERNARD DYER, Esq., F.C.S.,
Analytical, Agricultural, and Consulting Chemist.

September 27th, 1877.

DEAR SIR,—I herewith enclose results of an analysis of sample Bone-dust marked $\frac{AB}{3}, 110$

It consists chiefly, if not entirely, of shavings and turnings from a but on or knife-handle factory, and as the variety of bone used for these purposes is of a harder and closer texture than ordinary average bones, the per centage of phosphate of lime is somewhat higher, and that of nitrogenous and fatty organic matter somewhat lower, than in the usual description of raw bones.

As you will see from the analysis, the sample is quite genuine, and unmixed with vegetable ivory, a frequent adulterant of bone turnings.—Yours faithfully,

(Signed) BERNARD DYER, F.C.S.

To E. O. Greening, Esq.

The sample sent by Mr. Lowe was found by Dr. Voelcker to have the following composition:—

Moisture	9.19
*Organic matter	36.16
†Phosphoric acid	20.99
Lime	27.59
Magnesia, alkaline salts, carbonic acid, &c.	3.58
Insoluble siliceous matter... ..	2.49
	100.00
*Containing nitrogen	3.02
Equal to ammonia	3.66
†Equal to tribasic phosphate of lime	45.82

It thus appears that the sample analysed by Dr. Voelcker contained more organic matter with rather less nitrogen than that analysed by Mr. Dyer, and about 7 per cent. less phosphate of lime.

The excess of organic matter and deficiency of phosphate of lime in sample submitted to Dr. Voelcker he found to be due to the presence of vegetable ivory, of which the sample contained at least 15 per cent.

In the result the Association returned 15 per cent. of the price on one-half the quantity of 20 tons.

GENERAL BRISTOL.

Lord SKELMERSDALE (Chairman) reported that the Committee having been informed by the President of the Society that His Royal Highness the Prince of Wales proposed to visit the Bristol show-yard on Friday, July 12th, they recommended that a special tent be provided in the show-yard for the use of His Royal Highness, and that he be invited to luncheon there. They further re-

commended that the chief constable of Bristol be asked for the services of twenty of the Bristol police in the show-yard on that day. An application having been received from the Shorthorn Society to hold its general meeting in the show-yard on Thursday, July 11th, at noon, the Committee recommended that this request be granted. This report was adopted.

SHOW-YARD CONTRACTS.

Mr. BOOTH reported that the Local Committee having agreed to provide a band of the Royal Marines during the show at Bristol, the Show-yard Contracts Committee had given instructions for the erection of a band-stand, in accordance with a previous resolution of Council. The Committee had received a report from the Society's Consulting Engineers with reference to the forthcoming trials at Bristol, and had ordered the erection of a trial-shed, in accordance with the plan supplied by the Engineers. The Committee recommended the payment of a further instalment of £1,000 to the contractors. Having received a report of the condition of the show-yard from the Committee, the Committee had instructed the Secretary to write to Messrs. Fry and Son, the contractors, drawing their attention to the backward state of the works, and urging them to complete as rapidly as possible. This report was adopted.

IMPLEMENT.

Mr. AVELING reported that the Committee had made calculations for the supply of milk and cream required for the trials of dairy appliances at the Bristol meeting, and arranged the course of procedure, commencing on Tuesday, the 9th July. This report was adopted.

SEEDS AND PLANT DISEASES.

Mr. WHITEHEAD (Chairman) reported that the Committee had considered Mr. Bowick's suggestion with regard to the improvement of cereals. They were of opinion that it would not be practicable to carry out the first part of his proposed scheme, and that even were it to be tried it would not accomplish the end in view. The Committee had, however, resolved to reconsider the second part of Mr. Bowick's proposal, and to request the consulting botanist to bring up a modified scheme in the direction of his views. This report was adopted, after an explanation from Mr. Whitehead that, knowing the wish of the Council with regard to recommendations made by members of the Society, the Committee had given the fullest consideration to Mr. Bowick's proposals, but they were of opinion that to carry out the first part would entail immense expense, and would not lead to any proper result.

A letter was read from Mr. Francis Knollys, stating, on behalf of his Royal Highness the Prince of Wales, that it will afford him much satisfaction to accept the office of President of the Society for the ensuing year.

It was proposed by Viscount BRIDPORT, seconded by Earl CATHCART, and carried unanimously, that Lord Vernon be requested to act as one of the repre-

sentatives of the Council at the Paris Agricultural Congress.

The resignation of Sir William Miles, Bart., as a Vice-President of the Society, was received.

Mr. WHITEHEAD gave notice that at the next meeting of the Council he would move the following resolution:— "That the Council sanction the exhibition of hops at the Society's show in London next year, and undertake to adjudicate upon the prizes that may be offered for the same."

A letter was read from Mr. George Slater, on behalf of the Fleece Farmers' Club, Canterbury, stating that a Committee of that body had been appointed to confer with the Society as to the offer of a prize for the best implement for the cultivation of hop grounds by steam-power, to be competed for in connection with the London Exhibition next year. The letter was referred to the General London Committee, shortly to be appointed.

The SECRETARY was instructed to request the Mansion House Committee to nominate a certain number of their representatives to co-operate with the London Committee of the Council in organising the London Agricultural Exhibition of 1879.

A letter was read from the Clerk to the Council, enclosing a communication in reference to the potato disease.

Letters of thanks were read from recently-elected honorary members.

SHORTER.

A meeting of the Council of this Society was held at the Society's rooms, 12, Hanover Square, on Tuesday the 4th June. Present—Mr. T. C. Booth (in the chair), Colonel Kingscote, C.B., M.P., Mr. B. St. John Aekers, Mr. J. W. Cruickshank, Mr. F. J. S. Foljambe, M.P., Mr. S. P. Foster, Mr. A. Mitchell, Rev. T. Stanforth, and Mr. Jacob Wilson.

The following new members were elected:—

Barnett, Miss F. S. A., Costislost, Bodmin, Cornwall.
 Fosbery, George R., Kilgobbin, Patrick's Well, Co. Limerick.
 Hodgson, Edward, Bland's Wath, Brough, Westmorland.
 Lancaster, John, Skygarth, Penrith.
 Nelson, George, Great Salkeld, Penrith.
 Sandes, T. W. Sallowglan Tarbert, Co. Kerry.
 Woodhouse, C. B. Mount Gilead, Campbelltown, New South Wales.

EDITING COMMITTEE.

Mr. T. C. BOOTH reported that Volume 24 was progressing satisfactorily; and that the Committee had examined several pedigrees sent for insertion in the Herd Book.

some of which were accepted, and the others referred back for further explanation.

The Committee wished to draw the attention of the Council to a point which had several times come under their notice. It was this: In some instances it was the practice of breeders who had used in their herds a bull of a well-known and valuable tribe, and had bull-calves got by such bull, to name such calves after the name of the sire, continuing the ordinal number.

The Committee were of opinion that this practice of naming animals was open to objection, seeing that from such name it might be inferred that it was descended from the same name as its sire; and, further, it caused the duplicate entry of the same name in the Herd Book. Although it was almost impossible to prevent the entry of duplicate names, the Committee were of opinion that such should be discouraged as much as possible, especially in such an instance as pointed out by the Committee.

This report was adopted.

GENERAL PURPOSES COMMITTEE.

Colonel KINGSCOTE reported that the accounts for the month of May had been examined by Messrs. Quilter, Ball, and Co., and the Committee, and were found to be correct, that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £11 16s. 9d. during the past month, that the receipts for the same period had been £141 10s. 6d. the balance of the Society's current account at the bankers being £458 6s. 11d., and £700 on deposit, and the Committee recommended that the cheques be drawn for various accounts and salaries, amounting to £283 11s. 6d.

That the Committee recommended that arrangements be made with the Society's auditors for the auditing of the Society's accounts to the end of 1877, previous to the annual general meeting of members of the Society.

The Committee laid before the Council a proof of a voting paper for the renewal of the Council at the next annual general meeting, and they recommended the Council to propose for re-election the retiring members of the Council.

This report was adopted.

In pursuance of notice, and in accordance with the Articles of Association, the Council then considered the following house-list and voting paper, and on the motion of Colonel KINGSCOTE, C.B., M.P., seconded by the Rev. T. STANFORTH, it was adopted, and ordered to be printed, and forwarded to the members of the Society.

ANNUAL MEETING, 1878.

LIST NO. 1.—BEING LIST OF MEMBERS OF THE COUNCIL WHO RETIRE BY ROTATION.

At the annual general meeting of the Society to be held in the present year ten members of the Council will retire from office by rotation, in accordance with the articles and laws of the Society; and the following list, prepared by the Council, contains the names and addresses of such retiring Councillors and a report as to their several attendances.

ATTENDANCE, FROM THE FORMATION OF THE SOCIETY (FEBRUARY, 1875), TO THE PRESENT TIME.

NAMES.	Monthly Councils.	Special Councils.	Com- mit-tees.
	Total 32.	Total 3.		No. of meetings. — Attendances.
Aylmer, Hugh, West Dereham Abbey, Stoke Ferry, Norfolk	23	2	33 18
Bective, Earl of, M.P., Underley Hall, Carnforth	10	3	3 1
Crosbie, W. Talbot (elected February 6th, 1877), Ardert Abbey, Ardert, Ireland.....	1	1	— —
Foljambe, F. J. Savile, M.P., Osberton Hall, Worksoop	5	2	— —
Foster, S. Porter (elected July 3rd, 1877), Killhow, Mealsgate, Carlisle	2	—	— —
Lawson, Sir Willfrid, Bart., M.P. Brayton, Carlisle.....	4	2	— —
Lindsay, Col. Loyd, M.P., Lockinge Park, Wantage, Berks	9	2	36 3
McIntosh, David, Havering Park, Romford, Essex	22	1	35 20
Mitchell, A., Alloa, N.B.	10	2	— —
Wilson, Jacob, Woodhorn Manor, Morpeth.....	23	2	33 18

Issued by order of the Council, June 4th, 1878.

H. J. HINE, Secretary.

LIST NO. 11.—BEING LIST OF MEMBERS PROPOSED BY THE COUNCIL.

At the annual general meeting to be held in the present year, ten members of the Council will retire from office by rotation, and they are re-eligible.

It is the duty of the Society at the above meeting to elect ten persons to be members of the Council, to fill the above vacancies, and it is the duty of the Council to propose to the Society the names of ten persons to be so elected.

The following List No. 2, prepared by the Council, contains the names and addresses of the ten persons, being life members of the Society who are proposed by the Council to fill the above vacancies, viz:—

LIST NO. 11.—BEING LIST OF PERSONS PROPOSED BY THE COUNCIL.

- Aylmer, Hugh, West Dereham Abbey, Stoke Ferry.
- Bective, Earl of, M.P., Underley Hall, Carnforth.
- Crosbie, W. Talbot, Ardert Abbey, Ardert, Ireland.
- Foljambe, F. J. S., M.P., Osberton Hall, Worksoop.
- Foster, S. Porter, Killhow, Mealsgate, Carlisle.
- Lawson, Sir Willfrid, Bart., M.P., Brayton, Carlisle.
- Lindsay, Colonel Loyd, M.P., Lockinge Park, Wantage.
- McIntosh, David, Havering Park, Romford.
- Mitchell, A., Alloa, N.B.
- Wilson, Jacob, Woodhorn Manor, Morpeth.

Members of the Society must record their votes on voting papers like this present paper, prepared for that purpose, and which may be obtained from the Secretary.

Issued by order of the Council, June, 4, 1878.

H. J. HINE, Secretary.

VOTING PAPER.

A member wishing to vote for the persons proposed by the Council may sign the following memorandum, viz:—

I vote for the persons proposed by the Council, and whose names are mentioned in the foregoing List No. 2.

Name of Voting Member
 Address
 Date

A member wishing to substitute any persons in the place of the persons proposed by the Council, may strike out of the No. 2 the names of those persons for whom he does not wish to vote, and may insert in the following list, No. 3, the names and addresses of the persons whom he wishes to substitute in the place of the persons so struck out, and should sign the memorandum at the foot of such list. No persons are eligible except life members of the Society.

LIST NO. 3.—BEING LIST OF PERSONS SUBSTITUTED BY THE VOTING MEMBER IN THE PLACE OF PERSONS PROPOSED BY THE COUNCIL.

Names.	Addresses.
1.....
2.....

I vote for the persons proposed by the Council, and mentioned in list No. 2, except those persons whose names I have struck out of the said list. And I also vote for the persons whose names are mentioned in the above list, No. 3.

Name of Voting Member
 Address
 Date.....

On the motion of Mr. JACOB WILSON, seconded by Mr. S. P. FOSTER, it was resolved unanimously—"That application be made to the Royal Agricultural Society for permission to hold the annual general meeting of the members of the Shorthorn Society in the show-yard at Bristol on Thursday, July 11 next at noon."

The next meeting of the Council was fixed for Tuesday, July 2, at 3.30 p.m.

CORNWALL.

(Abridged from *The West Briton*.)

The fine weather which we had for several days at the latter end of last week and the beginning of this was broken by heavy showers of rain on Monday night, followed by a rather strong wind and occasional showers on Tuesday morning, the opening day of the show. This threatened to materially affect the attendance on the first day, and no doubt did so, but yet the first early excursion train from the West was crammed before it got to Saltash. There appeared to be a general feeling that the weather would clear up as the day advanced, and the hopes of this were not disappointed.

According, at all events, to the order of the catalogue, the Devons claim our first attention, and they, no doubt, still have the strongest hold on the likings of the farmers in Cornwall, as well as in the sister county, as the most generally suitable for Cornish land, and especially for small holders. There were altogether 44 entries, and as a class they were quite equal to those of former years, though we could hardly say that they were much superior. As was to be expected, where Lord Falmouth was an exhibitor he carried off the major part of the best prizes. His three-year-old bull, Romaucy Rye, obtained not

only the first prize, but was deemed worthy of the special prize as the best bull in the show, a verdict which, no doubt, the admirers of Shorthorns and Herefords would be inclined to appeal against. In the three-year-old class Mr. Rosewarne, Godolphin, was Lord Falmouth's only competitor, and the second prize was awarded to a very nice animal of his, Master Flitton. In the two-year-old Devon bull class, not exceeding three years, Viscount Falmouth's Reflector had premier honours, Mr. Davey, of Penhole House, Northhill, with his Harry, coming second; and his lordship had first prize in the class of bulls not exceeding two years on the 1st of June, 1878, Messrs. Jackman and Bickle, Hexworthy, coming second. But in young bulls not exceeding twelve months old his lordship had to give way to a lady competitor, who, as far as we can ascertain, exhibited for the first time at the Royal Cornwall Show, and her great success on this occasion will, we hope, induce her to become a regular exhibitor. The first prize in the class we have named was awarded to Osman, a bull aged six months and two weeks, belonging to Mrs. Langdon, Flitton, Northmolton; and Lord Falmouth's bull, which was aged nine months, got second place, Mr. Julyan, of Grampond, coming third. Again, in cows not exceeding three years old, Mrs. Langdon was first, and in heifers not exceeding two years old on the 1st of June she not only obtained the first prize, but had the honour of obtaining the special prize for the best cow or heifer in the show, and there were twenty-four entries against her. Mr. Norrish, of Crediton, and Mr. Corner, Williton, won a first prize each for heifers, the former in yearlings, and the latter in heifers not exceeding three years old.

The Shorthorns were a magnificent lot, and, as usual, Messrs. Hosken, of Hayle, carried off the great bulk of the prizes, and were successful in every class in which they competed. In bulls exceeding three years old they did not compete, and the first prize was awarded to an animal belonging to Mr. B. St. John Aekers, Gloucestershire, but it was by no means a perfect animal. The same exhibitor had the premier honors, 1st. and 2nd in the two-year-old bulls not exceeding three years, Mr. Tyacke, of Merthen, following with a good third. In the young bull class, not exceeding 12 months old on the 1st June, the Messrs. Hosken did compete, and obtained the first place, Mr. Trethewy, Tregoose, Grampond-road, coming second, and Mr. Tregaskis, St. Issey, third. Mr. Aekers here was nowhere. In three-year-old cows Messrs. Hosken was first, and Mr. Pollard second. Mr. Tyacke had a first for a heifer "in calf or milk," but he had no competitor. In heifers not exceeding two years old on the 1st June Messrs. Hosken had another first, and also in heifers not exceeding a year old on the 1st June. They had thus five first prizes to go into the ring for the Champion prizes. In the two-year-old class there was an exceedingly close contest for the second prize between Messrs. Hosken and Mr. Tregaskis. The judges had considerable difficulty in deciding between the merits of each animal, and there was a difference of opinion amongst the farmers looking

on; and some thought there was a "toss up" between the two. Eventually, however, the judges decided in favour of Mr. Tregaskis, and we congratulate him upon the honour of beating such a strong opponent, and hope it will encourage him to continue in the march of improvement. Altogether the young cows were the finest lot that have ever been seen at these shows, and the judges felt that great credit was due to Messrs. Hosken for sending, and being able to send, such animals for competition.

The Herefords, which have been creeping into favour in the county for some years past, were never so well represented as they were this year; indeed, they were the finest lot ever seen in Cornwall. The Herefords, larger than the Devons, and not so big as the Shorthorns, suit a certain class of farmers who cannot keep to advantage the Shorthorns, and yet want something larger and more profitable than the Devons, with a bigger frame, and that will put on more beef in a given time. The Herefords put on beef quickly, and are consequently becoming favourites with a good many farmers in the county. There were altogether 37 entries, thus falling not far short of the leading breeds. The over two-year-old bulls were a very fine lot, there being six of them, and Mr. J. E. Best, of Lanteglos, won the first prize, and Major Carlyon, Tregrehan, had the premier honour, for bulls not exceeding two-years-old on the 1st June. Mr. J. S. Tucker, St. Germans, had the first for yearlings. In cows, Mr. John Paull, Ruan, had first, Mr. Wesley Grose, of Wadebridge, coming second. Mr. J. S. Tuck had the first for heifers not exceeding two-years-old, Mr. C. J. Searle coming second. In the yearlings Mr. S. Hearle had the premier honour.

Of Guerneys there were only eight entries.

The Jerseys are much greater favourites, apparently, in the county than the Guerneys, judging from the number of entries at this show. There were twenty-one animals, and they were decidedly the best lot that has ever been seen at any Cornish exhibition.

In some classes the Sheep were very strongly represented, and in others they were weak. The long-wool yearling rams were almost all that could be desired, and there were 20 entries of them, and the judges were so pleased with them that they commended the whole class; indeed, they did the same in all the classes of long-wool sheep—they were so fine a lot. The Leicesters were well represented, and in these Mr. Tremaine stood to the front again with some very fine pens. He had the first for yearling rams, Mr. Rosewarne, of Nanspuska, coming second. Mr. Tremaine was also first for rams of any other age, and the ram which won the prize in this class won also the special prize of £5 as the best ram in the field. In yearling ewes Mr. Tremaine was again first, and won a similar special prize for the best ewe. Much cannot be said for either the South Hams or the Dartmoors. In Shropshire Down Lord Falmouth carried away all the honours. He had four prizes for four pens, and he had no competitor.

Following the order of the catalogue, we come next to Horses, which now form so increasingly an attractive feature of the Show. There were altogether 137 entries, and, speaking of the quality of the animals generally, we should say that the agricultural class was a very good one, and the agricultural stallions were an unusually fine lot. It is not often that one man can show two such fine entire horses as Mr. Henry Laity, of Praze, Crowan, did. He got first for Uncle Tom, and second for British Yeoman, the North Cornwall Stud Company coming third with Bobby Burns. The agricultural mares were few, but very good. They were, however, the judges thought, wanting in size. Mr. J. Pethick, of Plymouth, took the first prize. The fillies and the yearling colts were highly approved of by the judges. Mr. Stephens, of St. Columb Minor, for three-year-old fillies took first prize, and his neighbour, Mr. Thomas Bandle, took first for two-year-olds. Mr. Charles Norris, of Exeter, had the first for agricultural colts foaled in 1877. For pairs of horses used solely for agricultural purposes, and *bona fide* the property of a tenant-farmer, Mr. Stephens beat three Devon men, and got first prize. The thoroughbred stallions were very good, but there were only three of them; Mr. T. R. Bickle, of Lamerton, took first with Skiffington. The hacks and hunters were a very good class, but a good many of them ought to have been placed amongst the heavy-weight hunters.

The show of Pigs was about an average as far as number was concerned, and was equally good in quality to anything we have seen of late years.

PRIZE LIST.

JUDGES.—DEVONS AND HEREFORDS: Mr. Yeomans, Stratton Court; Mr. Farthing, Bridgwater.—SHORTHORNS: Mr. Sandey, Ratcliffe-on-Trent; Mr. Beau'ford, Thrapston.—SHEEP: Mr. Browne, Holne-in Spalding; Mr. Casswell, Lincoln; Mr. Jackman, Meadwell, Kelly.—PIGS: Mr. Davey, Bochym House; Mr. Russell, Sithney.—HORSES—HACKS AND HUNTERS—Mr. Hutchinson, Catterick; Mr. Williams, Barnstaple.—AGRICULTURAL HORSES: Mr. Shuker, Hereford; Mr. Watts, Dorset.

CATTLE.

DEVONS.

Bulls exceeding 3 years old.—First prize, £10, Viscount Falmouth (Romaney Rye); second, £5, — Rosewarne.

Bulls above 2 and not exceeding 3 years old.—First prize, £10, Viscount Falmouth; second, £6, — Davey.

Bulls not exceeding 2 years old.—First prize, Viscount Falmouth; second, £6, Jackman and Bickle, Hexworthy; third, Viscount Falmouth.

Bulls not exceeding 12 months old.—First prize, Mrs. Langdon; second, Viscount Falmouth; third, — Julian.

Cows, 3 years old, in calf, or if in milk, having had a calf within 6 months.—First prize, Mrs. Langdon; second, — Corner; third, — Julian.

Heifers in calf or in milk, not exceeding 3 years old.—First prize, — Corner; second and third, — Menhenick.

Heifers, not exceeding 2 years old.—First prize, Mrs. Langdon; second, — Corner; third, Jackman and Bickle.

Heifers not exceeding 12 months.—First prize, — Norrish; second, — Julian; third, — Tremayne.

SHORTHORNS.

Bulls exceeding 3 years old.—First prize, £10, B. St. J. Ackers; second, £5, — Cruise.

Bulls above 2 and not exceeding 3 years old.—First and second prizes, £10 and £6, St. J. Ackers; third, £3, — Tyaeke.

Bulls under 2 years.—First prize, Hosken and Son; second, — Tregaskis.

Bulls not exceeding 12 months.—First prize, Hosken and Son; second, — Trothewy; third, — Tregaskis.

Cows above 3 years old, in calf, or if in milk having had a calf within 6 months.—First prize, Hosken and Son; second, — Pollard; third, — Tyaeke.

Heifers in calf or in milk, not exceeding 3 years old.—Prize, — Tyaeke.

Heifers not exceeding two years.—First prize, Hosken and Son; second, — Tregaskis; third, Hosken and Son.

Heifers not exceeding 1 year.—First prize, Hosken and Son; second and third, — Tregaskis.

HEREFORDS.

Bulls above 2 years.—First prize, £10, J. E. Best; second, £6, G. Raby; third, £3, — Nicholls, jun.

Bulls not exceeding 2 years.—First prize, Major Carlyon; second, — Paull.

Bulls not exceeding 1 year.—First prize, J. S. Tucker; second, — Paull; third, C. J. Searle.

Cows above 3 years in calf, or if in milk having had a calf within 6 months.—First prize, J. Paull; second, W. Grose.

Heifers in calf or in milk not exceeding 3 years.—First prize, J. S. Tucker; second, R. Oliver.

Heifers not exceeding 2 years old.—First prize, Major Carlyon; second, C. J. Searle.

Heifers under 12 months.—First prize, S. Heale; second, J. S. Tucker.

GUERNSEYS.

Bulls.—First prize, £4, T. D. Eva; second, £2, T. D. Eva. Cows, 3 years old, in calf; or if in milk having had a calf within six months.—Prize, — Rendle.

Heifers 3 years.—First and second prizes, — Rendle.

JERSEYS.

Bulls.—First prize, £4, J. Nicholls; second, £2, — Crocker.

Cows 3 years old, in calf; or if in milk having had calf within 6 months.—First prize, — Lark; second and third, J. Tremayne.

Heifers not exceeding 3 years.—First, second, and third prizes, J. Tremayne.

SHEEP.

Leicester yearling rams.—First prize, W. Tremaine; second, — Rosewarne; third, T. Potter.

Rams of any other age.—First prize, W. Tremaine; second, T. Potter; third, — Rosewarne.

Pens of five yearling ewes.—First prize, W. Tremaine; second and third, — Rosewarne.

South Ham yearling rams.—First prize, E. Cornish; second, — Hallet; third, J. Stooke.

Rams of any other age.—First prize, J. Stooke; second, H. Pain.

Pens of five yearling ewes.—First prize, R. B. Trant; second and third, H. Williams.

Dartmoor yearling rams.—Prize, R. Palmer.

Rams of any other age.—First prize, R. Palmer; second, W. Squire.

Long-wool yearling rams.—First prize, — Drakes; second, Sir J. H. H. Amory; third, W. Tremaine.

Rams of any other age.—First, second, and third prizes, — Drakes.

Pens of yearling ewes.—First prize, Sir J. H. H. Amory; second, J. Norris; third, C. Norris.

Shropshire Down yearling rams.—First and second prizes, Viscount Falmouth.

Rams of any other age.—First and second prizes, Viscount Falmouth.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallions.—First prize, £12, H. Laity (Uncle Tom); second, £8, H. Laity (British Yeoman); third, £5, North Cornwall Stud Company (Bobby Burns).

Mares and foals or mares in foal.—First prize, J. Pethick (Violet); second, T. W. Moorshead; third, — Stephens (Darling).

Geldings or fillies foaled in 1875.—First prize, — Stephens (Blossom); second, J. Cardell (Duke); third, C. J. Searle (Duke).

Geldings or fillies foaled in 1876.—First prize, T. Rundle, second, N. Hoskins; third, — Stephens (Captain).

Colts, geldings, or fillies, foaled in 1877.—First prize, C. Norris; second, R. Hicks; third, J. S. Fucker.

Pair of horses used solely for agricultural purposes, and bonâ fide the property of a tenant farmer.—Prize, — Stephens (Duke and Tiger).

Thoroughbred stallions.—First prize, £12, T. H. Bickle; second, £8, Colonel Ballard; third, £5, H. Laity (Young Randal).

HACKS OR HUNTERS.

Mares and foals, or in foal.—First prize, W. Stephens second, H. Key; third, — Cardell.

Geldings foaled in 1875.—First prize, — Cardell; second, — Tucker; third, W. Rowse.

Fillies foaled in 1875.—First prize, W. Tremaine (Mabel); second, W. Rowse; third, T. Cardell.

Geldings foaled in 1876.—Prize, — Polkinghorn.

Fillies foaled in 1876.—First prize, — Grigg; second, S. Hicks; third, C. Trelawny.

Colts, geldings, or fillies, foaled in 1877.—First prize, T. Stocker; second and third, C. Trelawny.

Weight-carrying hunters not exceeding five-years-old.—First prize, — Jackman (Powersland); second, — Henty; third, — Grigg (Lassie).

Hacks (mares or geldings) not exceeding five-years-old.—First prize, W. H. Thomas; second, — Grigg (Nan); third, W. Stephens.

Weight-carrying hunter (mare or gelding), to be tested over hurdles, in the showyard.—Special prize of £10, first prize, H. Huthnance (Yellow Girl); second, A. Guy.

Cobs (mares or geldings), not exceeding 14 hands 2 inches, to be tested over hurdles in the showyard.—First prize, Lieutenant Francis; second, J. Magor.

Cobs (mares or geldings), not exceeding 14 hands 2 inches.—First prize, — Jackman (Tienborne); second, — Pethick (Parson John).

Ponies (mares or geldings), not exceeding 13½ hands high.—First prize, H. W. Thomas (Multum in Parvo); second, — Polkingborne.

Single harness horses (mares or geldings), not exceeding five-years-old on 1st January, 1878, and not under 14 hands 3 inches, to be driven and tested on the show ground.—First prize, — Cardell; second, H. W. Thomas.

FIGS.

Boars, large breed—First prize, Duckering and Sons; second, —, Partridge.

Breeding sows in farrows or that have farrowed within six months of the meeting.—First prize, B. St. John Ackers; second, Duckering and Sons.

Pens of two breeding sows (of the same litter), not exceeding twelve months old.—Prize, Lord Moreton.

Small breed.—First prize, —, Partridge; second, T. Salmon; third, Lord Moreton.

Boars not exceeding twelve months old.—First prize, W. F. Collier; second, M. Partridge; third, W. F. Collier.

Breeding sows in farrow or that have farrowed within six months of the meeting.—First prize, —, Partridge; second, W. F. Collier; third, Lord Moreton.

Pens of two breeding sows (of the same litter), not exceeding twelve months old.—First prize, Lord Moreton; second, —, Partridge; third, Duckering and Sons.

HIGHLAND AND AGRICULTURAL.

The half-yearly meeting of the Highland and Agricultural Society was recently held in their hall, George IV. Bridge. In the absence of the Marquis of Lothian, President of the Society, Lord Polwarth was called to the chair.

Mr. FLETCHER N. MENZIES, Secretary, read the list of 196 ordinary members who were balloted for and admitted.

The SECRETARY stated that the meeting of the Paris Agricultural Congress would take place on Tuesday, and that as he would be present, he would be prepared to give information to any of the members who were to attend.

CONTAGIOUS DISEASES (ANIMALS) BILL.

The SECRETARY stated that the following gentlemen were appointed a deputation to proceed to London on the occasion of the second reading of the Bill:—Mr. Dundas, Arniston; Mr. Oswald, Daunkier; Mr. Mylne, Niddrie Mains; Mr. Melvin, Bonnington; and Mr. Clay, Kercheesters.

TRANSACTIONS.

Mr. FORBES IRVINE laid on the table Vol. 10. (fourth series) of the transactions of the Society.

A vote of thanks was then given to the Chairman, and the proceedings terminated.

THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND AND THE IMPROVEMENT OF CEREALS.

The following is the full text of Mr. T. Bowick's letter to the Secretary of the Royal Agricultural Society on the subject of his proposal that the Society should encourage the improvement of cereals.

Bedford, May 28.

SIR,—I am much obliged for your favour of the 6th instant, and have pleasure in complying with the request of the Council to suggest something of the way in which the improvement and cultivation of cereals may be best encouraged and promoted by the Society. The subject is, I admit, surrounded with difficulties inherent to itself, for

1. The crops cannot go to be judged—the judges must go to them.
2. This Department can never be made a source of direct gain to the Society, like the exhibits which attract to the annual shows.

But it is to the last degree a national and an important one. Mr. Pusey, "the father of the Society," evidently had a clear recognition of this fact, and of the possibilities of the improvement of our cereals by wisely directed plans. The first page of his opening article, in the earliest volume of the Society's *Journal*, shows this. And that it can be done is equally certain:—witness the private efforts of Shireff, Bauham, Hallett, Scholey, and others—also the fact that it has been reduced to a very correct system by several of the State Societies in America.

I am aware that this Society, many years since, and also the Highland Society, put its hands to work, but they worked upon inefficient lines, and hence the comparative inutility of results. The mere offering of prizes for sample sacks of wheat is bound to fail. The fact has to be met that there is such a thing as "strain," pedigree, breeding, in the stocks of grain, as much as in the families of Short horns or other animals. Neither is the result attainable by the agency of Prize Farm Competitions, which competitions necessarily have to do with the appearance of the crops as they stand, without reference to the other principles involved.

I annex, at foot, a schedule of prizes which it would be desirable to offer. And though these are confined in the first instance to wheat—for which we have to pay most to other countries—yet the same relative claims can be made on behalf of oats and barley, and the same beneficial results anticipated.

It seems to me, as above indicated, of much greater moment that a few general principles should be recognised by the Society, and then the outcome of these will develop bit by bit a more accurate method of procedure.

- (a) That animal and vegetable life are identical in many of their manifestations—and that the same laws hold good as to their improvement.
- (b) That our cereals wear out or deteriorate, if pains are not taken to keep up the quality. There are but very few to-day of the sorts that were cultivated half a century ago.
- (c) That there is often a difference of six, eight, and ten bushels of produce on an acre between one variety of wheat and another, although grown alongside, under exactly similar conditions.
- (d) These differences show that any variety is capable of improvement, and thus, in the use of judicious means, the corn crops may be improved in quantity and quality to the advantage alike of the husbandman and nation. Even with the modest increase of say four bushels of extra produce per acre—from improved strains of seed, &c., we save some £1,000,000 per annum, which has otherwise to be paid to foreign countries.

Those whom I have consulted in this matter think also that by carefully-prepared tabulated forms for entry a mass of information of the most valuable kind will be obtained on various points, such as times of sowing, quantity of seed, width of rows, methods of planting, &c. And I have no hesitation in saying, from extensive correspondence, that any well-conceived and large-spirited steps which the Council may inaugurate will meet with the heartiest appreciation and interest from the bulk of the members of the Society.

The costs proposed in the first instance are not of a formidable character—some £300—or just the amount that is offered for competition for pigs; one third of what is offered for sheep; or one sixth of the prize money for cattle. Is this an unfair

amount to claim for our cereals? I trow not. Go on this modicum for a three years' trial, and then develop finally, adding the other grains as found desirable.

It will be better to divide the country into five districts. This will render it more workable, and give a fairer chance for each locality.

The *modus operandi* of testing the crops presents some difficulties. These are not insurmountable, and I and others are ready to submit methods for consideration, when the principle is accepted that something is to be done, and a long standing debt paid to the cereals. From the careful examination of the germination and growth of stock samples on our trial ground, (representing, at a fair seeding, many thousands of acres,) we find that widely different results are to be expected from apparently similar strains of seed.

And you will pardon a homely illustration in closing, in proof of the fact that the *vis vite* of vegetable life resides in the germ, rather than in the mere appearance of harvestable results. In this county, at the time I write, there are some hundreds of acres of seeds of various sorts of Turnips now in full bloom. Many of these crops are bred from large selected bulbs. But by purposely late-sowing the present roots themselves will not average over 1½ inch in diameter. Yet in

1879 the produce will revert to its former size and quality of bulb. So of wheat; get the strain, the selection, the ennoblement right, and sound results may be fully expected.

Trusting these matters may be thoroughly weighed, and that they may prove useful as a basis for speedy action on the part of the Society,

I am, your faithful servant,

T. BOWICK.

H. M. Jenkins, Esq.,

PRIZES.

I. For the best crop of not less than 10 acres of any recognised variety of wheat—the cultivation of which is traced through three successive seasons. First, £25; Second, £15; Third, £10.

[Similar premiums in each of the five districts.]

II. A Special Prize of £50, open to the United Kingdom and the Channel Islands, for the best new variety of wheat—whether raised by ennoblement (repeated selection), by hybridizing, or from a sport. The methods of growth or selection to be fully described, and not less than 5 acres grown in the field to be the subject of competition. It must also have been originated within the past five years.

EXPERIMENTS WITH MANURES ON CORN AND ROOT CROPS.

At a meeting of the Framlingham Farmer's Club, held in April, Mr. H. F. Harwood read the following interesting paper, which we have not previously been able to find space for:—

It is now nearly half a century since the agriculturists of England were first enabled, through the investigation of science, to see the way to largely increase their crops by the use of artificial manures, to supplement the scant supply of farmyard manure. And though at first the introduction of Peruvian guano, and subsequently of dissolved phosphates in the form of modern artificial manures, followed by the impregnation of nitrate of soda, was treated with considerable suspicion, yet now there are but few farmers who do not make use of some additional manure beyond that made upon their farms. The question that now arises is not "If we should use artificial manures" so much as "Which manure is the most profitable for the farmer to purchase.

No man has done more—or half as much—to throw light upon this important question than Mr Lawes, of Rothamsted, whose most valuable series of experiments, now continued over 30 years, has been the starting point of many who have stepped out of the beaten track, and strengthened not a few whose prejudice threatened to overcome their faith. The subject we have before us to-night opens a very wide field of enquiry, but we propose simply laying before you the results of a few experiments which we have now conducted for several years at Belstead, and trying to deduce some points of value from them; and although no one is more conscious than we are how inadequately they meet the pressing demands of this subject still we cannot but feel that the information we have gained from them may be in a measure interesting to our brother agriculturists.

It is necessary that you should first be put in possession of a few facts relating to the description and previous management of the land on which the experiments were made. In 1870 the field selected for the experiments, strictly speaking

porous mixed soil, inclining to be light land, was manured with ten tons per acre of farmyard dung for wheat. This wheat crop was followed in 1871 by barley, manured with 5 cwt. per acre of mixed manure, containing nitrogen, equivalent to ammonia 7 per cent., and soluble phosphate of lime 25 per cent. After the barley was harvested the various plots were measured, marked out for experiment, and numbered—a part prepared for wheat in the autumn of 1871, a second part for barley, and a third part for mangels.

We propose first to take a series of experiments upon wheat, each experiment manured at the same cost per acre. First, to test the value of the farmyard manure made in an ordinary open yard, the larger portion of which is exposed to weather, as against that made in a covered yard, entirely protected from the weather. In both cases the bullocks were fed at about the same cost per head per week, cotton cake and bean meal being used as the artificial food. This experiment was continued for two years with the following result:—

		1872		1873	
		Nitrogen to ammonia.	Bush. per acre.	Cwt of wheat straw per acre.	Gross value
		£ s. d.			
Plot 1—Manure from open					
yard	·60	31	44	14	1 2
1—Manure from covered					
yard	·77	35	36	14	9 0
		1873			
1—Manure from open					
yard	·60	35	40	16	16 5
2—Manure from covered					
yard	·77	37	40	17	18 3

Showing, as we shall presently see, a decided increase in favour of manure from the covered yard.

3.—Then, as you see by the sheet before you, we tried shoddy, the refuse of the wool manufactories, containing 7 per

cent. of ammonia, and no phosphate of lime. This was ploughed in the autumn, and produced in two years the following result:—

	Bushels	Cwt. of straw	Gross value.
	per acre.	per acre.	£ s. d.
1872	31½	40	15 0 4
1873	32½	27¼	15 0 8

Showing that, although the gross value was about the same, owing to higher prices, the second year the weight, both of corn and straw, was decreased, as would be expected, from the repeated application of a manure containing ammonia, with no phosphate of lime.

Following the sheet again you see we tried three artificial topdressings in the spring, which we obtained from three separate firms for three years with this result:—

1872.

	Containing ammonia.	Bushels per acre.	Cwt. straw per acre.	Gross value.
				£ s. d.
6.	3.42	30¼	25½	12 8 7
7.	2.85	29¼	25½	12 4 6
8.	1.62	26½	21¼	10 19 11

1873.

	Containing ammonia.	Bushels per acre.	Cwt. straw per acre.	Gross value.
				£ s. d.
6.	3.42	34¼	24¾	15 11 6
7.	2.85	33½	22½	15 5 10
8.	1.62	30¾	27	14 6 7

1874.

	Containing ammonia.	Bushels per acre.	Cwt. straw per acre.	Gross value.
				£ s. d.
6.	3.42	28½	25½	10 9 3
7.	2.85	24¾	22	9 1 6
8.	1.62	45¾	24	9 10 6

Showing an average of the three years:—

	£ s. d.
Plot 6 producing	12 16 5 per acre.
Plot 7 „	12 3 11 „
Plot 8 „	11 12 4 „

Results very closely following the proportion of ammonia in the manure used.

9. We next come to an experiment with Peruvian guano which has continued for six years in succession applied as a top dressing in the spring with these results:—

	Bushels per acre.	Cwt. straw per acre.	Gross value.
			£ s. d.
1872	31½	29	13 3 6
1873	29¾	20¼	13 11 7
1874	28½	21¼	10 7 4
1875	15½	21¼	6 11 4
1876	19¼	22½	8 1 1
1877	9	10¾	4 9 3

This is a striking experiment; for while we have thought that Peruvian guano at least contained all that was needed for the development of plant life, we see but a second-rate result all through—the average of the three years, 1872, 1873, 1874, compared with that of topdressing No. 6 is £13 7s. 5d. against £12 16s. 5d. per acre; but although the cost of the two per acre was the same and the ammonia in the guano much cheaper than in the artificial top dressing, still it cannot have been in a form so easily assimilated by the plant, for analysis shows that the guano plot received 87lb. of ammonia per

acre, while only 40lb. were applied to topdressing No. 6. It is further shown by the annual decrease in the crop that wheat cannot be grown to advantage continuously by the application of Peruvian guano.

10. Referring to the sheet before you we have next the results of an experiment producing wheat for six years in succession without any manure as follows:—

	Bushels per acre.	Cwt. straw per acre.	Gross value.
			£ s. d.
1872	22½	23¾	9 8 1
1873	27	20¼	12 13 2
1874	21½	21½	8 1 6
1875	10¼	16¾	4 13 0
1876	15¾	14¾	6 3 9
1877	8½	11¼	4 6 0

With reference to these results, the only surprise would be, perhaps, that upon such a soil it should produce what it has done without any manure last year, within 3s. 3d. per acre of the produce of the guano plot.

We next have an experiment to test the value of common salt as an adjunct to a mixed topdressing, apart from the convenience it affords as a small outlay of being mixed with, and so more efficiently disseminating, nitrate of soda or other topdressings.

Two plots were each manured with two cwt. per acre of nitrate of soda and 1½ cwt. per acre of superphosphate of lime to each plot.

11. 1 cwt. of salt per acre was added and produced a three years' average of..... £ 9 5 7

12. No salt added, ditto £ 9 7 1

Showing that in those three seasons the application of salt with nitrate of soda produced a decreased crop, but it is hardly fair to infer that salt at no time is favourable, for in each of these years the plant with salt stood better and the straw was of more value, and in very hot seasons might be even more advantageous.

13. Following the sheet before you, you see the result of an experiment with ground rape cake containing 5 per cent. of ammonia and 3 per cent. of phosphate of lime, applied for three years in the autumn, with this result:—

	Bushels per acre.	Cwt. straw per acre.	Gross value.
			£ s. d.
1872	31¾	27¼	13 0 4
1873	30	20	13 12 6
1874	24¾	25¼	9 6 4

There being nothing striking in the result of this three years' experiment, pointing to rape cake as likely to hold its own in competition with other more highly nitrogenous manures it was discontinued.

14. Superphosphate of lime next attracted our attention. This experiment was continued two years as a topdressing, and contained 27 per cent. of soluble phosphate, resulting thus:—

	Bushels per acre.	Cwt. straw per acre.	Gross value.
			£ s. d.
1872	25½	20½	10 0 10
1873	30	21¼	13 15 1

Showing, as was anticipated, that superphosphate of lime alone was not adapted as a top dressing for wheat, so it was considered unnecessary to experiment further with it.

Again referring to the sheet before you, you have the result of a very interesting experiment helping to throw light upon

The value of straw itself as a manure unsaturated with any organic matter. Two plots, Nos. 14 and 15, were selected, both having been manured with superphosphate the two previous years; and to one of them, No. 15 on the sheet, a dressing of barley straw cut into chaff, equivalent to about 36 cat. per acre, was applied for two years in succession, while the other plot, No. 14, received no manure for those two years, with this result:—

	1874.		Gross value.	
	Bushel per acre.	Cwt. straw per acre.	£	s. d.
14—No chaff.....	20½	20	7	13 0
15—Chaff	21½	18½	7	17 10
	1875.		Gross value.	
14—No chaff.....	9¼	18	4	12 3
15—Chaff	9¼	17	4	7 2

Showing an average upon the two years of

	£	s.	d.
14—No chaff.....	6	2	7
15—Chaff	6	2	6

—or a loss of a penny per acre on the experiment.

The next and last experiment upon wheat which we propose introducing to your attention to-night is with nitrate of soda alone as a topdressing for six years.

	Bushel per acre.	Cwt. straw per acre.	Gross value.	
			£	s. d.
1872 { Applied as an autumn top dressing plot 126, exposed to winter rains. Applied in the spring. }	32	27	13	1 8
1873 ditto	39½	42¼	16	9 7
1874 ditto	31¾	15¾	13	19 9
1874 ditto	29¾	99¼	11	2 4
1875 ditto	19¾	32¼	1	18 1
1876 ditto	18½	15¾	7	2 2
1877 ditto	15	15¼	7	3 10

Results which demonstrate somewhat clearly—

1st. That nitrate of soda should be applied in the spring rather than in the autumn, as a difference in favour of spring dressing of £3 8s. per acre shows unmistakably the serious waste resulting from winter rains.

2nd. That a continued application of nitrate of soda of itself without an equivalent of phosphate of lime in the form of superphosphate, or other phosphatic manure, does but reduce the crop each year, and probably would tend to impoverish the land for some years to come.

We will now refer to the results of the repeated application of various manures upon barley, beginning as in the wheat experiments, with the results of an experiment for three years in succession, with manure from the covered cattle yard and the uncovered cattle yard as follows:—

	Nitrogen Ammonia.	Bush. per acre.	Cwt. Straw per acre.	Gross value.	
				£	s. d.
				1872	
18—Open yard.....	0.46	38¼	23½	11	6 6
19—Covered yard...	0.77	43¼	21¼	12	15 2
				1873	
18—Open yard.....	0.46	43	22½	15	1 8
19—Covered yard...	0.77	45	40¼	17	2 4
				1874	
18—Open yard.....	0.46	41¾	22¼	12	2 9
19—Covered yard ..	0.77	48	29½	14	4 0

As we deal with this experiment at length further on in this paper we will go on to notice an interesting result from these two plots being left unmanured in 1875, to ascertain the effect upon the crop of farmyard manure the second year after its application; for while it is doubtful if any artificial manures are beneficially retained in the soil after the removal of the crop to which they were applied, it is generally allowed that the old-fashioned farmyard manure is retained in the land certainly over the second year.

This view is much strengthened by this result:—

	1875.		Gross value.	
	Bush. per acre.	Cwt. Straw per acre.	£	s. d.
18—Open yard, applied in 1873, yield in 1875	26	17	7	7 4
19—Covered yard	28	17	7	14 6
Compared with the unmanured plot since 1871	20	13½	4	15 10

In addition to an unexhausted value per acre from plot 15 of £2 11s. 6d. the covered yard manure (plot 19) shows £2 18s. 8d. This is the more encouraging from the fact that the soil on which these experiments are tried is a porous mixed soil, and certainly not so well adapted to retain the manure as would be retentive heavy land.

Turning again to our sheet we see the results of an experiment with artificial mixed manures, one containing nearly twice as much ammonia as the other; this was continued for two years with this average result per acre:—

	Containing ammonia.	£ s. d.	
		£	s. d.
20—Top-dressing for barley.....	5.60	15	8 0
21—Ditto	2.60	14	13 11

Then, as you see on the sheet, No. 20 has continued barley up to this time with an annual topdressing of nitrate of soda and superphosphate of lime mixed together. No. 22 has remained unmanured during the six years, and No. 23 has been topdressed with nitrate of soda alone, each year producing as follows in gross value per acre:—

	1872.	1873.	1874.	1875.	1876.	1877.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
20 Mixed manure.	13 13	17 2	8 14 13	3 9 16 6 9	16 6 16 10 9	
22 Unmanured	11 6	2 13 15	11 10 14	3 4 15 10 7	9 10 8 5 4	
23 Nitrate of Soda.	15 1	1 15 14	6 11 9	6 7 6 1 8	12 3 14 10 7	

These results only support those obtained by Mr. Lawes at Rothamsted, and go far to show that with barley at least it is possible to continue year after year with the use of artificial manure containing a high percentage of ammonia, with an equivalent of soluble phosphate, provided the land can be kept clean, which it is possible to accomplish on a limited scale.

As this completes the series of experiments upon corn crops as shown by our sheet, we purpose drawing your attention for a few minutes to the general principles laid down and borne out by the foregoing results.

As concerns the use of covered cattle-yards for converting our straw into manure at the greatest advantage, let us look again at the results of this experiment upon wheat and barley.

Allowing the cost of the manure, rent, labour, and other charges to be the same on both plots, the gross value of the produce of the manure upon wheat per acre was—

	1872.			1873.		
From the open yard ...	14	1	2	16	6	5
From the covered yard.	14	9	0	17	13	3

Or an average gain in favour of the covered yard of 19s. 10l per acre each year.

And the same experiment with barley produced an average gain in favour of the covered yard of £1 16s. 10d. per acre each year.

It may be assumed that the largely increased gain in the barley experiment may be partially accounted for by the fact that the wheat had an autumn dressing, and exposed to the wasting influence of winter rains, while with the barley the manure was ploughed in in the spring, and, moreover, the manure used for barley by analysis showed a smaller proportion of ammonia in the manure from open yard than that used in the wheat experiment, accounted for from the fact that the manure used for the wheat was made after the previous winter rains, while that for the barley was exposed all winter in preparation for the spring.

But as we usually grow about an equal part of wheat and barley on our farms, the average results show a gain by the use of covered yards, as far as the manure alone is concerned, of £1 8s. 4d. per acre.

With your concurrence we will diverge a moment from the immediate subject of this paper, while dealing with the pecuniary advantages obtained by the use of covered yards, to touch upon a few points very nearly connected with this question.

Having had some little experience in fattening bullocks untied up in covered cattle yards, we have found that upon an average each bullock, in the course of fattening, provided sufficient straw be provided, will leave about eight tons of manure, equal to four-fifths of the dressing supplied per acre in these departments. And although it may be said that a greater weight of manure will be produced in the open yards, there are few who will doubt that as the utmost value of wheat-straw itself as manure is something less than 20s. per ton, it can be right to convert straw worth now £3 per ton into manure worth less than 23s. Hence we may deduce this fact that one bullock produces four-fifths or 22s. 8d. of the increased gain per acre by the use of covered yards.

And further in favour of covered yards, surely something may be said of their value for summer fattening, when out of doors the animals would be exposed to flies and overheating.

We may just add that very convenient covered yards may be erected at the small annual cost as interest upon outlay of 7s. per head on each bullock, while this may be reduced by half, in comparing the cost with the advantage accruing as to the open yards which would at least cost 3s. 6d. per head per annum. So we get an advantage equal to 19s. 2d. upon each animal fattened in the covered yards in the results of its manure alone.

And gathering up the several points we have alluded to, the conclusions arrived at are:—

1. That wheat can hardly be grown with advantage continuously on the same land, perhaps owing more to the want of proper mechanical condition than to the lack of a suitable manure.

2. That in using farmyard manure or artificial manure the same considerations ought to influence us—viz., to secure as much nitrogen in the form of ammonia in an assimilative form, mixed with an equivalent of phosphate of lime, as possible, and to bear in mind that phosphate must occupy but a second place, for although manures containing ammonia only, and those containing simply phosphates, repeatedly applied, must exhaust the land, still those containing ammonia only will produce more for the first and second year than a simple phosphatic manure. And while we apply so large an excess of phosphate in our high-class farmyard manure beyond what one, two, or even three crops of corn can require, it would seem that where our corn crops need a stimulant a light dressing of nitrate of soda ought to suffice.

How far it is right for us to follow the evident teaching of the barley experiment bidding us crop the same land year after year with a topdressing easily obtained and applied must be decided by the general state of the land as regards cleanliness and condition, as well as the demand for barley, which of course is limited; but there can be no doubt whatever that the beaten track of our forefathers may be left with impunity, far more than has been generally admitted, but only when in possession of an intelligent and correct appreciation of the requirements of the land and a sufficient command of capital.

Having so far dealt with manures as applied to corn crops, we will direct our attention to the results of the same system adopted in growing roots.

The ground decided upon for mangel, as we said at first had been cropped in the same manner as the wheat and barley plots prior to 1872, when nine plots were measured off, manured, and planted; but as the season was advanced, and the land in a very wet, uncongenial state, the crop was to a large extent a failure. But as it clearly revealed the effect of the manures applied in their relative values, we give here the loss per acre of each experiment after charging the cost of manure and the value of the produce of the unmanured plot.

	Loss per acre.		
	£	s.	d.
24—Manure from open yard on the flat	1	2	4
25— „ covered yard do.	1	0	2
26— „ „ on the ridge	2	6	
27—Ground rape cake on the flat	1	2	4
28—Mixed manure 5·00 per cent. ammonia on the flat	1	2	4
29— do. 2·40 do. do. do.	16	11	
30—Unmanured	0	0	0
31—Shoddy	11	4	
32—Superphosphate of lime	2	0	0

The same plots were again used for the same experiments in 1873, as we felt that, owing to the previous season and the untoward condition of the land, the unexhausted value of the manures might be seen the second year, in addition to the renewed dressings, except in the case of No. 24, which was made use of to try the effect of nitrate of soda alone, as follows:—

	Tons, cwt.	
	Tons.	cwt.
24—Nitrate of soda on the ridge	22	5
25—Farmyard manure on the flat	19	7
26— do. on the ridge	18	2
27—Ground rape cake do.	16	18
28—Mixed manure 5·00 p. c. ammonia do.	16	5
29— do. 1·80 “ do.	15	5
30—Unmanured do.	13	12
31—Shoddy do.	16	17
32—Superphosphate of lime do.	14	18

In 1876 we tried a further experiment in another field upon six plots, all of which were manured with farmyard manure, at the same time as the remainder of the field, and in addition to the farmyard manure we applied various manures to ascertain if artificial manures answered when farmyard manure was used, with the following result:—

		Loss upon each plot after charging for manure and produce of No. 4 plot.	
	3 cwt. per acre	ton. cwt.	s. d.
1.—Superphosphate	3 cwt. per acre	18 19	14 3
2. Nitrate of soda	1½	20 19	1
3.—Nitrate of soda } Superphosphate 3 }	1½	21 8	10 5
4.—No artificial manure		18 17	
5.—Blank			
6.—Guano	2	20 5	12 0

We have found in these experiments that mangels follow very closely upon corn crops in their preference for nitrogenous rather than phosphatic manures, as is shown by the results of shoddy and nitrate of soda, besides those of the superphosphate of lime. The manure from the covered yard again tells a favourable result, while the much vexed question of growing roots on the ridge or flat proves its dependence

upon weather, for in a damp season the ridge appears to advantage, while in a hot summer the flat is not left behind.

The third series of experiments seems conclusively to point to the fact that where farmyard manure of good quality is used it is needless adding any further expense of artificial manures, as each experiment made a loss when compared with that mentioned with farmyard manure only, and charged with the cost of the extra artificial manure, although many of them exhibited an improvement of the dressing.

It is interesting to note that the improvement was such in the nitrate of soda plot as to be only one penny per acre short of the cost, while the superphosphate makes a loss just equivalent to its cost, apparently showing that it did no good whatever.

And now that we have glanced through this paper we cannot but be struck with one thing, that it only touches the great question which it is hoped it may throw some light upon, for the further we probe the mysteries in the science of agriculture yet undeveloped the wider becomes our range of knowledge and the more intense our desire to arrive at the most advantageous means of utilizing that which is ready to our hand in science and nature. Our only consolation in considering the many defects in our present attainments may be in looking back 50 years and witnessing the vast progress in every branch of farming industry, by which we are enabled to cope successfully with difficulties and competition at which our ancestors would have stood aghast.

THE PARIS CATTLE SHOW.

(From *The Mark Lane Express* of June 17.)

The International Cattle Show at Paris is in all respects a grand sight. Not only is there a greater and more various gathering of live stock than has perhaps ever been got together before; but the whole show is so admirably arranged, and the sheds are so well-constructed, that even our Royal Society might in some things imitate with advantage, while other associations might learn—what few, if any, of them know at present—how a show should be arranged. The rows of shedding are not set about towards all points of the compass, with wide intervals between two classes of the same species of animals, as is often the case at our agricultural shows, thus necessitating a vast amount of extra and needless labour and bother to those who wish to make the round, and who are often at a loss where to go in following the numbers in their catalogue. In the Esplanade des Invalides there is plenty of room, and yet all is packed in such a small compass—considering what a great show it is—that it takes but a short time to walk across the show-yard in either direction. Throughout the Show the rows of shedding are parallel, and the numbers follow up and down in regular order throughout each section, except in a few instances, the foreign division (English &c.), where a little alteration has been made in the classification.

Before I left London I read in one of the daily papers that by the success of British exhibitors our own country had maintained her superiority as a cattle producing one. I should say if British superiority in this respect rested on our exhibits at Paris there would be reason to tremble for our laurels; for, with the exception of Mr. McCombie's Scots, which well deserved the high honour they have gained, there is nothing for a British visitor to be proud of in the cattle classes as a whole, while there is much for him to be ashamed of. The English Shorthorns are a wretched lot, and are most decidedly beaten by the French Shorthorns; the Hereford breed is represented by a single animal and of Devons and Sussex together there are only 18 entries. As far as sight-seeing is concerned, this to the British visitor matters nothing—he can see a good show of native stock of his country—as a whole, the best in the world—at Bristol next month. But he would like to see Old England better represented in respect of her roast beef.

With sheep it is better; but here, as in many of the cattle classes, English breeders appear to have sent their culls. With the pigs it is different, perhaps because there was less fear of contagious disease, or the great though necessary nuisance of quarantine on return—which, by-the-by, has to be undergone with pigs, as with other animals, if they are not sold here. At any rate, some of our best breeders have brought some of their best animals

here, and the English pigs are far superior to their foreign rivals.

However, as already remarked, the English live stock is of about the least interest to the English visitor to such a show as this. It is to the French Breeds of cattle, sheep, and pigs that he gives most attention, and those he finds to be well represented. They are of the best of their kind, and although there are not many of the breeds that a British farmer would care to breed from, they are not the less interesting. With those at home it is different. Their interest centres chiefly in the success of their own countrymen, and, therefore, this letter shall deal with the classes in which Englishmen exhibit, leaving the description of the French animals for a future occasion.

With their proverbial courtesy the French have accorded the first place in the catalogue to the foreign exhibits. The first division is for animals of foreign breeds, bred and raised abroad, and belonging either to foreigners or Frenchmen. The first class is for "breeds from the shores of the North Sea," and of this class the first "category" is for Shorthorn bulls of from one to two years. The class—as we should call it—is a poor one. M. Mathieu, of Thorout, Flanders, is first with a roan Shorthorn of no remarkable merit, Lady Pigot being second with a very poor specimen, and M. Tiberghien third. The next class—I must use the term throughout, although the French nomenclature is different—is for bulls of from two to four years. This was only a little better than the first class. Mr. Fox's first prize bull is a useful one, and as there was nothing of any special merit to compete with him he won easily, Lady Pigot being second again, a Dutch exhibitor third, and a Frenchman fourth. In the heifer class there was a little more competition, the Marquis of Exeter taking first honours with a daughter of Telemachus, and Her Majesty the Queen being second. There is a large class of cows, containing some very useful cows in fair breeding condition, two or three of which I prefer to the fatter prize-takers. The Marquis of Exeter is first with Telemacina, which has grown patchy since I last saw her. The Queen is second again, and Her Majesty also receives honourable mention for Benedicte, a nice roan cow. Besides the third and fourth prizes there are some extra prizes in this class, but the Queen's cow is certainly superior to these extra-prize takers.

The only Hereford, a bull, is shown by the Queen. He is a nice level bull, by Alexander, bred by Her Majesty.

In the Devon and Sussex classes there is but little competition, but the animals shown are of good quality. Mr. W. Farthing, of Stowey Court, Bridgwater, is first in the young bull class with a Devon, and Messrs. Stanford, of Ashurst, Steyning, are second with a Sussex; and the order is simply reversed in the class for bulls from two to four years, the prize-takers being the only exhibitors, but equally well deserving the prizes. The Queen is first in the heifer class, with a Devon, and Mr. Fryer is second. For cows over two years Mr. Fryer

takes the first place with a Devon cow, Mr. Farthing being second.

Why there are no Channel Islands Cattle is a mystery I have not yet heard explained. There was one entry, but that does not put in an appearance.

The Ayrshires are represented by a single animal.

Suffolk, Angus, Aberdeen, and Galloway cattle were first classed together as polled, and these classes, although not well filled, were by far the most meritorious of the British Cattle exhibits. In the class for young bulls Mr. McCombie gains the first honour with one of his magnificent polled Aberdeens, and Mr. Macpherson Grant was second with another of the breed. In the class for older bulls there are only two animals, but these are excellent, and here Messrs. Grant and Mr. McCombie change places. In the young cow class Mr. McCombie shows four animals, taking first prize for one, and "honourable mention" for two, Mr. Macpherson Grant being second. The red polled Suffolks were taken out of the class in which they had been entered, and made into a class by themselves, which is "nuts" for Mr. Colman, as his three animals, the only Suffolks here, made three classes, and each take the first prize, against its own shadow. One of these is a very nice cow Mr. Duncan is the only exhibitor of West Highlanders, and Mr. Robertson, with his family, takes the same position with a lot of miserable little Kerry cattle. How Irish visitors must blush to see their native cattle so represented! This is the last of the British cattle division.

Besides the prizes given in the classes, there are three prizes of 2,500 francs value each, offered by the French Agricultural Society for the best group of meat-producing, dairy, and working animals respectively, the competition being open to all exhibitors, French and foreign. The first of these has been awarded to Mr. McCombie, with his Aberdeen-Angus; the second was won with Flemish cows, by M. Bosse; and the third for the Limousin cattle, by M. Cailland.

In the foreign (not French) classes for Sheep the merinos come first, and here, I need hardly say, there are no English exhibitors.

The Southdowns are not a first-rate lot, but Lord Walsingham did not require his best to win here. Besides the first prize in three out of the four classes and the fourth in the other, his Lordship gains the prize of 1,500 francs given by the *Société des Agriculteurs* for the best lot of sheep for the butcher of any pure breed in the show. The other prize-takers are named in the prize list.

The Down classes are pretty well filled, the Oxfordshires especially being very creditably represented. Some of the awards are, in my opinion, and in that of many other Englishmen, open to question. They are given below. Mr. Treadwell is very lucky, and Messrs. Street & Adams are unlucky—perhaps that is about the best that can be said. Mr. C. Howard's first prize in the old ewe class I do not quarrel with, because I think his ewes are of the truest type, though those of Mr. Adams are thicker and more

massive altogether. Some say the latter were disqualified for being too fat for breeding animals, and that is a reason which those of us who have often complained of prizes going to fat instead of to breeding quality should be the last to object to; but why Mr. Treadwell's ordinary pen in the old ewe class was set above Mr. Street's it is not easy to surmise, and I hear that Mr. Treadwell, as one might expect from so good a judge, was himself surprised. Mr. Honor's "Dorset-Downs" well deserve the extra prize which they receive. There is very little Dorset and a great deal of Down in this new strain; but however it has been produced it is a strain of very fine quality, substance, and symmetry. Mr. Russell also gets an extra prize for three very nice Hampshire Downs, and another for Kent sheep.

The Leicesters and Lincolns are more numerous than choice; but the Cotswolds are a grand little lot. Mr. Russell Swanwick was alone, the competitive entries being absent, perhaps in despair of beating such sheep as Mr. Swanwick's. The Cheviots and Black-faced Scotch sheep are not of much account.

The Pig show is a very good one—Messrs. Duckering, Sexton, and Howard take the first prizes. Mr. Duckering, who is a very extensive exhibitor here as elsewhere, takes no fewer than six first prizes; but Mr. Sexton has been awarded the special prize of £40 for the best lot of pigs in the whole show for purity of breed.

The following are the names of the judges for this (the English, &c.) department of the show, and the prizes, taken from the Official Prize Sheet, published to-day:—

LIST OF JUDGES.

PRESIDENT:—M. Bouley.

CATTLE (chiefly English).—M. Malo, Inspecteur-general de l'Agriculture; Mr. Jacob Wilson (England); Mr. H. D. Adamson; M. le Comte J. H. Vander Straeten-Ponthoz, a Clavier (Belgique); M. Bourderonnet, a Saint-Junien (Haute-Vienne); M. A. Burel, a Fongueusemare (Seine-Inférieure); M. Gernigon, a Saint-Fort (Mayenne); M. de la Valette, a Villiers-Charlemagne (Mayenne).

SHEEP.—M. Dutertre, Inspecteur-general de l'Agriculture et des bergeries.—Mr. Hugh Aylmer (England); M. Darblay, a Chevilly (Loiret); M. Lelong (E.), a Maintenon (Eure-et-Loir); M. Siredey, a Fontaine-en-Queusnoy (Cote-d'Or); M. Vaulard, a Caumont (Aisne).

PIGS.—M. Lefebvre de Sainte-Marie, Inspecteur general de l'Agriculture.—Mr. T. Crisp (England); Mr. J. Ross (England); M. Demole, a Crevins-Bossey (Haute-Savoie); M. le Senechal, directeur de la vacherie de Corbon (Calvados) Marquis de Verdun, a Aucey (Manche).

CATTLE.

SHORTHORNS.

Bulls of from 1 to 2 years.—First prize, J. Mathieu, Thourout (Flandre occidentale); second, Lady Pigot, West Hall, Weybridge, Surrey; third, P. Tiberghien Manage, (Hainaut).

Bulls of from 2 to 4 years.—First prize, G. Fox, Elmhurst Hall, Lichfield; second, Lady Pigot, West Hall, Weybridge Surrey; third, M. Verheyden, Dilbeek, Brabant; fourth, M. le Comte de Riocour, Bous-su-en-Lagne, Namur.

Heifers of from 1 to 2 years.—First prize, The Marquis of Exeter, Stamford, Northamptonshire; second, Her Majesty the Queen; third, G. Fox, Elmhurst Hall, Lichfield; fourth, Lady Pigot, West Hall, Weybridge, Surrey.

Cows of 2 years and upwards.—First prize, The Marquis of Exeter, Stamford, Northamptonshire; second, Her Majesty the Queen; third, Robert Bruce, Great Smeaton, Northallerton; fourth, Lady Pigot, West Hall, Weybridge, Surrey; fifth, J. Berger Spence, London; extra prizes: F. Verheyden-Dilbeek, Brabant; J. Mathieu, Thourout; De Wouck-Valdriene, Cras-Avernas.

HEREFORDS.

Bull of from 2 to 4 years.—Prize, Her Majesty the Queen.

DEVONS AND SUSSEX.

Bulls of from 1 to 2 years.—First prize, W. Farthing, Stowey Court, Bridgewater; second, E. and A. Stamford, Ashurst-Steyning, Sussex.

Balls of from 2 to 4 years.—First, E. and A. Stamford; second, W. Farthing.

Heifers, 1 to 2 years.—First prize, Her Majesty the Queen; second, W. Rolles Fryer, Dorsetshire.

Cows, 2 years and upwards.—First prize, W. Rolles Fryer; second, W. Farthing.

AYRSHIRES.

Heifers and cows.—First and second prizes, [not awarded]; third, A. Woods, Aintree, Liverpool.

POLL'D SCOTS.

Bulls, 1 to 2 years.—First prize, W. McCombie, Tillyour, Aberdeen; second, G. Macpherson Grant, Baidalloch, Baetle (?).

Bulls, 2 to 4 years.—First prize, G. Macpherson Grant; second, W. McCombie.

Heifers 1 to 2 years.—First prize, W. McCombie; second G. Macpherson Grant.

Cows, 2 years and upwards.—First prize, G. Bruce, Killy, Aberdeenshire; second, W. McCombie; third, G. Macpherson Grant.

RED POLL'D-SUFFOLKS.

Bulls, 1 to 2 years.—Prize, J. J. Colman, Norwich.

Heifers, 1 to 2 years.—Prize, J. J. Colman.

Cows, 2 years and upwards.—Prize, J. J. Colman.

HIGHLAND SCOTS.

Bulls, 2 to 4 years.—Prize, J. Duncan, Argyllshire.

Heifers, 1 to 2 years.—Prize, J. Duncan.

Cows, 2 years and upwards.—Prize, J. Duncan.

KERRY.

Bulls.—First prize, J. Robertson, Malahide, Co. Dublin, Ireland; second, M. Musard, Villequier, Seine-Inférieure.

Cows.—First prize, Mrs. J. Robertson; second, J. Robertson; third, R. T. Robertson.

SHEEP.

SOUTH-DOWNS.

Rams not over 18 months.—First prize, Lord Walsingham, Merton Hall, Thetford; second, H. Goringe, Shoreham, Sussex; third, J. J. Colman, Norwich, Norfolk; fourth, Crossweller and Coleman Emery, Storrington, Sussex.

Ewes not over 18 months.—First prize, H. Goringe; second, H. R. H. the Prince of Wales; third, J. J. Colman; fourth, Lord Walsingham.

Rams over 18 months.—First prize, Lord Walsingham; second, J. J. Colman; third, Crossweller and Coleman Emery; fourth, the Prince of Wales.

Ewes over 18 months.—First prize, Lord Walsingham; second, Crosweiler and Coleman Emery; third, H. Gorrings; fourth, the Prince of Wales.

OXFORDSHIRE DOWNS.

Rams not over 18 months.—First prize, J. Treadwell, Upper Winchendon, Aylesbury; second, C. Howard, Biddenham, Bedford.

Ewes not over 18 months.—First prize, C. Howard; second, J. Treadwell.

Rams over 12 months.—First prize, G. Street, Maulden, Bedfordshire; second, C. Howard.

Ewes over eighteen months.—First prize, C. Howard; second, J. Treadwell.

HAMPSHIRE DOWNS.

Rams.—Extra prize, R. Russell, Horton Kirby, Dartford, Kent.

Ewes.—Extra prize, R. Russell.

DORSET DOWNS.

Rams.—Extra prize, G. W. Homer, Borechester.

Ewes.—Extra prize, G. W. Homer.

LEICESTERS.

Rams not over eighteen months.—First prize, G. Turner, jun., Thorpelands, Northamptonshire; second, R. W. Cresswell, Ravenstone, Ashby de la Zouch.

Ewes not over eighteen months.—First prize, G. Turner, jun.; second, R. W. Cresswell.

Rams over eighteen months.—First prize, R. W. Cresswell; second, G. Turner, jun.

Ewes over eighteen months.—First prize, G. Turner, jun.; second, M. Noblet, Clateau-Renard.

LINCOLNS.

Rams not over eighteen months.—First prize, J. Pears, Mere, Lincoln; second, Messrs. Dudding, Wragby, Lincolnshire.

Ewes not over eighteen months.—First prize, R. Catling, Wisbeach, Cambridgeshire; second, J. Pears.

Rams over eighteen months.—First prize, R. Catling, second, J. Pears.

Ewes over eighteen months.—First prize, J. Pears; second, Messrs. Dudding.

IMPROVED KENTS.

Rams.—Extra prize, R. Russell.

COTSWOLLS.

Rams not over eighteen months.—Extra prize, Russell Swanwick, Cirencester, Gloucestershire.

Ewes not over eighteen months.—Extra prize, Russell Swanwick.

Rams over 18 months.—Extra prize, — Russell Swanwick.

Ewes over 18 months.—Extra prize, — R. Swanwick.

BLACKFACED SCOTCH.

Rams.—First prize, J. Duncan, Benmore Kilninn, Argyllshire; second, W. Beattie, Crochnacoonie Petlige, Ireland.

Ewes.—First prize, W. Beattie; second, J. Duncan.

PIGS.

Large Black Sows.—First prize, R. E. Duckering, Kirton Lindsey, Lincolnshire; second, R. Swanwick, Cirencester; third, A. Stewart, Gloucester; fourth, W. Hewer, Highworth, Wiltshire.

Large White Boars.—First prize, J. and F. Howard, Bedford; second, R. E. Duckering, Kirton Lindsey, Lincolnshire.

Large Black Sows.—First prize, R. E. Duckering; second, W. Hewer; third, R. Swanwick; fourth, A. Stewart.

Large White Sows.—First prize, R. E. Duckering; second, J. and F. Howard.

Small Blacks.—Extra prize for purity of breed, £40.—Prize, G. M. Sexton, Ipswich.

Small White Boars.—First Prize, R. E. Duckering, Kirton Lindsey, Lincolnshire; second, Lieutenant-Colonel Cooke, Wales; third, G. M. Sexton.

Small Black Sows.—First prize, R. E. Duckering; second, G. M. Sexton.

Small White Sows.—First prize, R. E. Duckering, Kirton Lindsey, Lincolnshire; second, G. M. Sexton, Ipswich, Suffolk; third, Her Majesty the Queen.

SPECIAL PRIZES.

W. McCombie, Tillyfour, Aberdeen, for his group of Aberdeen-Angus cattle.

Lord Walsingham, Merton Hall, Thetford, for his group of Southdown sheep.

G. M. Sexton, Ipswich, Suffolk, for his group of Suffolk pigs.

Gold Medal to J. K. and R. R. Fowler, Prebendal Farm, Aylesbury, for their exhibits.

Her Majesty the Queen, for Shorthorns, Herefords, and Devons.

Lady Pigot, Weybridge, Surrey, for her group of Shorthorns.

NEWCASTLE HORSE SHOW.

Of horses—divided into three sections and seven classes—there were about sixty entries.

HORSES.

DRIVING CLASSES.—Harness mare or gelding, 15 hands and over, to be driven on the ground, 1st, £10, Jno. Wilson, Howden Dene, Corbridge-on-Tyne (Norfolk); 2nd, £5, J. and J. Meikle, Newcastle; 3rd, £2, W. D. Cruddas, Elswick Park Terrace, Newcastle (Rolland).

Harness mare or gelding, under 15 hands and over 12 hands 2 inches, to be driven on the ground, 1st, £10, Robert Jefferson, Todd's Nook, Newcastle; 2nd, £5, William H. Hley, Old Shildon, Bishop Auckland (Folly); 3rd, £2, F. M. Laing, 17, Windsor Terrace, Newcastle (Paddy).

Pony, not exceeding 13 hands 2 inches, to be driven on the ground, 1st, £5, Samuel C. Steven, Harborne, Birmingham (Jack); 2nd, £2, Wm. Mathwin Angus, Saltwell Hall, Gateshead (Toby); 3rd, £1, W. Murray, M.D., South Dene, Saltwell, Gateshead; h. c. John Slater, £14, Westgate Road, (Newcastle).

Pony, not exceeding 13 hands, to be ridden on the ground, 1st, £3, W. M. Angus, Saltwell Hall (Toby); 2nd, £1, W. Murray, M.D., South Dene, Saltwell, Gateshead.

LEAPING CLASSES.—Mare or gelding, 15 hands or over, that shall jump the fences best to the satisfaction of the judges, 1st, £10 and silver cup, value £5 5s., given by Mr. A. Gillespie, Newcastle, H. Rastall, Ruswarp House, near Whitby (Maid of the Hills); 2nd, a saddle and bridle, value £7, given by Mr. Edward Newton, Newcastle, King and Gillespie, 83, Westgate Road, Newcastle (Speck); 3rd, £2, John Dickinson, jun., Chesterwood, Haydon Bridge (Speculation).

Mare or gelding, under 15 hands, that shall jump the fence best to the satisfaction of the judges, 1st, £8, Thomas Beethorpe, Sneaton, Whitby, Yorkshire (Wildfire); 2nd, £4, J. Dickinson, jun., Chesterwood, Haydon Bridge (Lady Arm-

strong); 3rd, £1, Thos. Cawthorn, Hobson Hotel, by Lintz Green (Hobson Lad).

Mare or gelding, not exceeding 14 hands, that shall jump the fence the best to the satisfaction of the judges, 1st, £5,

Wm. Eassy, Whickham, Gateshead (Monk); 2nd, gold mounted whip, Thomas Cawthorn, Hobson Hotel, by Lintz Green (Hobson Lad); 3rd, pair of spurs, William Hey, Old Skilton, Bishop Auckland, (Polly).—*Newcastle Courant*.

THE AGRICULTURAL HALL HORSE SHOW.

"And when the Epsom feast is o'er, and racing jackets flash no more," then the Agricultural Hall Company commenced their fifteenth annual show of horses—on Saturday, June 8th, in the same week. On opening our catalogue we find that thirty-one gentlemen have paid two guineas each to start their horses for the weight carrying hunters prizes, a race, or competition that we believe to be a greater lottery than any Derby, and that the "glorious uncertainty" of the turf is ten times more applicable to horse shows. There is no doubt that the spirit of emulation in the chase as on the turf and the road has had a great deal to do with the improvement of our breed of horses, and we cannot dispense with the services of the thoroughbred stallion in breeding hunters and hacks even now. One of the first we recollect was Mimos, a bit of a savage, and then almost as white as snow, and on the back of Rhadamanthus, a half-bred four-year-old son of his up to 16 stone, looking like a mole-hill on the top of a mountain, we cleared the brook that winds through the field where Hampden fell. Since then a monument has been erected—not to us—but to the great patriot. In serious moments we have often thought whether some two hundred and odd years hence a monument will arise where now stands the Agricultural Hall, as high as that which rears its head on Fish-street-hill, topped by an equestrian statue to the memory of the noblemen and gentlemen who have so kindly acted as judges of hunters, the master of foxhounds, and others who have awarded jumping prizes, and nearly cracked their sides with laughter when some unlucky competitor, made beautiful for ever, has emerged from "Madame Rachel's Bath;" and to those who have expressed an opinion as to which horse would make the best hunter, and those who have criticised them in black and white, or if we all went before Mimos, Rhadamanthus, and Eacus—we don't remember having seen the latter—and said we had been picking out from appearances, and from what we could see of them in a circus, the horses which would make the best hunters, we should get more kicks than halfpence, for on looking over many a grand stud of hunters we have been told in the box of a very ordinary looking one, that there is not a better horse in the lot, and the day is never too long for him; and in that of "perfection's self," he is as soft as soap and not worth his litter; a third can go if in the humour; a fourth has the will but no constitution; and a fifth you would rather run than ride such a brute. In a word we are indebted more to the hardy constitutions, pluck, and endurance which our ancestors prized so much than to appearances for our breed of horses, as who can say, let him be ever so

good a judge, without a fair trial, that such a horse will not when the least pressed shut up like a hedgehog, or that another will not in a good thing, when covered with a network of swollen veins glowing through a coat reeking with sweat, strain every tremulous muscle and pliant sinew to the utmost, while his heart of hearts is throbbing ready to burst, and struggle on with shortening and faltering stride, sobbing with a glaring eye, to keep within ear of the music he loves so well though the who-loop should prove his requiem? That's the sort of horse to encourage the breed of and will bear a comparison with "the world's great heroes" that Napoleon said never knew when they were beaten. Whether the decisions come to in the space afforded in the Agricultural Hall ring tend to improve or injure the breed of hunters, is like the decisions, simply a matter of opinion, for the freedom of which we have always plumped, we leave to the gentlemen of the jury, and in doing so beg to say if we have offended in criticising horses or shows as the policemen did, after cracking several of Her Majesty's liege subjects' heads: "If in doing my duty as an officer I have hurt any of your feelings, as a gentleman I am very sorry for it." As a show of horses it is not an improvement on any previous show, though better than we expected to see, taking into consideration how bad everything is and has been for some time past, so much so that we fear there are many men and women who do not think as Shakespeare did, that they are only players, having found that playing, at going to bed without their suppers is a very different thing to going to bed supperless. When we talk about horses—but here come Viscount Cole, Captain James Baillie, and Mr. A. Holne Semmer, who are nearly half-an-hour after the time advertised before they commence with the weight carrying hunters. The weight carriers were only four short of last year's entry, and Mr. Harvey Bayly's "big 'un" Tavistock looking better even under cover than he did in the open when galloping through the slash at Alexandra Park, and fit to carry Daniel Lambert again, scored a double victory, being first in his class and the best of all the hunters in the Hall, Mr. Jacob Smith playing second to him with Statesman, the champion four-year-old of last year at Alexandra Park. Mr. Newton's The Moor, which wants a couple of inches off his height added to his breadth, beat him for second honours, though at Islington he was not placed, the third being Major, a dark chesnut, with anything but great hunting characteristics, as he reminded us more in form and action of the Yorkshire roadster than his sire, Theobald, or his dam's sire, Orpheus, both to be found in *the* stud-book—we say *the*, as there are a

many about, but we expect, when the pig can sing, "My birth is noble as thine own—let this attest" (producing pedigree), we shall do as the Boudins do, who never ask for a pedigree when dealing with one another, but have always a long one ready-cooked for a foreigner! Mr. Billington's two "dark" horses, well known in the Agricultural Hall, looked and went well. Q. C. being a very varmint-looking old fellow, and Loyola, though somewhat of a charger to look at, can use his hind legs well. Their owner is an unlucky exhibitor but a good loser, and is to be seen after the verdict as before, and not pulling a face—like some—as long as their horses' heads. Another black, of hunting character, was the rather thick-shouldered Silkstone of Mr. Seymour. Mr. Richard, better known as Dick Webster, was on an old gentleman's horse not far from the ground. Mr. Saunders's Rob Roy was very showy, but scarcely up to as much weight as some of the others. Messrs. Cooper's Colonel was a short, old-fashioned horse, rather high on the leg, and looked more like keeping his rider out of the dirt than going through it. Sir F. A. Constable's Emperor, by Stockton, is a big, powerful horse, with a machiner's shoulders; and Mr. Taylor's Beauty is a leggy one, with no back ribs; while Mr. Thorne's Halcyon, with our peaceful days, we have forgotten, and some others not worth remembering. The hunters without condition as to weight, of which there were twenty-six entered, and among them many nice hunting-like horses, included the well-known Rossington and Baldersby, that were first and second in two hunting classes at Alexandra Park last year. Rossington being the champion, but here Baldersby gets the first colour. They have much improved, the Edwinstowe nag being perfection in the get up. Rossington, when going out of the ring, gave Baldersby a look, as much as to say, "We shall meet again at Philippi!" The third horse, Luxury, we said a good word for at Muswell Hill when commended; while Salem, from the same stable, who was second there, was one of the first to be shown out of the ring at Islington. One of the most varmint, hunting-like horses in the ring, and a lazy, oily goer, that looked like keeping on till Christmas, was Lord Tredegar's light bay Cross Stitch, by Volturao, though not a bit like him, and fared no better than Mr. Crawshaw's old-fashioned Barry, and the fiery-like flyer Masterpiece, from the same stable. Barry has taken prizes at Islington. Some of the others worth naming were Mr. Penn's Game Lad, Messrs. Croswell and Emery's Pathfinder. Mr. Jameson's Precocious Peg, Mr. W. Richards' Nutpecker, and Mr. Cooper's Aylesbury, which wants time to make up. The four-year-olds were, with some few exceptions, very moderate, and we thought it a very close thing—having more kicks than halfpence for giving an opinion without a fair trial—between Golden Hoop, the Manchester and Alexandra Park hero, and Mid Lincoln, by Snowstorm, which had almost too much knee action for a hunter, as he was more hardy-looking than the victor. Graffham, the property of Mr. Abbott, was a very useful horse and moved well though a

trifle thick in the shoulder; then he is by Young Touchstone and there you have the hereditary complaint. Mr. J. Robinson's Emperor, a very hunting-like horse of breed, looked very much like winning—he was a wily looking one. The others which took our eye were Mr. Matthan's Madeline, very neat, Mr. Harvey's powerful Warrior, taking something after Hotshot, Mr. Kendle's Rifleman, another powerful nag, and a useful bay of Mr. Darrell's. We had almost overlooked one of the most promising in the class, Major Peploe's Publican, a powerful hunting-like bay by Double X, with good hind leg action. The hunters not exceeding fifteen two were poor with the exception of the very hunting-like Dandy of which there was more than the very neat Nobleman. Lamdash is a varmint looking roan, and popped over the gorse-topped rails as if he had been used to the circus all his days. Castaway looked like a cast-off from the racing stables. He is well known with the Warwickshire and belongs to the Earl of Camperdown and may be a good horse. A friend of ours once bought a horse "well known with the Surrey" and it turned out that he was "a deal too well known," as he had broken two or three people's collar bones. We have ticked Mr. Cooper's Nobleman, Mr. South's Ruby, Mr. Bassett's Polly, Mr. Blaxland's Knox, Mr. W. Redfern's Zouave, and Mr. J. Lampard's Walnut, for something good, but a thunderstorm coming on made the hall so dim that we could not see to make our notes for a time, while the horses, their riders, and the judges, in a blue mist, looked more like spirits from the vasty deep than themselves. Then came the Cup, which is a tale that has been told in the weight-carrying hunter class; followed by the popular farce of the roadster stallions, as they with their runners—especially a gentleman in charge of Fireaway the Second—create plenty of mirth as they rattle up and down the ring, shouting "Hie! hie! hie!" and "Wo! ho! ho!" Fireaway the Second for which we have always said a word in favour of his going, was made the champion, the second being a hack stallion, rather straight and peacocky in his back, but a wonderfully easy and fine goer, though it was a near thing between him and Mr. Flanders' Confidence, a well made roan of the Norfolk stamp and a very true stepper, with Mr. Grout's compactly built cob Lamplighter, and Mr. Kingwell's Young Harkaway, a very quick mover well up. There were five or six more in the class. Colonel Ewart, Lieut.-Col. the Hon. Caryl Craven Molyneux, and Capt. H. Candy, then took in hand the "riding horses," with fine action and quality, at a quarter to five and continued judging until half-past seven. Nell Gwynne, a very nice chesnut mare and pretty stepper, was placed first in a small class of any height exceeding 15 2 hands, the second being a rather leggy horse with nice action, ridden by a guardsman, and the third a very neat chesnut mare by Ely with a lady up. Shakespeare was in the class and is up to weight; he is now the property of Mr. Tompkins. Charles H. was proclaimed king of the weight-carrying cover hacks and roadsters, we need hardly say that he is a roadster

with grand action and does not remind one of "on my thorough bred hack to cover I rattle." Neither did Lincoln, a very nice cob, and another Yorkshireman ridden by Mr. Allen, of Seymour Place, who was up in nearly every class on something good. The third was a skew-bald of fair form from The Wilderness. Lady Spencer Churchill's Lottery is a very compact park hack with stylish action without overdoing it, and Mr. Hudson's Perfection, a brown of great power; Miss Moffat's Black Prince, a park hack with fashionable action. Sir George Wombwell's Sunbeam, with Mr. Allen up, a very clever mare that we noticed in our Yorkshire report last year, cantered off with the first money, the second going to Telephone, rather a stale looking brown whose hind leg action was not powerful. Lady Adelaide, being a fussy, bustling hack that would keep her rider and herself too in a perpetual stew should they be taking an airing in warm weather. Sir David Baird's Cazelle, Mr. Moore's Frisk, Mr. Simpkin's Cornet, Mr. Doulton's Topsy, and Mr. Bayly's Nobleman were in a class of thirty-nine, the judges winding up a very long day with some decent ponies of all sizes under 13 3 hands, the prizes going to three very nice ones, while the children, little boys and girls, who cleared the gorse rails in a very plucky manner on their little tits were not rewarded even with a sugar plum. A class of harness horses, and the park cobs were left till Monday.

PRIZE LIST.

Hunters, weight carriers.—First prize, £60, T. H. D. Bayly, Edwinstowe, Newark (Tavistock); second, £30, J. Smith, Humberton, York (Statesman); third, £20, J. Robinson, Hull (Major). Commended: A. H. Eillington, Ashford (Loyola).

Hunters, without condition as to weight.—First prize, £60, J. B. Booth, Killerby, Catterick (Baldersby); second, £25, T. H. D. Bayly (Passington); third, £15, Messrs. Allen and Haines, Seymour Place, Bryanstone Square (Luxury).

Hunters, four years old.—First prize, £50, F. P. Newton, Norton, Malton (Golden Drop); second, £25, J. E. Davy, Tashwell, Louth (Mid Lincoln). Commended: R. J. Kendle, Wresneham, Erandon (Rleman); J. Robinson (Emperor).

Hunters, not exceeding 15·2 hands high.—First prize, £40, W. Richards, Ashwell, Oakham (The Dandy); second, £20, W. J. Menzies, Malpas (Lumlash). Commended: The Earl of Camperdown (Castaway); and T. H. Bayly (Nobleman).

Cup for the best horse in any of the hunting classes.—T. H. D. Bayly, Tavistock.

Roadster stallions, trotters.—First prize, £50, Enfield Stud Company (Fireaway the Second); second, £15, G. Holmes, Scarborough (Young Fireaway).

Riding horses.—First prize, £20, G. Cox, Stamford Street (Nell Gwynne); second, £10, K. Fraser, Albany Street Barracks (Strasburg); third, £5, W. and G. Salter, Pimlico (Duke of Cambridge).

Cover hacks and roadsters, weight carriers, not exceeding 15·2 hands.—First prize, £20, J. Robinson (Charles II); second, £10, J. Ritchie, The Limes, Finchley (Lincoln); third, £5, T. Jay, Wimbledon Park (Norfolk Mixture).

Park hacks and ladies' horses, not exceeding 15·2 hands.—First prize, £20, Sir G. Wombwell, Newburgh, Easingwold (Sunbeam); second, £10, G. A. F. Quentin, Woodleigh, Cheltenham (Telephone).

Ponies, not exceeding 13·3 hands, in saddle.—First prize, £15, J. Wilson, East Id (Polly); second, £8, W. P. Birch, Wellingboro' (St. Patrick); third, H. Frisby, Buckingham Gate (Queen Polo).

Park cobs, high steppers, not exceeding 14·5 hands high.—First prize, £20, Sir G. O. Wombwell (Fairy Queen); second, £10, Lady E. S. Churchill (Matchless); third, £5, Mrs. Frisby (Queen Adelaide).

Harness horses, not exceeding 15·2 hands high.—First prize, £20, T. Benton-Erith, Huntingdon (Cock of the Walk); second, £10, the Strand Stud Company (Expectation); third, £5, Major G. A. F. Quentin (Lady Rowena).

Not exceeding 14·3 hands high.—First prize, £20, H. Wayman, Nelson House, Downham Market (Maritan); second, £10, Lady E. S. Churchill (Matchless); third, £5, Captain Hanbury, Ascot (Cherky).

Pair of phaeton horses, not exceeding 15·2 hands high.—Prize, £25, H. Frisby (Eclipse and Echo).

Pair of ponies, not exceeding 14·3 hands high.—Prize, £20, Miss Moffat (Bean and Belle).

On Tuesday, Baldersby, the prize hunter, without condition as to weight, and Fireaway the Second, the prize roadster stallion, were disqualified for unsoundness. Both these horses are well known prize-takers, and if the judges were of opinion, as we will take it for granted several sets before were, that Baldersby's unsoundness does not and will not interfere with his natural usefulness as a hunter, and Fireaway the Second's infirmity does not and will not prevent him from getting sound stock, then they are sound enough. Sir Hercules was a roarer, and got roarers, but he got Irish Birdeatcher, the sire of The Baron, which was the sire of Stockwell, the well-known sire of Blair Athol, and we cannot say how many more. Defence, another son of Whalebone, was blind, and got some blind cobs; his daughter, Defenceless, was blind, but the dam of Caractacus, which could see well enough to win the Derby, and get Claudius, the first prize stallion at the Alexandra Park Show and second at Eath and West of England. In fact, if we disqualified hunters for one of the many things which constitute unsoundness we should have nothing but wooden brutes that could not go fast enough to make themselves unsound, and if we did the same with stallions and mares there would be an end to racing, hunting, and Rotten Row.

"Thus their lives they still do pass,
She a virgin—he an ass."

We do not blame the veterinarian, and the rules we have not seen. One year at York the late Professor Spooner asked us which we would give the prize to, a sound or an unsound horse? We answered—"That depends, Professor, on what the unsoundness is, and what the horses are?" Dr. Johnson says, a horse is an animal, a wooden machine."

MOWING TRIALS AT NANTES, FRANCE.—At these trials, which were brought to a conclusion on the 1st of June Messrs. Harrison, McGregor, and Co. gained the first prize consisting of a gold medal and 500 francs.

L I V E S T O C K N O T E S .

On my return from Oxford I find upon my table two catalogues of exceeding interest, that of Sir Curtis Lampson and Mr. Holford's united sale, both of whom have been such spirited buyers, and that of Mr. B. B. Groom, who spoke such fair words at the last Berkeley sale, and the forced dispersion of whose numerous herd in these hard times, so far from the English market (because most men like to see before they purchase), is likely to cause a fall of prices in great favour of the buyer. What will be is dark, but should the demand be slack there is full reason to understand the fact, and there is no cause to doubt the future success of our fairly-conducted home herds, because really as yet the demand for choice females greatly exceeds the supply. However, we shall shortly see. The Papillon Hall sale (Mr. Holford's) opens with Winsome 12th bred and purchased at Holker, the second lot being Lady Geneva Waterloo, bred by Lord Skelmersdale, and therefore likely also to be nice. Then come Waterloos, Duchesses, Nancys, Walnuts, Js. Didos, Charmers, Tuberoses, in considerable number. From personal inspection some time since I know the herd to have considerable merit, and the animals are likely to be found in capital order. The stock of Grand Duke 23rd struck me as being of remarkable merit, especially over the back. Those who want to begin have in Sir C. Lampson's Brunettes a singular opportunity of securing several females at once of one family (the easiest plan of getting a satisfactory herd together), which in this instance, be it remembered, descends from Sockbun Sall, "of notorious milking properties," as an old breeder termed her, and as far as Blanche 2nd by Norfolk is identical in pedigree with the Golden Duchesses, of which Mr. Eastwood was so enamoured. Both sorts atop have Booth and other comparatively alien blood. But methinks, if the Brunettes be shapely and sorty, the modern breeder can afford to steer in the wake of such skilled compounders as Mr. Eastwood, who so late as 1867 followed his pets into the fire of a Welsh sale.

At Oxford the plash of incessant rain made the ground a perfect swamp, and kept visitors away. The Shorthorns were not of the first order, although there were many which in older and less saucy days would have been considered prime. Mr. Kennard, with his white bull-calf, Queen Mary's son, shows that his material is *reproductive of like*. He has been breeding somewhat "in and in," the best way so far as it is safe, and until signs of feebleness arise, of attaining a general type in one's herd. This victorious youngster was compared to Jonas Webb's memorable First Fruits at the Battersea Show. First Fruits was, however, high at the tail, whereas Mr. Kennard's exhibit is level as need be, and has a pleasanter bend than the London winner had. The heifer calves, while a nice level-backed daughter of the Duke of Cornwall's, which, with a deeper carcass, might have won the prize. But she was a little light to

look at beside the winners, although better than one at least over loin and crops. The first-prize cow in milk was wonderfully neat and meaty, as might be expected from her breeding. Her dam was by Lord Chancellor (20160) (Jonas Webb's), got by Usurer out of a Cambridge Rose cow. Usurer was very stylish, and the Cambridge Roses were very deeply padded over the back. Then, this winning cow's sire was Satan (27430), bred by Captain Oliver, and a mixture atop of Cherry Grand Duke (23554), Grand Duke 7th (19877), Romulus Butterfly (18741), of Barmpton Rose foundation, and the rest the Sweetheart Charmer blood. There was every reason, then, for her to be neat and fleshy. The reading of such a pedigree would suffice to predict it, and is new testimony in favour of analysis. Being only able to arrive on the second day of the show, when the animals were not paraded, owing to the heavy rain, one was unable fairly to canvass their respective merits. It is very wonderful how on so very small an area the Hereford men manage to breed such good animals. There would seem to be such necessity for dangerous in-breeding. Possibly they obtain "differentiation" of blood by re importation of sold animals. Otherwise one does not see how they can go on so successfully as they do. If they would but paint their white faces, and get generally a better milking character, they might be adopted for crossing with, and would soon fetch costly prices such as at present they do not reach. I was greatly interested in the Channel Island cattle, of which there was a good show, and by help of some intelligent teachers went over my grammar and accidence again. The points to judge by in Alderneys are so different from those by which we estimate the Shorthorn, Hereford, &c., that for the public benefit I am induced to note them down. In the first place, over the crops you cannot have a cow too shrunken. Their back, then should resemble the withers of a horse that are unusually high; in fact, imagine a floor-tile four inches deep, standing on edge and covered with skin, and you have an idea of what the crops of an A E Alderney cow should be. Then, her ribs should not spring too suddenly, but have a comparatively flattish bend, and from the back rib onward a certain amount of slackness is allowable. The quarter should be long, and the tail laid in a wide trough, the bones opening on either side. The muscles down the thigh should be withered into a sort of channel, and from the under upwards a sort of horse-shoe pattern of hair is looked for, the "escutcheon," as they designate it, of the true breed. "The Americans will have this," they say. It must be seen to be understood. The bag should be square as possible, and the teats, of good size, some three to four inches apart. The head should be long and fine, and deer-like. The interior of the ear and the skin of the tail should be as golden yellow as possible, and the

long black. Silver grey is, perhaps, the most taking colour, but as to hue, judges are not over particular, provided the animal be "self-coloured," that is be all in "shades," as the ladies say of the same tint. The appearance of *white* in patches or stripes obtains the name of "broken colour," and is supposed to indicate some introduction of alien blood, whereas to the uninitiated eye this tortoise-shell marking is pleasant. The Channel Islander's only idea of a cow is that she shall *milk well* and the yield be rich, and such are the points which long experience and study have led them to value as indicative of high dairy excellence. The horn, by the way ought to be dark tipped and yellowish below.

These points of the Alderney milker are not altogether unlike those enumerated in a verse in Youatt, as descriptive of the Yorkshire cow, in which the character of the "Holderness and the Durham beautifully mingles," though somewhat different.

"She's long in her face, she's fine in her horn,
 She'll quickly get fat without cake or corn,
 She's clean in her jaws, and full in her chine,
 She's heavy in flank, and wide in her loin,
 She's broad in her ribs, and long in her rump,
 A straight and flat back without ever a hump,

She's wide in her hips, and calm in her eyes,
 She's fine in her shoulders, and thin in her thighs.
 She's light in her neck, and small in her tail,
 She's wide at the breast, and good at the pail,
 She's fine in her bone, and silky of skin,
 She's a grazier's without, and a butcher's within."

The moral one derives from this is that the accumulated experience of dairymen show that the rounded crops which are essential in the showyard are not as a rule attainable in the *deep milking* kind. The question is, then, which is the most desirable type of cow? R. Booth, we know, preferred meat to milk, and attained the roller formation in his animals; Bates went rather for milk, Sir C. Knightley, so far as he could, for both. Which breeder is it desirable that we should copy in our herds?

VIGIL, June 14.

Scene in a horse-car. Seats all occupied. Enter a person dressed as a lady. Bright little boy rises and off rs his seat. Lady drops into it with an air of slight disdain. Boy—"O, I beg your pardon, did you speak?" Lady—"No, I didn't say anything." Boy—"Oh! excuse me, I thought you said, thank you." Lady, in high dudgeon—"You may have your seat." Boy (resuming it)—"Well, I'll thank *you*." Passengers convulsed. Lady disappears at next street crossing.—*Boston Transcript.*

BATH AND WEST OF ENGLAND SOCIETY.

MEETING AT OXFORD, JUNE 10 TO 14.

The exceedingly favourable auspices under which the Oxford Meeting commenced last Monday led to anticipations of financial success, which, we fear, could not possibly have been realised, owing to the disastrous weather which set in on the second day and continued more or less to its close. On Tuesday a perfect deluge of rain made the show-yard in a wretched condition, and rendered the attendance of visitors almost impossible. On Wednesday the weather was stormy, and the ground still very uncomfortable, especially to ladies, to whom Agricultural Societies' Meetings owe a great deal of their financial success. It will be seen from the following table that the opening day was a good one, and there can be little doubt that but for the unfortunate weather the Oxford Meeting would have been as successful financially as it was in every other respect.

	Oxford, 1878.	Bath, 1877.	Hereford, 1876.
Monday	3,881	2,357	1,814
Tuesday	2,081	8,266	3,914
Wednesday	6,452	17,002	10,668
Thursday	19,378	54,365	28,481
Friday	7,607	14,487	4,164
Total	39,399	76,477	49,041

The arrangements were excellent, and the site, which was everything that could be desired, was furnished gratuitously by Mr. G. Herbert Morrell, in addition to presenting £100 to the general fund, and in other ways contributing largely to the attractiveness of the meeting.

As the funded capital of the Society has increased from £2,068 in 1853 to £12,000 in 1878 we trust the loss which may accrue from the Oxford Meeting will be easily and cheerfully borne, and that it will be more than retrieved in the future career of the Society, which has now reached the 101st year of its existence. The entries at the Meetings of the Society for the past ten years are as follows.—

Year.	Place of Meeting.	Stock Entries.	Implement Entries.
1855	Falmouth	292	1240
1859	Southampton	528	3000
1870	Taunton	520	3150
1871	Guildford	536	3512
1872	Dorchester	673	2443
1873	Pinworth	721	1953
1874	Bristol	740	4100
1875	Croydon	806	3120
1876	Hereford	723	3200
1877	Bath	816	4200
1878	Oxford	780	3339

Besides the ordinary agricultural stock, the numbers of which in the several classes have already been given, there was a large show of poultry and pigeons, the entries numbering 631. The prizes, exclusive of those awarded to the poultry, were for cattle, £940; sheep, £419; horses, £110; pigs, £160, and £10 10s. for butter; £255 champion prizes and £10 for cattle, given by the Oxfordshire Agricultural Society.

Amongst the more distinguished visitors were the Earl and Countess of Macclesfield, Sir Henry Dashwood, Lord Jersey, Earl of Abingdon, Earl Portescue, Sir Alexander Hood, Sir W. Vernon Harcourt, M.P., Mr. Hall, M.P., and Mrs. Hall, and Mr. and Mrs. G. H. Morrell.

THE HORSES.

Heigh, ho! When things had come to the worst they were sure to mend, but we had not seen the worst yet—we were told both on the rail and in the show-ground by shrewd business men. If the Islington and Alexandra Park horses were not up to previous shows, those at Oxford followed suit, both in number and quality, when compared with those at Bath last year, more especially the agricultural horses. For though there was a capital ring, an excellent stand, and good accommodation for the jugs, the boxes in number were small, while absenteeism was well represented by a beggarly account of empty ones, and the occupants of the others, in many instances, reminded us more of deserters and usurpers from the pit and some even of "the gods" than the show and "fashion" of the dress circle. Who would ride a bad horse or show one, or drive a bad pen if he could get a better? What, ho! Waiter, bring us another. Why should we write this down? Because the pens in coffee-rooms, as a rule, are such bad goers that writers' ideas vanish with the post before they can register them. We publish this in no selfish spirit, but more for the benefit of those fair ones whose spouses ponder and pause, and ponder and ponder, after getting as far in a letter as "My dearest *Jemima*" or "*Sarah Ann*" as the case may be—but we are diverging. Then, such names as Beaufort, Fitzhardinge, Loyd Lindsay, Barlow, E. and A. Stanford, and some others were the more conspicuous by their absence among the exhibitors of horses in the catalogue; while that of Ellesmere was to be found in every class of agricultural horses, and those of Arkwright, Bailey, and Swanwick among the exhibitors of hunters and hacks, and last though not the least, as supporters of the show, were Messrs. Battams and Trist those two well-known rivals in the ring, the former with a very strong string. Messrs. R. G. F. Howard and J. E. Parsons (the latter armed with a tape, and who some of the lookers on said was measuring the horses for breeches) took the agricultural classes, and Messrs. H. Beever and W. Parker the thoroughbred stallions, hunters, hacks and ponies, beginning, like jibbing horses, by going backwards, with the ponies at the end of the entries. But for convenience we shall take them as they stand in the catalogue. The first on the list were the agricultural stallions foaled before 1876, seven in number, the absentee being Royal George, of Worsley Hall. After putting them through their paces and due consideration King of the Vale by King of the Valley was fixed upon for first honours. He is a blue roan, four years old, a grand topped horse, deep, wide and symmetrical, but weak in his second-thighs where a cart-horse wants power as much as a statesman does a head. We said as much as this for him when he won at Alexandra Park in 1877, beating three or four, including

Honest John by Honest Tom, as he did here, a light-middled horse with big muscular limbs. One of the last inventions is the nose machine, which if applied to any proboscis out of joint, however so ill made, for an hour daily, is quickly formed to perfection. Now by all the brains of all the machine-makers in this country why is not this enlarged so that it can be applied to the form of ill-made horses? The Sultan is a brown three-year-old, compactly made, by The Quail; and the long, deep, short-legged Al by Basil-don, with the exception of a little woodenness in his forelegs, is a very nice horse, and belongs to Sir G. R. Phillips. Great Britain by Black Prince, four-years-old, is a very useful-looking black cart-horse, hailing from the Chimney Farm, Bampton, and equally so is the neatly-built, hardy-looking Champion, a four-year-old chesnut, bred by Mr. Jones, of Hereford. There was nothing with the form or fashion of Young Sampson and Topsman, nor in the next class, the stallions foaled in 1876, though Lord Ellesmere's Young Prince of the Isles, by Prince of the Isles, is a very taking colt, deep, and nicely formed, with quick firm action, while the rather lanky Admiral from the same stable did not want fashion but more "stuff," as he is light in the middle, and too long from the stifle to the hock for a prize cart-horse; he is by Honest Tom, Mr. Greening's light-girthed, high-rumped roan by Al by Al—these repetitions must create confusion in a Stud Book—coming in for a commendation. Mr. Rowland's black colt by Hercules will grow into something useful when he drops a bit to his leg, while Mr. Street's roan, with drooping quarters, by Champion, out of Cardiff Lass, has not the fashion of the Maidon stable. The agricultural mares in foal, or with foal were a small class, only four coming into the ring out of an entry of nine, the two grand weighty mares, Dainty and Lady Worsley, having it all their own way, Dainty coming in for first honours. She was the only one of the horses that a reserve was put on at the Worsley Hall sale, and three hundred and fifty was bid for her, but the reserve price was fifty more, and we hope as she is heavy in foal that she may throw something as dainty as herself, though it will be rather late in the year. The other two were useful farm mares, and we felt sorry for their owners that they should have thrown their money away in sending them to the show, as they do not stand an atom of a chance with the heavy horses. There should be prizes for dray-horses and prizes for light agricultural horses, both useful for certain purposes, and more adapted for certain counties than the heavy ones. We have often said this, as we think it most unfair to the owners of light horses. Then came the cart fillies foaled in 1876, headed by a very smart, nicely-made roan of Mr. Drewitt's, which only came in for a commendation, and we think there must have been something more than having got her leg over her halter for the judges to place the useful but coffin-headed Moreton-in-the-Marsh filly before her. Maggie, from Worsley Hall, is a very nice-formed filly, with action. Mrs. Malcolm's

Darne is very light and active. The cup for the best stallion in either class went to the four-year-old King of the Vale, though several outside the ring preferred, as we do, the two-year-old Prince of the Isles; and the cup for the best mare or filly must have gone to Worsley even if Dainty had not been on the ground.

The late Mr. Goodwin, of Hampton Court, in 1856 published a list of the most successful covering stallions of the year, giving the names and pedigrees of over three hundred. Considering racing still flourishes and everyone knows the value of advertising in these days a stranger to the showyard would be surprised that only five stallions entered the ring for a chance of a £50 and £20 prize. They were that well-known champion of the ring, Citadel, whose form and size has gained him many a prize and kept better horses away, but his luck has changed and he fared no better than he did at Alexandra Park. Claudius, by Caractacus out of Lady Peel, by Orlando, is also well-known in the ring and a nice horse, but not for getting hunters, with his forehead. Marfiori, by Prime Minister out of Regina, by Autocrat, does not take after his sire, and though but a moderate one is better than a good many thoroughbred stallions to be seen about the country, and the golden bay Faughballagh 2nd, by Pictou out of a Woolwich mare, does not take after Pictou, but the sooner he does the better for the country if that gallant hero, as we expect he soon will, has gone to ground. The cock-throated Master Richard, seventeen years old, by Teddington out of Eaergy by Weatherbit, takes more after the chesnut than the brown, but inherits a weakness of the latter in girth and wants letting down an inch to his elbow, which makes him appear a trifle leggy. He is a slashing looking horse with a good head, neck, and shoulders, with a back that time has made a hole in, and some grand quarters, full of muscle, hocks well let down and nicely placed. There was a Master Richard, but a very different stamp of horse from this, as neat as neat could be judging from a portrait we have seen of him by Abraham Cooper, R.A., which got hunters, one we have in our eye as we write with a star in the forehead of his varmint-looking head, and of rare hunting form, Ocur de Lion, the property of the late Mr. Drake, and as well-known with his hounds as that weight-carrier the fleabitten grey of Griff Lloyd, or the "Waterperry grey" that was to be seen in the first flight, some well-known cock-tail with the handsome Peyton up, or good looking one clipped by the long thighs of the Messrs. Cox. Talking about hunting brings us to those foaled before 1874, the tug of war being between the two browns, Carew and Brown Stout, which are always beating one another, proving the old adage "Yours to-day, mine to-morrow," to be a correct tip. Mr. Byas's Stockwell had somewhat of the cut of an old fashioned hunter but went stiff and as slow as a snail, and we think that his place is as a wheeler in some gentleman's drag fond of playing at coaching. Then Pantaloon, by Laughing Stock, is a very handsome horse, carrying himself well, and a quick step-

per that was nicely handled by a son of the well-known veterinarian of the Vale. If any swell out of luck wishes to catch the eye of an heiress in Rotten Row, look for Aylebury, buy Pantaloon, and as Sancho says "you will never want flies." Mr. White's Bourtons, chesnut, stepped well, but has a long stag neck, and if his rider does not keep his head back he may require the nose machine. Mr. Trist's Edinburgh, an old stager in the ring, as usual moved well.

A lad in the ring blows a whistle and the four-year-olds come to him, the first prize going to a light coloured bay, Look Sharp, by Make Hast, with deep shoulders, hunting form, and power; the second money to a bay gelding of fair form, that could go though by "No go," three moderate animals making up the class. A very well made hunting-like filly throughout, with deep laid shoulders, was Lady Jane, from Kilworthy, Mr. Aldworth's black filly being of a very different stamp, varmint and bloodlike, though a bit high in the leg, but still looked like going. Mr. Swanwick was to the fore with a bay by Umpire, and we were not in love with his form or rolling action, but he is much better than anything we thought the herring-gutted American would get in the shape of hunters. Mr. J. Bailey's black filly Crow, by Truant, pleased us better, being of good form, moved nicely, and had well-laid shoulders, deep ribs, and was short from knee and hock to the ground, and though her coat was staring like the quills of the fretful porcupine in one of its "best humours," ought to have beaten Hawthorn, a fine grown handsome looking gelding, by Donnington, for he had not hunting shoulders, and his forelegs were as stiff and back at knee as could be. There was nothing very hunting-like in the three colts and fillies foaled in 1877, the winner, Trueman, being a very showy light-boned colt with breed and action, but not hunting character. Miss Kelson, a very light-boned mare, with good withers and a foal at foot, and a chesnut of moderate form were the only hunting brood mares. Two decent hacks competed for the prizes for the best mare or gelding above 14 hands up to not less than 14 stone, and ten or a dozen mares or geldings over 14 hands and up to not less than 12 stone, came in the ring, the contest lying between Prince Charlie, a very nice dark brown thick set hack and a good goer, and Osman, a blood-like mare and as sweet a hack in form, action, and manners as a gentleman would wish to throw his leg over. The others were Mr. Tomlin's Creina, Mr. Haver's Quivive, Mr. Morrell's Merton, Mr. Trist's Brown Bess, Mr. Friend's White Stockings, and a fast going dun from Blenheim. For a local prize of £10 for park hacks and ladies' horses there was no entry; this surprised us as most gentlemen think any horse will do for a lady—and for some other local prizes for harness horses there were only two, which we will not criticise, for the love we have for a county in which we have spent some pleasant days. Half-a-dozen nice ponies and the cup for the best riding mare or gelding, which did not include the prize thoroughbred stallion or brood mare, was

awarded to Lady Jane, from Kilworthy, whose owner sold Mr. Harvey Bayly, Tavistock, the Cup winner at Alexandra Park and Islington this year.

THE CATTLE.

The first class paraded before the judges was that of the old Shorthorn bulls, many of which have been described over and over again in these columns. As they walked round we recognised old acquaintances, and fancied that Shorthorn bulls, like men, do not always improve with age—as they get older they get plainer, some of them. Sir Arthur Ingram's coat was rather thicker than at this time last year, and suited him better: the cold season has made considerable difference to the clothes in which show animals appear (this summer, and in the case of Sir Arthur Ingram it affords something more to take hold of. The old bull begins to show his weak places with more painful distinctness, but his style, scale, depth of quarters, and great length, generally makes him an easy victor over those of his class with which he is in the habit of competing. So it was this time, and he was put first, taking also the champion prize of ten pounds given by the Oxfordshire Agricultural Society for the best Shorthorn animal in the yard. Of the eleven animals which put in an appearance there were only a very small minority of really first-rate Shorthorns, and the competition was therefore in reality very weak. Sir Arthur Ingram, with his flat sides, plain shoulders, and light crops, is quite a model Shorthorn, for, as a breeder told us, it does not matter about a Shorthorn being a trifle plain in those points! Very taking is this particular animal with Shorthorn judges, but we confess to having no great liking for him, although we have seen stock of his getting which we thought much better than himself. The judges having placed him on one side for first honours were not long in deciding upon Attractive Lord, a four-year-old bull bred by Mr. T. Pears and belonging to the Earl of Ellesmere, for the second place. This is an animal we should prefer to Sir Arthur Ingram, as being more in accordance with our ideas of what a Shorthorn bull should be. He is of much finer quality, very stylish, and has an excellent touch, and is altogether of a superior stamp to that of the rank and file of old Shorthorn bulls as we are in the habit of seeing them in the showyards; he is level for a Shorthorn, and has nothing coarse about him. Mr. John Rowley obtained a high commendation for Count Towneley, a light roan bull which we do not greatly admire; and Mr. Jabez Cruse was commended for Oxford Duke 10th, a good handler, but not what we should call one of the front rank, although he has been many times honoured in the showyard. General Fuzee, the property of Mr. T. Hardwick Bland, was nominated the reserve number, and this bull, though coarse, has that about him which we think likely to make his stock useful to the grazier: he has a good coat and plenty of it, and is full of flesh, has level back, good chine, ribs, and quarters, and is plenty big enough. Altogether he is not, perhaps, the sort of animal to suit the "fancy," but he is likely to do as much for the ordinary stock of the country as any one

of the class in which he stood. Mr. J. Stratton's Royal James has not improved during the year; Caractacus, exhibited by Mr. J. Walter, M.P., and bred by Mr. J. Stratton, is a plain bull, with nothing to recommend him that we can see; Mr. Charles Chapman's Minstrel Boy is a very plain, loose, mediocre white bull; and Mr. B. St. John Acker's Clovis is more uneven, more hollow behind his shoulders, and less to our mind this year than he was last, which is equivalent to saying that we think very little of him. Mr. Wodehouse exhibits Royal Havering 2nd in good form, and the bull has improved. The class of old Shorthorn bulls was what some called a "grand" lot, but they were, in our opinion, a very fair and typical example of Shorthorn blood in aged classes—about two-thirds of it no credit whatever to the breed.

Next came the bulls above two and not exceeding three years old; and they were, as a class, scarcely equal to the older bulls. Eight of them put in an appearance, and the judges soon came to a decision. The easiest work of all is to judge the judges, and perhaps that is why we could have decided in even less time and in a totally different manner. When Mr. T. Willis's Rear Admiral walked away with the first honours we began to think we should not be likely to see eye to eye with the gentlemen who admired that character of Shorthorn blood. This bull took second prize in his class at Liverpool last summer, after being passed over at Bath, and his career affords a good example of the glorious uncertainty of judges' awards and breeders' rewards. We have no opinions in common with those who think this animal deserving a prize as a Shorthorn bull; he is very little changed from last year, and has not even furnished himself as might have been anticipated from his age, which is now one week under three years. He is now, as we described him then, a long-legged, thin-coated, shelly, heifer-headed animal—a decent bullock spoiled, for there is but little waste to his carcase. So long as this Admiral remains on the list he will be decidedly in the rear in our humble opinion. He is very level, neat, and taking to outsiders; but he has very little of what we should consider to be the essential points of a good bull. A very different and a far better animal is Mr. John Elwell's Bainesse Windsor, which, whilst affording plenty of room for fault-finding, is of good character, and has a soft mellow hide and a good coat, and withal a very creditable back, chine, and twist. This bull was put second, and Mr. Rowley's white bull Fitz Arthur, bred by Mr. Linton, was commended. This is a son of Sir Arthur Ingram, and perhaps deserves to be raised a little—ever so little—above the rank of positive mediocrity. Another white bull, Flag of France, bred and exhibited by Mr. Foljambe, had the reserve number; but this animal is very loose and uneven, requiring a lot of making up before exhibition. Telemachus 10th is a very useful bull. Mr. St. John Acker's stock may be well descended and their blood of the bluest, but we are not in love with their bodies; his Prince of Georgia has a rump like an old ewe, and is what we should call "a duffer." Mr. T. H. Bland ex-

hibits another very indifferent animal in the person of General Flirt, who rejoices in a head like that of a buffalo and has his tail set on like a monument. In fact, these bulls were not things of beauty in our eyes, and right glad we were to see them make room for the yearlings, which were a little better, but not much. Here again we did not admire the decisions of the judges. Mr. T. Willis obtained first prize for a 21 months' old bull of the same style, character, colour, and breeding as his Rear Admiral, both having been got by Admiral Windsor (32912). Certainly we prefer this young bull to his elder brother; he is particularly level, and has good points, but his legs are long, and his barrel light, and his character anything but that of a bullock-getter. Colonel Loyd-Lindsay, M.P., takes second prize with an eighteen-months-old roan bull, Churchill, which looks capable of making a good animal another day, and the reserve goes to Mr. Garne for a roan sixteen-months-old bull, with plenty of good hair, though rather rough in the coat; this is a promising youngster, very mellow, and likely to prove useful. Mr. Bland's General Favourite is a thick-set little chap, not a very bad one, but has nothing about him which could attract the attention of the judges. Mr. Denis de Vitre's Sir Joseph is a particularly plain one, and of the rest there was not one which calls for attention one way or the other, and not one out of the ten could be called a really good one. Amongst the calves, however, there were two or three really first-rate animals; the seven-months-old white calf Prince Victor, bred by the Rev. Bruce Kennard out of Queen Mary, is a gem—something to admire and to remember; if this animal should turn out as well as it now promises, a very successful career in the show-yard as well as a very useful one in the herd may be fairly expected of it. Mr. Joseph Stratton's ten-months-old roan calf Proteus was second, and a very superior calf he is—plenty of scale, and of excellent quality. Colonel Loyd-Lindsay's Don Cossack has the reserve, and there was nothing else in the class of six which was at all worth looking at, much less reporting. According to our judgment there was but one bull, out of all the entries in the four classes, which was worthy the high pretensions of the breed, and that one was the white calf.

The Shorthorn cows were, as usual, a very poor class. It is a strange thing that none of the fanciers can send anything in the shape of a decent old cow to a show. When such a thing does occur it may be made a note of, but, like Captain Cuttle's quotations, they are very difficult to find. We consider the Shorthorn cow class to be a disgrace to the breed, and therefore to the breeders. We are quite unable to discover the "grandeur" and the "superb character," and the "magnificent character" of these old crocks which some of the Shorthorn fanciers appear to have the faculty of discerning, and do not hesitate to record them as being just a rough lot of cows; if their blood is of the bluest their carcasses are of the ugliest, and not worth anything beyond contractors' price when they come at last to the shambles. We can't help thinking that to a really unprejudiced mind there must be

evidence of a something quite outside agriculture, and quite useless to the rent-paying farmer, in this Shorthorn "fancy". We are sensible of the improvement that has been effected already in the rank and file of our cattle throughout the country by the use of this Shorthorn blood; we do not wish to detract one iota from its legitimate merits, but simply to point out wherein it becomes sometimes a matter for the ridicule of non-believers. We see prizes awarded systematically to animals which are not calculated directly to improve the production either of meat or milk in their descendants, and we are told that there is some marvellous power and virtue stored up in their veins, and that although their bodies—the casket—are unsightly, their blood—the jewel—is pure, potent, and almost priceless. Well, we simply do not believe it, as they put it. We are perfectly well aware that any "terribly inbred" weed—a wretch to look at but having an unexceptionable pedigree—will, if matched with mongrel-bred stock, produce a result which is far, very far in advance of the mongrel-bred dams; but, so would any absolutely purely-bred animal. Therefore, we think that farmers, those who have the production of beef or milk in view, have a right to expect something which is calculated to effect their object in a direct manner; no breeder of bullocks would give herd-room, much more a high price, for the bluest blood bull which did not carry a frame the character of which it was desirable to transmit. When a lot of highly-bred but not correctly fashionable young bulls are to be bought for about thirty pounds apiece, and here and there one which *has* been bred correctly to fashion fetches three thousand pounds, and would not be worth one shilling more to the food producer, then we think we are justified in saying that rent-paying farmers have already drawn the line between business and fancy by refusing to give more than a business price for a fancy article. We should be glad to see every young Shorthorn bull now in the breeder's hands sold to tenant farmers, who would use them for meat or milk as their requirements might decide, and are firm believers in the general usefulness and superior adaptability of the breed to any other; but we feel it a duty to point out the ridiculous position the Shorthorn breeders seem content to occupy at our great shows by the mixed quality and low *status* of many of the animals exhibited, which gives opportunity for pointing the finger of scorn, and leads to such questions as "When is the bottom of this Shorthorn hump likely to drop out?" Mr. Brassey, for instance, sent a cow which looks like a nurse, and would be no credit to any well-appointed dairy. This cow was bred by Mr. Garne, of Chipping Norton, who himself exhibits a very plain cow; then Mr. Mumford, of Thame, exhibited a cow with a "gob" of fat on each rump catch which looks like weighing 20 lb., and there were others which deserve anything but honourable mention. Mr. Sharp was first with quite a mediocre cow, Mr. St. John Aekers second, and Sir J. H. G. Smith, Bart., took the reserve. Then come the heifers in milk or in calf, above two and not exceeding three years old; and these

were certainly very much better than the old cows. We hear a great deal about "the alloy," and, if correctly reformedit means an infusion of Scots blood of some kind, and to our mind the very thing these Shorthorns are now needing is another infusion—a strong one—of some alloy which will give them the thickness of flesh, the wealth of hair, and the butcher's form they so seldom possess, and then we should be prepared to expect great things of the renovated blood. Mr. Marsh's Diana, which took first prize in this class, is a square-made, thick, level, firm-handling heifer, very stylish and taking. The Earl of Ellesmere's Lady was second; Mr. G. Ashby and Mr. H. Wodehouse got commendations; and Mr. St. John Ackers the reserve for about the best animal he exhibited at Oxford. The heifers above one and not exceeding two years old are a still better class. Mr. Brassey secured the first prize with a twenty-three-months old heifer, *Jemima* 4th, square-made, very deep, but rather bullocky-looking; has plenty of flesh, but certainly lacks character and style. Col. Loyd-Lindsay was second with a twenty-one-month old white heifer, *Derna*, very pretty and very promising. Mr. W. Gillett Garue was highly commended for *Duchess of Warwick*, second, a twenty-three-months heifer, which does him credit, and Mr. Foljambé stood for the reserved number. There were two or three more heifers which to us appeared deserving a commendation, but the judges did not think so and passed them over; amongst these there was a particularly promising heifer of Mr. Ashby's, which had rare scale and character and great length—looks like making a big cow and a good cow another day. Then there was that beautiful animal, *Lady Maruhull* 4th, a twenty-two-months old roan heifer, bred and exhibited by Rev. Bruce Kennard; she was left completely out in the cold and never so much as noticed—a hard and undeserved fate we thought at the time and think now. The heifer calves numbered fifteen entries and were of all sorts, good, bad, and indifferent. Some of them would not compare favourably with the run of those one used to see with their legs tied and their heads hanging out of the dealers' carts; others were useful but not good enough to show, and there were a few really good ones. The Earl of Ellesmere's eight-months old calf *Melody*, by *Attractive Lord* (the second prize bull in the aged class), was no doubt fairly and honourably first, and Mr. Walter's *Pride of Bearwood*, six months old, was second; there was a difficult task to decide this matter, but the two months made a difference, and the little one lost. Then came Mr. W. Linton and Mr. C. W. Griffin with a commendation a piece, and the reserve for Mr. Schroeter. All these were capital heifers, worthy of being shown anywhere; Messrs. Arkell and Griffin also did themselves credit with their heifers. This class brought the Shorthorns to an end; and in closing our notice of them we may say that there were very few first-rate animals, and that we did not consider the breed as well represented as it might have been and ought to have been.

The Herefords are not so numerous as the more fashionable breed, but the quality throughout is excellent. In

the aged bull class there are five animals, of which the Hereford men need not be ashamed. Mr. Aaron Rogers's *Grateful* secures first prize and the Champion prize of the Oxfordshire Agricultural Association, for the best male horned animal. This bull has a most extraordinary good forehead; his chine, back, ribs, and loin are wonderfully good, in fact his ribs are perfect—but there is a defect behind, his quarters are drooping, and his twist narrow, although his rounds are fairly good, and this spoils his appearance. Still his good points are so good that Mr. Thomas's *Horace* 2nd, which took the second prize in the younger class at the Royal last year, and Mr. Taylor's *Thoughtful*, which was first at the Royal, were both defeated; *Thoughtful*, Mr. Taylor's bull, being placed second, and Mr. Thomas's *Horace* 2nd highly commended. Mr. Lutley's *Cupid* taking the reserve number. All these animals were worth looking at, and their quality undeniable; still it is a question whether either of them were as good as *Tredegar*, who won last year at Liverpool. There were but two entries in the next younger class to which the prizes were both awarded, Mr. H. N. Edwards taking first with *Durable*, a bull which has greatly improved since last year, and Mr. Philip Turner second with *Corsair*. The next class, for bulls over one and under two years old, was rather weaker, Mr. J. Price's bull *Arthur* beating Mr. Carwardine's *Anxiety*, which was first as a calf at Liverpool. Mr. Thomas's *Goldfinder* had the reserve, and Mr. H. N. Edwards's *Compact* did not look like being more successful this year than last. The bull calves were a very excellent lot of youngsters. Mr. Hungerford Arkwright's *Conjuror* took first honours, and is a very promising calf; the same may be said of Mr. Carwardine's *Lord Oxford*, which was second, and Mrs. Sarah Edwards's *Master Butterfly* pushed them very hard, but only obtained the reserve. Mr. W. Taylor and Mr. H. B. Lutley had both of them capital calves, and the rest were not bad ones. However, the judges had no commendation for them. The cows were four good animals, for it is very seldom that Hereford men will show a bad cow; they get patchy, but are not usually so uneven as their more fashionable sisters. The Executors of the late Mr. Warren Evans took the first, and Mr. E. J. Lewis the second prize, Mr. Fenn, the reserve number. Mr. Hungerford Arkwright's *Rosebud* did not put in an appearance. The heifers in-milk or in-calf numbered only three, but two of them were such animals as it was worth while coming to Oxford on purpose to see. Mrs. Sarah Edwards, of Wintercott, took first and second, leaving Mr. Lutley the reserve; but Mrs. Edwards's *Leonora* is one of the most perfect animals that has been shown for years. It was first last year as a yearling at Liverpool, and will likely be first wherever it goes; the Champion prize given by the Oxfordshire Agricultural Society was also awarded to this heifer as the best female horned animal in the yard. The companion heifer, *Beatrice*, is also very handsome, and took second to *Leonora's* first at the Royal last year, as it did last week at Oxford. Mrs. Edwards may well be proud

of such stock as that: if Leonora had been a Grand Duchess Shorthorn a poem would have been composed in her honour, and translated into several languages by this time. But no Shorthorn that we have ever seen was cast in such a mould as this Hereford heifer. Then in the next younger class Mrs. Sarah Edwards leads off again with a sweet heifer of twenty-two months old—Spangle 5rd; Mr. John Morris' Empress was second; Mr. Platt got highly commended for a nice heifer, but we did not care for her horns; and Mr. Taylor's Lancashire Lass, which was second as a calf at Liverpool, took the reserve. The heifer calves were one of the best classes in the show; some of them were beautiful. Mr. Hungerford Arkwright's Gaylass was first, and Mr. W. Taylor's Empress second; the latter is a little plain behind her shoulders. Then the judges thought they could not well help giving some barren honours, and actually went to the extent of two highly commended exhibits—Mr. Price's Lady, and Mr. Thomas' Lady 5rd—and after that, in a fit of unusual liberality, commended Mr. J. H. Arkwright's Abigail. Mr. Penn's Downton Rose took the reserve number, so that only two or three were left out in the cold. The Herefords altogether were as good as usual, if not a little better, and the Hereford men have the satisfaction of taking the two open champion prizes—in fact, they have secured well at Oxford.

The Sussex classes were well filled, the entries numbering 50, with very few absentees. We are pleased to see this very useful breed coming so steadily to the front, and, as they are managed, they are likely to push the Shorthorns harder than the Hereford or Devon is ever likely to do. We think it likely that this breed will increase in favour in the South of England, and each year sees more Sussex beasts amongst the stock of Surrey and Kent. We do not think it likely that anything beyond local predominance will fall to the lot of the dark reds; still, it is very evident that breeders are paying increased attention to this stock, and agricultural societies and fat stock shows are recognising the position they have so fairly won. The two-year-old bulls were shown by Messrs. E. and A. Stanford, to whom are awarded the first and second prizes. In the next class there were four entries, Messrs. J. and A. Heaseman, of Angmering, Arundel, taking the first prize, Mr. Braby the second, and Mr. Agate the reserve. For yearling bulls (under two years old) Messrs. Heaseman were again first, Mr. Whitehead second, and Mr. Duke reserved—Messrs. Stanford also exhibiting. For bull calves Mr. Hutt secured first honours, Mr. Page the second, Messrs. Stanford commended, and Messrs. Heaseman took the reserve. The cows were a credit to the breed, and as a class were far before the Shorthorn cows. Mr. Heath's first prize cow was a very heavy, well-bred animal, of excellent quality, as was also Mr. Braby's second. The class was commended. The heifers in calf or in milk were well represented, Messrs. Heaseman winning with a very level animal, with capital back, chine, and ribs, and a nice hauler. Mr. Duke's second prize heifer was also a very

stylish, deep-framed animal, not so level, but still a formidable opponent. The class was commended. The yearling heifers were very pretty, Mr. Braby winning with one bred by the Messrs. Heaseman—who have been very successful with their herd—Mr. Vickers was second, and Mr. Agate reserved. For calves Mr. Whitehead was first, Mr. Agate second, and Messrs. Heaseman reserved. Again the class was commended. Altogether the Sussex cattle came out very strong, completely taking the wind out of the sails of the Devon breeders, who only entered 27 animals in 8 classes. These were most of them well-known animals in the elder classes, and the principal prize-takers were Mr. Walter Farthing and Mrs. Maria Langdon, the latter securing five prizes, and the former four prizes and a reserve number. Mr. Farthing beats Mrs. Langdon in the cow class, and Mrs. Langdon defeats Mr. Farthing in the yearling heifer class. The heifer calves are very nice, and the two breeders above named, together with Mr. John Walter, Mr. Rolles Fryer, and Earl Fortescue are exhibitors. The Devon men are probably husbanding their resources, and saving their strength for next month at Bristol.

The Channel Islands Cattle were in strong force, the entries numbering no less than 102, and the general standard of excellence was very high; in fact, we have never seen as good a show of first-rate milking animals. The Jerseys were like deer, and a herd of such must look very pretty, and be very suitable in a park or a gentleman's paddocks; but we can scarcely imagine such animals to form part of an ordinary dairy. For bulls above two years Mr. Cardus and Mr. Simpson were the winners; the latter exhibited an animal of exceedingly fine quality, as it appeared to us, although we do not pretend to any practical knowledge of these cattle. The cows were greatly admired, Mr. Simpson being first on the list, Lord Chesham second, and four others received high commendations. No less attractive were the heifers in-milk or in-calf, and here again Mr. Simpson took the lead, Mr. Rigg being second, beside which there were six others highly commended and two commended. A fawn-like class were the heifers not exceeding two-years-old, in which Mr. Simpson is again first with an additional prize awarded; Mr. Dixon second, four high commendations, and three commendations. Mr. G. Simpson, of Wray Park, Reigate, appears to have deserved the exceptional successes he obtained in such excellent classes. The Guernsey cattle were not to our mind quite so pretty nor quite so delicate-looking, but there were some very excellent dairy animals amongst the well filled classes.

One of the most attractive features of the open judging was the awarding of the Champion prizes given by the Oxfordshire Agricultural Association, and a great deal of interest centred in it. For the best Shorthorn animal in the yard the award was given by the Shorthorn judges, of whom there were but two—Mr. Drewry and Mr. Tindall—and the contest was between Mr. Linton's Sir Arthur Ingram and Mr. Marsh's heifer Diana, and after

some little time the bull took the prize card. To our mind the white bull-calf Prince Victor was a better Shorthorn than either of them. He would be a bold man who would stake his reputation on a calf, as it may not realise the expectations formed of it, but taking the animals as they stood, simply on merits actually possessed at the time, we thought the calf the best, nor were we singular in that opinion. Then the whole conclave of judges came into the ring to decide which was the best male horned animal in the yard, and here the Shorthorn men were in a hopeless minority—cornered in a manner that does not often happen in a showyard. In vain Mr. Brewry contrasted the strong points of Sir Arthur Ingram with the weak ones of Mr. Roger's Hereford bull Grateful, it was all to no purpose, the rest could not get away from the Hereford, whose wonderful rib and forehead was too much for the Shorthorn, and a show of hands showed an overwhelming majority for the Hereford. There is no doubt that had the Shorthorn judges been of sufficient numerical strength they would not only have prevented this Hereford triumph but also that which followed when the best female horned animal had to be decided upon, for it went sadly against grain to award even such a heifer as Mrs. Sarah Edwards's Leonora the championship over the Shorthorn Diana; but it had to be done, and we think there were few outsiders who were not thoroughly satisfied. These Champion awards were an unquestionable streak of lean for "the fancy," and we may depend on their not allowing such a thing to occur again if they can possibly help it. This, coming after Paris, is about as much as they will be able to hear with patience. We should be glad to see sweepstakes judging of this kind occur more frequently.

THE SHEEP.

The Southdowns were numerically about as strong as usual, but they were rather weak in point of merit; taking the classes throughout they could scarcely be said to be up to their usual standard. Of shearling rams there were 29 entries, amongst which most of the most noted breeders names were to be found—the Prince of Wales, Lord Walsingham, Mr. Rigden, the Messrs. Hease-man Sir W. Throckmorton, Mr. Gorringe, &c. Lord Walsingham took both first and second prizes, with sheep got up in John Day's usual excellent form; but we think we have seen better from Merton. The Prince of Wales obtained a high commendation, and the Messrs. Hease-man a commendation; Mr. Chapman's sheep receiving the reserve number. Mr. Rigden's sheep was very light in his neck, but otherwise a capital Southdown, with first rate hind quarters. With older rams Lord Walsingham was again both first and second, but we liked the second prize sheep rather the best in respect of his wool and his form, although a smaller sheep. Mr. Hugh Gorringe was commended, and Mr. George Jonas held the reserve. The ewes were decidedly below par; Mr. Chapman's first prize were a fairly good pen, and no doubt very useful sheep, but there was nothing else of any consequence. Mr. F. M. Jonas took second, and the Prince of Wales

the reserve. The Sandringham sheep were long in the leg and not well matched. Altogether the Southdowns at Oxford were not particularly to our fancy. The Hampshire Downes were certainly better, and Mr. Alfred Morrison's first prize shearling ram was one of the best sheep we have seen for many a day; his handling was perfect, and over his shoulders he was extraordinarily good. This sheep very deservedly took the champion prize of the Oxfordshire Agricultural Association for the best short-wooled ram. It will be remembered that Mr. Morrison exhibited some first rate sheep at the Smithfield Club Show last Christmas, and from his general entries we form the impression that his flock must be a good one. Mr. Lewis Lloyd was second with a very useful sheep, and Mr. Morrison held the reserve number with a second exhibit. For aged rams Mr. Moore was first, Mr. Morrison second, Mr. Barton commended, and the reserve was given to Mr. James Read. The ewes, as a class, were better than the Southdown ewes, the first prize pen, belonging to Mr. James Read, securing the Oxfordshire Association Champion prize for the best pen of short-wooled ewes as well; and a very capital lot they were. Mr. F. Moore took second prize, and Mr. W. Newton and Mr. J. M. Friend both received commendations, whilst Mr. T. Chapman Saunders held the reserve. There can be no question that these ewes did the Hampshire breeders credit. The Shropshires, as might have been expected, were in strong force, the shearling rams numbering 26 entries. This was a very good class, but we could not understand the first award; in fact, we were not alone in thinking the ticket had been nailed to the wrong pen. This sheep belonging to Mr. T. Mansell is small, has good back, legs, and twist, and handles well, but has a wretchedly plain head and neck, completely spoiling his character; still he is first on the list. We think there were better sheep than him in the class. Mr. Henry Townshend's second prize shearling is far more to our mind, and Mrs. Harriet Smith showed two pens of capital sheep, both of which were commended as were those of Mr. Mansell and Lord Chesham, who also exhibits a very poor sheep indeed. Mr. H. J. Sheldon's sheep were not to be despised, and there were several very useful rams in the class, which was a very good one. With the old rams Mr. Henry Townshend secures the first prize, but Mrs. Harriet Smith's second prize was an excellent handler, with plenty in front of him and good wool. Mr. H. J. Sheldon took the reserve. With the ewes Lord Chesham comes to the front with a pen of highly finished sheep, got up in excellent show form, and a very pretty lot of ewes they were, of the finest possible quality to be Shropshires at all. Mrs. Smith's ewes were second, very useful, but it is hard work to contend with such finished work as they turn out at Lutteridge. Mr. Meldou's pen obtained the reserve. The Oxfordshire Downes were at home, but they did not make as strong a show as the other Down classes. There were, however, 20 entries of shearling rams. Mr. Brasscy, Mr. John Treadwell, Mr.

Arkell, Mr. Adams, Mr. Hobbs, and Mr. Wallis were the principal breeders who exhibited, Mr. Adams being first, Mr. Hobbs second, and also the reserve number. In the class for old rams there were but three entries, Mr. John Treadwell contributing two of them, and taking both first and second prizes. The ewes were useful sheep, but the pens were not very even. Mr. Brassey's first prize pen we did not greatly admire; Mr. Wallis's second prize lot were good sheep, but there was one ewe that spoilt the pen. Mr. Brassey was commended for a second pen, and also Mr. Treadwell, whose sheep were stylish but leggy, and not well matched. Mr. George Adams had the reserve number, and his pen was uneven, though a very useful sort of sheep. There were a few Leicesters exhibited by Mr. George Turner, who had no competitor; four prizes were awarded him. There were 17 entries of Cotswold shearing rams, chiefly by Mr. John Gillet, Mr. Russell Swanwick, Messrs. Thomas and Stephen George Gillet, and Mr. Samuel Smith. Mr. John Gillet took first prize and two commendations, and Mr. Russell Swanwick second. In the older classes Mr. John Gillet did not compete, and Mr. Swanwick swept the board, securing also the Oxfordshire Association's Champion prize for the best long-wool ram. In the ewe class Mr. Swanwick did not compete, and Mr. John Gillet walked over the course, taking first and second prizes, as well as the Champion prize given by the Oxfordshire Agricultural Association for the best pen of longwooled ewes in the yard. This pen of ewes were certainly of great excellence. Devon Long-wools were represented by Mr. Alfred Bowerman, Sir J. H. Heathcote-Amory, and Mr. R. Corner; Kents by Mr. De Chair Baker, Mr. Henry Rigden, and Mr. Godwin; and there were a few Dorsets, Exmoors, and other Mountain sheep. Altogether there was a fairly good show of sheep.

THE PIGS

were very well represented, the entries being numerous, and the exhibits generally of considerable merit. For pigs of the large breed the familiar names of the Earl of Ellesmere and Mr. Duckering appear alternately as prize-takers in the first four classes. Mr. Sanders Spencer obtaining second prize, and Messrs. J. and F. Howard a commendation for pens of two breeding sows. The class for small black breed breeding sows was commended throughout, and the classes for small white breed brought most of the noted breeders into competition, Mr. Sanders Spencer, Mr. Duckering, Lord Moreton, and the Earl of Ellesmere being the chief prize-takers. There were some well filled classes of Berkshires, and the quality was unexceptionable. Mr. Heber Humfray, Mr. Arthur Stewart, Lord Moreton, and Lord Chesham took honours for the best boar not exceeding one year old; whilst for the best breeding sow Mr. Richard Fowler secured first prize, and the Champion prize for the best pig or pen of pigs in the yard. Sir W. Throckmorton was second, Lord Moreton held the reserve, and the whole class was highly commended with great justice. We have seldom, if ever, seen a better lot of pigs in a show-yard.

LIST OF JUDGES.

CATTLE.

DEVONS AND SUSSEX.

R. B. Warren, Child Okeford, Blandford, Dorset.
W. Lutley, Escott Farm, Carhampton.
T. Cooper, Horton, Bishopstone, Lewes.

SHORTHORNS.

C. W. Tindall, Aylesby Manor, Grimsby.
G. Drury, Holker, Carke-in-Cartmel, Carnforth.

HEREFORDS.

J. W. James, Mappowder Court, Blandford, Dorset.
J. Haynes, Llanrotal, Monmouth.

CHANNEL ISLANDS.

J. Sampson, Minstead, Lyndhurst.
C. W. Baker, Luton Hoo, Luton, Beds.

SHEEP.

LONGWOOLS.

R. Woods, Chipstone Park, Mansfield, Notts.
A. F. M. Druce, Twyfield, Abingdon.

SOUTHDOVS AND HAMPSHIRE.

J. C. Clayden, Ellough Hall, Beccles.
J. Marsh, Stratford-sub-Castle, Salisbury.

SHROPSHIRE, OXFORDS, DORSETS, AND EXMOORS.

W. H. L. Clare, Twycross, Atherstone.
H. Overman, Weasenham, Brandon, Norfolk.

HORSES.

AGRICULTURAL.

R. G. F. Howard, Temple Bruer, Lincoln.
J. E. Parsons, Charwelton, Daventry.

HUNTERS.

W. Baker, Carleton Hill, Peurith.
H. Beever, Shortlands, Willington, Hawkhurst, Sussex.

PIGS.

J. Lynn, Stroxtan, Grantham.
E. Marshallsay, Perrysfield, Oxted, Godstone, Surrey.

HORSE-SHOEING.

J. D. Broad, Bath.

INSPECTOR OF SHEARING.

E. Baunton, West Knighton, Dorchester.

PRIZE LIST.

CATTLE.

DEVONS.

(All ages calculated to the 1st of June.)

Bull, above three years old.—First prize, £20, G. Turner, jun., Thorpeldans, Northampton (Volunteer); second, £10, Viscount Falmouth (Romaney Rye).

Bull, above two and not exceeding three years old.—First prize, £25, W. Farthing, Stowey Court, Bridgwater, Somerset (Royal Aston); second, £10, Viscount Falmouth (Reflector).

Bull, above one and not exceeding two years old.—First prize, £25, W. Farthing (Lord Newsham); second, £10, Maria Langdon, Flitton Barton, North Molton, Devon (Duke of Flitton 14th).

Bull calf, above six and not exceeding twelve months old.—First prize, £10, W. Farthing (Master Stowey); second, £5, W. Rolles Fryer, Poole, Dorset (Pasha).

Cow, above three years old, in milk or in calf.—First prize, £15, W. Farthing (Picotee); second, £10, Maria Langdon (Cherry 9th).

Heifer, in milk or in calf, above two and not exceeding three years old.—Prize, £15, M. Lundon (Temptress).

Heifer, above one and not exceeding two years old.—First prize, £10, M. Langdon (Cherry 10th); second, £5, W. Farthing (Pretty Face 2nd).

Heifer calf, above six and not exceeding twelve months old.—First prize, £10, M. Langdon (Temptress 12th); second, £5, W. Rolles Fryer (Azalea).

SHORTHORNS.

Bull, above three years old.—First prize, £20, and extra prize of £10, W. Linton, Sheriff Hutton, York (Sir Arthur Ingram); second, £10, Earl of Ellesmere (Attractive Lord).

Bull, above two and not exceeding three years old.—First prize, £25, T. Willis, jun., Manor House, Carperby, Bedale (Rear Admiral); second, £10, J. Elwell, Timberley, Warwickshire (Bainesse Windsor).

Bull, above one and not exceeding two years old.—First prize, £25, T. Willis, jun.; second, £10, Colonel R. Lloyd-Lindsay, V.C., M.P., Lockinge Park, Wantage (Churchill).

Bull calf, above six and not exceeding twelve months old.—First prize, £10, Rev. R. B. Kennard, Blandford, Dorset (Prince Victor); second, £5, J. Stratton, Marlborough, Wilts (Proteus).

Cow, above three years old, in milk or in calf.—First prize, £15, J. J. Sharp, Kettering, Northamptonshire (Julia 11th); second, £10, B. St. John Ackers, Painswick, Gloucestershire (Princess Georgie).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £15, R. Marsh, Hitchin, Herts (Diana); second, £10, Earl of Ellesmere (The Lady).

Heifer, above one and not exceeding two years old.—First prize, £10, A. Brassay, Chipping Norton, Oxfordshire (Jemina 4th); second, £5, Colonel R. Loyd-Lindsay, V.C., M.P. (Durna).

Heifer calf, above six and not exceeding twelve months old.—First prize, £10, Earl of Ellesmere (Melody); second, £5, J. Walter, M.F., Wokingham, Berks (Pride of Bearwood).

HEREFOLDS.

Bull, above three years old.—First prize, £20, and extra prize of £10, A. Rogers, Kington, Herefordshire (Gentleful); second, £10, W. Taylor, Ledbury, Hereford (Thoughtful).

Bull, above two and not exceeding three years old.—First prize, £25, E. N. Edwards, Leominster, Herefordshire (Darable); second, £10, F. Turner, Pembridge, Hereford (Corsair).

Bull, above one and not exceeding two years old.—First prize, £25, J. Price, Pembridge, Hereford (Arthur); second, £10, T. J. Carwardine, Leominster, Herefordshire (Anxiety).

Bull calf, above six and not exceeding twelve months old.—First prize, £10, J. H. Arkwright, Leominster, Herefordshire (Conjoror); second, £5, T. J. Carwardine (Lord Oxford).

Cow, above three years old, in milk or in calf.—First prize, £15, Executors of the late W. Evans, Usk, Monmouthshire (Lady Blanche); second, £10, E. J. Lewis, Brinton, Hereford (Little Beauty).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £15, and extra prize of £10, Sarah Edwards, Leominster, Herefordshire (Leonora); second, £10, Sarah Edwards (Beatrice).

Heifer, above one and not exceeding two years old.—First

prize, £10, Sarah Edwards (Spangle 3rd); second, £5, J. Morris, Madley, Hereford (Empress).

Heifer calf, above six and not exceeding twelve months old.—First prize, £10, J. H. Arkwright (Gaylass 1V.); second, £5, W. Taylor (Empress).

SUSSEX.

Bull, above three years old.—First prize, £20, E. and A. Stanford, Stuyving, Sussex (Dorchester); second, £10, E. and A. Stanford (Gunbridge).

Bull, above two and not exceeding three years old.—First prize, £25, J. and A. Heasman, Arundel, Sussex (Hereford); second, £10, J. Braby, Radgwick, Sussex (The czar).

Bull, above one and not exceeding two years old.—First prize, £25, J. and A. Heasman (Lord Bath); second, £10, C. Whitehead, Maidstone, Kent (Redhear).

Bull calf, above six and not exceeding twelve months old.—First prize, £10, L. Huth, Waldron, Sussex (Sir Roger); second, £5, H. Page, Walmers, Kent (General).

Cow, above three years old, in milk or in calf.—First prize, £15, L. Huth (Gentle); second, £10, J. Braby (Bouncer).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £15, J. and A. Heasman (Rosebud); second, £10, B. Duke, Lymminster, Arundel, Sussex (Bristol).

Heifer, above one and not exceeding two years old.—First prize, £10, J. Braby (Rival); second, £5, T. A. Vickress, Horsham, Sussex (Norfolk).

Heifer calf, above six and not exceeding twelve months old.—First prize, £10, C. Whitehead (Cherry Brandy); second, £5, A. Agate, Horsham, Sussex (Spite 2nd).

CHANNEL ISLANDS.

JERSEY.

Bull, above two and not exceeding four years old.—First prize, £10, J. Cardis, West End, Southampton (Dairy King); second, £5, G. Simpson, Reigate, Surrey (The Pride).

Bull, not exceeding two years old.—First prize, £15, W. Ludlow, Hbley, Oxfordshire (Prince); second, £5, and extra prize of £10, G. Simpson (Prince Albert Victor).

Cow, exceeding three years old, in milk or in calf.—First prize, £10, G. Simpson (Luna); second, £5, Lord Chesham, Chesham, Bucks (Lilac).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £10, G. Simpson (Woolmer Lassie); second, £5, H. A. Biggs, Walton-on-Thames, Surrey (Flirt).

Heifer, not exceeding two years old.—First prize, £10, and extra prize, G. Simpson (Queen Dora); second, £5, C. B. Dixon, Shirley Warren, Southampton (Venus).

GUERNSEY.

Bull, above two and not exceeding four years old.—First prize, £10, Rev. J. R. Watson, La Favorita, Guernsey (No. 6 Cloth of Gold); second, £5, R. N. G. Baker, Heavitree, Exeter (Prince Charlie).

Bull, not exceeding two years old.—First prize, £15, J. K. Newberry, Heavitree, Exeter (Esrlad); second, £5, J. James, Les Vauxbelets, Guernsey (Chieftain).

Cow, exceeding three years old, in milk or in calf.—First prize, £10, Rev. J. R. Watson (No. 2 Portia); second, £5, Colonel J. F. Lennard, Beckenham, Kent (Lady 2nd).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £10, R. N. G. Baker (Crocus); second, £5, R. N. G. Baker (Lady Jane).

Heifer, not exceeding two years old.—First prize, £10, R. N. G. Baker (Dolly); second, £5, J. James (Rosy).

SHEEP.

THREESPEES.

Yearling ram.—First prize, £15, G. Turner, jun.; second, £5, G. Turner, jun.

Ram of any other age.—No entry.

Pen of five yearling ewes.—First prize, £10, G. Turner jun.; second, £5, G. Turner, jun.

COTSWOLDS.

Yearling ram.—First prize, £15, J. Gillett, Charlbury, Oxon; second, £7, R. Swanwick, Royal Agricultural College Farm, Cirencester.

Ram of any other age.—First prize, £10, and extra prize of £10, R. Swanwick; second, £5, R. Swanwick.

Pen of five yearling ewes.—First prize, £10, J. Gillett; second, £5, J. Gillett.

PLAIN LONG-WOOL.

Yearling ram.—First prize, £15, A. Bowerman, Taunton, Somerset; second, £7, A. Bowerman.

Ram of any other age.—First prize, £10, A. Bowerman; second, £5, R. Corner, Williton, Somerset.

Pen of five yearling ewes.—First prize, £10, Sir J. H. Heathcoat-Amory, Bart., M.P., Tiverton, Devon; second, £5, R. Corner.

ROMNEY MARSH OR KENT.

Yearling ram.—First prize, £15, W. De Chair Baker, St. Stephen's, Canterbury (Duke of Kent); second, £7, J. S. S. Godwin, Tonbridge, Kent.

Ram of any other age.—First prize, £10, H. Rigden, Hythe, Kent (Lord of the Level); second, £5, J. S. S. Godwin.

Pen of five yearling ewes.—First prize, £10, J. S. S. Godwin; second, £5, W. De Chair Baker.

SOUTH-DOWNS.

Yearling ram.—First prize, £15, Lord Walsingham, Thetford, Norfolk; second, £7, Lord Walsingham.

Ram of any other age.—First prize, £10, Lord Walsingham; second, £5, Lord Walsingham.

Pen of five yearling ewes.—First prize, £10, C. Chapman, Stonehouse, Gloucestershire; second, £5, F. M. Jonas, Saffron Walden, Essex.

HAMPSHIRE DOWNS.

Yearling ram.—First prize, £15, and extra prize of £10, A. Morrison, Tisbury, Wilts; second, £7, L. Loyd, Beckenham, Kent.

Ram of any other age.—First prize, £10, F. R. Moore, Pewsey, Wilts; second, £5, A. Morrison.

Pen of five yearling ewes.—First prize, £10, and extra prize of £5, J. Read, Salisbury, Wilts; second, £5, F. R. Moore.

SHROPSHIRE.

Yearling ram.—First prize, £15, T. Mansell, Shifnal, Salop; second, £7, H. Townshend, Nuneaton.

Ram of any other age.—First prize, £10, H. Townshend; second, £5, Harriet Shifnal, Salop (Son of Lord Hardley).

Pen of five yearling ewes.—First prize, £10, Lord Chesham; second, £5, Harriet Smith.

OXFORDSHIRE DOWNS.

Yearling ram.—First prize, £15, G. Adams, Faringdon, Berks; second, £7, C. Hobbs, Fairford, Gloucestershire.

Ram of any other age.—First prize, £10, J. Treadwell, Aylesbury, Bucks; second, £5, J. Treadwell.

Pen of five yearling ewes.—First prize, £10, A. Brassay, second, £5, G. Wallis.

SOMERSET AND DORSET EORN.

Yearling ram.—First prize, £15, H. Farthing, Bridgwater, Somerset; second, £7, H. Farthing.

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

Pen of five yearling ewes.—First prize, £10, J. Mayo, Broadway Farm, Dorchester; second, £5, J. Mayo.

FENMOO AND OTHER MOUNTAINS.

Ram of any age.—First prize, £10, J. Homar, Clun, Salop; second, £5, Earl Fortescue, South Molton, Devon.

Pen of five yearling ewes.—First prize, £5, Earl Fortescue; second, £3, Earl Fortescue.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallion, foaled before 1876.—First prize, £50, and extra prize of £10, G. H. Morrell, Headington Hill Hall, Oxford (King of the Vale); second, £15, J. Hibbard, Chippingham Wilts (The Sultan).

Stallion, foaled in 1876.—First prize, £25, Earl of Ellesmere (Young Prince of the Isle); second, £10, R. Towner, Tetsworth, Oxon (King of the Vale).

Mare and foal, or in foal.—First prize, £15, and extra prize of £5, Earl of Ellesmere (Dainty); second, £5, Earl of Ellesmere (Lady Worsley).

Filly, foaled in 1876.—First prize, £15, Earl of Ellesmere (Maggie); second, £5, W. Hurlstone, Moreton-in-Marsh, Gloucestershire.

HUNTERS.

Thoroughbred stallion for hunters.—First prize, £50, T. Gee, Hawkhurst, Kent (Cinder); second, £20, H. W. Freeman, Newbridge Hill Stud Farm, Bath, Somerset (Lullish).

Mare or gelding, foaled before the 1st January, 1877.—First prize, £25, W. Trist, Ivybridge, Devon (Candy); second, £10, G. B. Battams, Tavistock, Devon (Brown Star).

Mare or gelding, foaled in 1874.—First prize, £25, and extra prize of £10, G. B. Battams (Look Sharp); second, £10, G. Edmonds, Lechlade, Gloucestershire.

Filly or gelding, foaled in 1875.—First prize, £15, and extra prize of £5, G. B. Battams (Lady Jane); second, £5, R. Aldworth, Didcot, Berks.

Colt, filly, or gelding, foaled in 1876.—First prize, £15, R. Swanwick; second, £5, E. G. Legg, Beaminstor, Dorset (Hawthorn).

Colt or filly, foaled in 1877.—First prize, £10, H. J. Bailey, Tenbury, Herefordshire (Trueman); second, £5, R. Swanwick.

Mare and foal, or in foal.—First prize, £20, R. N. Byass, Chipping Norton, Oxon (Miss Kelson); second, £10, J. Saunders, Medley Manor, Oxford.

HACKS.

Mare or gelding, above 14 hands, calculated to carry not less than 14 stone.—First prize, £15, R. N. Byass (Bob); second, £5, R. Gerring, Woodstock, Oxon (Clear the Way).

Mare or gelding, above 14 hands, calculated to carry not less than 12 stone.—First prize, £15, F. Symonds, Litchfield, Staffordshire (Prince Charlie); second, £5, J. H. Arkwright (Osman).

Park or lady's hack.—No entry.

Mare or gelding, for harness purposes, of 15 hands and upwards, to be driven in harness (given by J. Mason, Eynsham Hall, through the Oxfordshire Society).—First prize, £10, J. M. Jaffray, Leamington, Warwickshire (Gay Boy); second, £5, Rev. C. F. Garratt, Enstone, Oxon (Kitty).

PONIES.

Mare or gelding, not exceeding 14 hands.—Price, £10, J. B. Hobbell, Oxford (Leolinus).

Mare or gelding, not exceeding 15 hands.—First prize, £10, C. R. Ridley, Oxford (Jet); second, £5, J. M. Jaffray (Quick-silver).

FIGS.

(All ages calculated to the 1st of June, 1875.)

LARGE BREED.

Boar, above one year and not exceeding two years old.—Prize, £7, Earl of Ellesmere.

Boar, not exceeding one year old.—First prize, £7, Earl of Ellesmere; second, £3, R. E. Duckering, Kirton Lindsey Lincolnshire (Cultivator 16th).

Breeding sow.—First prize, £7, R. E. Duckering (Adelheid); second, £3, Earl of Ellesmere.

Pen of two breeding sows, not exceeding nine months old.—First prize, £7, Earl of Ellesmere; second, £3, S. Spencer, St. Ives, Hunts.

SMALL BREED (BLACK).

Boar, above one year and not exceeding two years old.—Prize, £7, J. Partridge, Bow, North-Devon.

Boar, not exceeding one year old.—First prize, £7, W. F. Collier, Horrbridge, South Devon; second, £3, J. Partridge.

Breeding sow.—First prize, £7, Rev. W. Hooper, Chilfrome Rectory, Dorchester; second, £3, W. F. Collier.

Pen of two breeding sows, not exceeding nine months old.—Prize, £7, J. Partridge.

SMALL BREED (WHITE).

Boar, above one year and not exceeding two years old.—First prize, £7, S. Spencer (Omega); second, £3, S. Spencer (Pat).

Boar, not exceeding one year old.—First prize, £7, S. Spencer; second, £3, R. E. Duckering (Osman).

Breeding sow.—First prize, £7, S. Spencer; second, £3, Lord Moreton (Pearl).

Pen of two breeding sows, not exceeding nine months old.—First prize, £7, Earl of Ellesmere; second, £3, Earl of Ellesmere.

BERKSHIRE.

(Not allowed to compete in any other class.)

Boar, above one year and not exceeding two years old.—Prize, £7, H. Humfrey, Shreveham, Berks.

Boar, not exceeding one year old.—First prize, £7, H. Humfrey (Bingley 1st); second, £3, A. Stewart, St. Bridge Farm, Gloucester (Victor).

Breeding sow.—First prize, £7, and extra prize of £5, R. Fowler, Aylesbury, Bucks (Princess Royal 2nd); second, £3, Sir N. W. Throckmorton, Bart, Faringdon, Berks.

Pen of two breeding sows, not exceeding nine months old.—First prize, £7, E. Tombs, Bampton, Oxon (Lady Baker and Lady Salisbury); second, £3, A. Stewart.

BUTTER.

First prize, £3, Lord Chesham; second, £2, C. F. Hollands, Hurstpierpoint, Sussex; third, £1 10s., A. C. Rogers, Radclive Farm, Buckingham.

THE SHOEHING COMPETITION.—First prize, £3 3s., W. J. Oldridge; second, £2 2s., W. Blackall; third, £1 1s., Rupert Samsbury; commended, J. Brooks, G. Wiggins, and J. H. Williams.

THE ANNUAL MEETING.

THE REPORT.

The Earl of JERSEY, in opening the proceedings, called upon the Hon. Secretary to read the minutes of the last

annual meeting, held in the Showyard, Bath, on the 5th June, 1877, which, having been read, were confirmed.

Mr. GOODWIN, the Secretary, then read the report, as follows:—

The Council, on this the 101st anniversary of the Society, desire to congratulate the general body of members on the success which still continues to attend its operations. The present meeting at Oxford, being the first visit of the Society to this ancient seat of learning, forms the prominent feature in the proceedings of the year. The Council have pleasure in recording the fact that the executive committee of the Oxford Agricultural Association have not only abandoned their distinctive meeting for the year, but have contributed a handsome sum as prizes for stock, in addition to those offered by this Society. The funded capital of the Society last year stood at £10,000, and has since been raised to £12,000 by the addition of £2,000 temporarily invested in India Bonds. The members enrolled on the books of the Society are—Governors, 121; life members, 120; annual members, 739—total, 1,030. Of cattle there are 324 entries, including 27 Devons, 95 Shorthorns, 49 Herefords, 51 Sussex, 68 Jerseys, and 34 Guernseys—a very large number considering that this meeting is being held at the same time as the agricultural contingent of the Paris Exhibition. Of sheep there are 242 pens, from most of the leading flocks in England, and including 49 Southdowns, 44 Shropshires, 31 Oxfordshire Downs, 30 Cotswolds, 27 Hampshire Downs, 21 Devon Long-wools, 19 Romney Marsh, 10 Exmoor and other Mountain Sheep, 6 Somerset and Dorset Horns, and 5 Leicesters. As regards horses the entries are less satisfactory than might have reasonably been expected, more especially since, in addition to local prizes, a considerable increase has been made in the amount given by the Society. Of pigs there are 16 entries of the large breed, 17 of the small breed (black), 29 of the small breed (white), and 52 Berkshires, not allowed to compete in the foregoing classes—total, 114. Of fresh butter there are 11 entries. Of poultry there are 518 entries, and of pigeons 113—total, 631. While many of the birds are characterised by marked features of excellence it may not be out of place to notice specially the Langshans, which have at this meeting made their first appearance in the Society's showyard. The arts department contains a collection of paintings and articles of vertu, for the exhibition of which the Society is indebted to the Local Loan Committee. The pictures by living artists, which form the staple of the Society's collection, are 407 in number, and comprise not only works of admitted excellence by artists of distinguished position, but many pleasing and successful contributions by men whose advancing reputation has been attested and promoted by the Society's exhibitions. In the horticultural department there is a good display of orchids and roses, and an extensive and complete collection of the indigenous wild flowers of Britain. The Council have determined to hold the annual meeting for the year 1879 in the important district of which Exeter forms the centre. The Council have much pleasure in recommending that the Earl of Morley be elected as President for the ensuing year, and that the following Governors of the Society be elected as Vice-Presidents:—The Lord Moreton, Colonel Coryton, and Mr. C. A. W. Troyte. In conclusion, the Council beg to express their cordial thanks to the Right Worshipful the Mayor the Chairman, Vice-chairman, and the hon. Secretaries and the members of the Local Committee, and to the inhabitants of Oxford, as well as the neighbourhood generally, for the

liberality and zeal with which they have promoted the success of the meeting. To the Art Loan Committee and to the contributors of works of art and horticultural specimens the thanks of the Council are eminently due. They also gratefully acknowledge their obligations to the judges in the several

departments for the able and conscientious discharge of their duties, and to the directors and officials of the railway companies for the facilities they have afforded the Society.

The Report was adopted

AGRICULTURAL SOCIETIES.

NORFOLK.

The annual exhibition of this Society was held recently, at North Walsham. The pretty little town was gaily decorated with festoons, banners, wreaths, such mottoes as "Speed the Plough," "Success to Agriculture," "Welcome," &c., spanning the streets. The townsfolk, doubtless, did all they could to welcome all comers, and that, perhaps, with an eye to business. Never has the little town been so inundated with people, and nothing but the County Agricultural Show will ever do it again. The Show-yard was situated about ten minutes' walk from the station.

No railway company is so much abused as that of the Great Eastern, and none so seldom praised; therefore it was with surprise, and indeed, with pleasure, I heard a large and popular exhibitor say, "How well the railway company managed their part—they did all they possibly could to help and oblige us." But I will begin my brief report of the animals in the yard, taking the classes as they begin in the catalogue.

THE HORSES.

Horses for agricultural purposes: The prizes for aged and three-year-old stallions were awarded at the Norwich Horse Show, in March last, and as I then wrote a report on the Show for *The Mark Lane Express*, I will not trouble its readers with further comment now. Suffice it to say, Mr. Murfit, of Wiggshall St. Mary, was awarded the first prize of £20 and the special prize of £60, for his grand horse Major; Mr. Anthony Hammond second for Lion, and Mr. Stanley, of Bury St. Edmund's, third for Champion. For three-year-olds Mr. Charles Masters was awarded first prize of £12 and special prize of £40, for Topsman; Mr. Jas. Case, of Testerton, second for Tomboy. These horses had to make their appearance at the show last week, which they did. There was a fair show of cart horses. In the two-year-old stallion class Mr. F. N. Micklethwait, of Taverham Hall, was awarded the red rosette for Taverham Tom, a good quality level colt, with plenty of bone, capital feet and legs, but a little too tall and narrow. Mr. Garrett Taylor took second honours for Norfolk Wonder, a recent purchase from Mr. Chas. Marsters. He is a very smart colt, and very active, but rather light in bone, a trifle low in the back, and slack behind his shoulders. This award is exactly the reverse of the Danmow decision, and was generally considered a right one.

The class for yearling agricultural stallions contained the best animal of the lot, viz., Mr. Rowell's (of Downham) Le Bon 2nd; to him was awarded the first prize in his class and the special for best stallion of any age.

He is a grand colt on short legs, a wide heavy fellow with great bone and feather. Mr. Ellis's 2nd prize colt is a very useful one, and a good mover.

The Suffolks were poorly represented as far as numbers go, Messrs. Richard Garrett and W. Wilson deservedly taking first prizes respectively for old and young stallions, and they were the only exhibitors.

In the class for brood mares Mr. Chas. Beart's Lioness added another prize to her already numerous honours. She is a grand mare and hard to beat.

Mr. Richard Smith, of Kimberly, won the first prize for cart foals with a very useful youngster. The mares and geldings were a good lot, as were the pairs of cart horses, although limited in number. Mr. Murfit, of Wiggshall St. Mary, showed a magnificent pair of geldings, for which he was awarded second prize. Mr. Robt. Makins winning first honours with a grand pair of mares; doubtless the geldings are worth the most money for town purposes, but the prizes are awarded for the best pair of horses for agricultural purposes, and the judges were perfectly right in giving their award to such a grand pair of mares, as they can both breed and work. The two-year-old and yearling cart colts were fairly well represented, but the genuine Norfolk cart-horses badly want improving.

The hackneys, I heard one of the judges say, were by no means a first-rate lot; however, there were some useful animals, especially in the hunters classes.

THE CATTLE.

On the whole, the Shortborns cannot be pronounced a first-rate lot; indeed, there were only a few good ones, and those principally from a distance. Norfolk men are not Shorthorn men or breeders of cattle; why on earth they are not it is impossible to tell. Surely it would be much to their advantage if they were to breed more cattle; it is the breeders of meat who derive the benefit of a fair price for meat, and I hope the day is not far distant when Norfolk farmers will send as many and as good Shorthorn cattle to the principal shows as those from other counties.

In the class for old bulls Mr. Linton gained the red rosette, also H.R.H. the Prince of Wales's cup, for best bull in the yard, with his grand bull Sir Arthur Ingram. He is as gay and as active as ever, his grand form, beautiful head, crest, and brisket, finely arched ribs, grand back, loin, and rump, are too well known to need further comment from me—everyone writes, and knows him to be a first-class animal. The Marquis of Lister's

second prize bull, Telemachus 9th, retains his heavy flesh. But he is not improved in other respects since last year. The reserve card went to Mr. Griffen's Telemachus 10th. Mr. Bland's first prize two-year-old, General Flirt, is a useful bull, with plenty of hair, good ribs, and deep flank, but his high-set tail gives his top anything but a nice appearance. The first prize yearling, Baron Ryedale, belonging to H.R.H. the Prince of Wales, is not a first class bull; he has a long big plain head, weak chine, no neck vein, shoulders too far forward, slack behind shoulders, altogether bad fore-quarters, good rump and half-leg. As a gentleman remarked, "The longer he lives I fear the worse he will get." Mr. Bland won second with a good quality bull. The bull calves were middling, Mr. Juno Morton securing both prizes with two useful calves, which, if "life fortunate," will do good service in a common herd. In the cow class two well-known cows took the two prizes, viz., the Marquis of Exeter's Telemacina and Mr. Sharp's Julia 11th. The latter was placed first. She is rather patchy, with good loin, ribs, and fore-quarters; but out of condition she would be exceedingly small, while Telemacina is a much larger and more stylish cow, with a magnificent back and loin. Mr. Griffen's first prize two year-old heifer is a pretty little animal, with narrowly set horns, which look mean, and do not beautify her appearance. Mr. Gerard Day, a Norfolk breeder, deservedly wins second honours with a very useful, good-quality heifer with well-sprung ribs and good loin. For heifer calves H.R.H. the Prince of Wales won the red ribbon with Fragrance, a long, level calf. Mr. Griffen's second prize calf is a very pretty one, but wanting in colour.

The Norfolk Polls showed up well, and this breed was better represented than the Shorthorns. Mr. Jas. Palmer's first prize bull is very good, possessing good neck, crest, and deep brisket, good level back and loin. Mr. Colman, M.P., won second with a good quality animal, but having flat ribs, and is rather thin over the spine. The old breeder, Mr. Juno Hammond, of Bale, is again in the show-yard, with representatives of his fine herd. He won first prize with his beautiful cow, Davy 12th—a very smart animal, good ribs, back, loin, and excellent rump of beef. Mr. Colman's second prize cow is but little inferior. A young breeder might well say, "How happy could I be with either were t'other dear summer away!" Mr. Colman's Fanciful won the red ribbon, and a grand two-year-old she is, excellent hind-quarters, and good in quality and colour. Mr. Hammond's Davy 18th was placed second to her; good as they both are it must needs a "fanciful" judge to decide which is the better of the two. The yearling polled heifer class may be pronounced as the best class of cattle exhibited almost all good animals of this breed. Mr.

Taylor, of Starston, took both the prizes, and well he deserved them.

The Cross-Bred classes contained some very good animals, *i.e.*, Mr. Morton's first prize cow Spot, a thick, heavy-fleshed good cow, just suitable for breeding good steers, and good at the pail too. Mr. Chapman's second prize cow in the same class is a stylish animal, and a right good farmer's cow.

The Alderneys, as usual in Norfolk, were not strongly represented. For the prizes awarded for fat cattle some good animals competed, those exhibited by Messrs. Colman, M.P. and Wortley we shall hear more of, they are destined for future honours.

The cup for best fat animal was awarded to Mr. Lound for a white three-year-old Shorthorn. She is a fairly good heifer, nice head, and very wide before; her shoulder-points are by no means well covered, in fact she is greatly deficient there, and the deep dip in her back gives her an ugly appearance.

THE SHEEP.

The Southdowns were a pretty collection; eight prizes were offered, of which Mr. Colman won four firsts and two seconds, which speaks volumes for the Easton flock. H.R.H. the Prince of Wales was awarded one first and two seconds. The first prize for ewe lambs went to Sandringham for an extremely pretty pen showing the true characteristics of the Southdown. Mr. Thos. Fulcher had two exhibits, and won a second prize with his old ram, a good sheep with good legs of mutton, good back, serag, and quality. Mr. Tom Brown carried everything before him with his invincible longwools; his first prize shearing ram is a grand sheep, fine in form and quality, beautiful wool, good legs of mutton (as all the Marham sheep have), grand loin, and magnificent ram's head. His second prize young ram is a wealthy fine-fleshed fellow—a very smart sheep. His first prize old ram was first at the Royal as a shearling, and has not been shown since; he has been used the last two seasons at Marham, and is destined for the same purpose next season. The ram lambs were good. Doubtless this fine collection of representative sheep from the Marham flock will ensure the appreciation of Norfolk flockmasters, so as to make the result of the Marham forthcoming sale satisfactory to Mr. Brown. The sheep bred by this painstaking breeder have won golden honours in all parts of the kingdom, and what is of more value, the golden opinions of flockmasters. The prizes in the longwool ewe classes were won by the celebrated breeders Messrs. Gunnell and Tell, with good Lincoln sheep. The half-bred lambs for which Norfolk is so celebrated were not so good as usual, although some good lambs were shown. Mr. T. Fulcher exhibited some capital Oxford Down rams bred by Mr. James Case, of Testerton, a fast rising breeder. In the shortwooled classes some roomy horny Suffolk ewes were shown by Messrs. Smith, Green, and Read, capital sheep they are and great favourites of the butcher and consumers also, as

In his criticism upon this and one or two other animals our contributor does not agree with our report of the Oxford Down. Judges will differ, and we give our contributor, who is a good judge of cattle, full liberty to record his opinions.

they have a large proportion of lean meat—they are big ewes and very much improved of late.

THE PIGS

were a small show, but the exhibits were first-rate, especially those shown by Mr. Sanders Spencer, of Holywell St. Ives. His are principally small breed whites and six exhibits carried off three first and two second prizes. They are beautiful in form and quality and first-rate specimens of the porcine race. Mr. Spencer came off with flying colours at the Bath and West of England Show at Oxford, and now again in Norfolk; therefore we may expect to hear of many more victories being gained by the now celebrated Holywell pigs. Mr. Daekering won all the prizes with large breed pigs, and Lord Rendlesham with black Suffolks. Mr. Sexton was not an exhibitor. Appended is the prize list.

LIST OF PRIZES. HORSES.

AGRICULTURAL STALLIONS.

Agricultural stallion two years old.—First prize, £12 F. N. Micklethwait, Taverham Hall (Taverham Tom); second, £3, Taylor Garrett, Whittingham (Norfolk Wonder).

Yearling agricultural stallion.—First prize, £12, E. Rowell Downham (Le Bon II); second, £8, J. B. Ellis, jun., West Bursham (Tom's Glory).

Special prize for agricultural stallion.—The Taverham prize of £5, for the best horse exhibited in Classes C and 3, E. Rowell, (Le Bon II).

Agricultural stallion (Suffolk) not under four years old.—Prize, £10, R. Garrett, Saxmundham (Crown Prince).

Agricultural stallion (Suffolk) under four years old.—First prize, £10, W. Wilson, Ipswich (Farmer's Glory).

HACKNEY AND RIDING STALLIONS.

Stallion not under four years old, suitable for getting hackneys for saddle or harness.—First prize, £15, R. Wales, Downham Market (Fireway); second, £10, J. Utting, Wymondham (Perfection); third, £5, J. L. Barrat, East Dereham (Rifleman).

Stallion under four years old, suitable for getting hackneys for saddle or harness.—First prize, £12, W. M. Farrar, Swaffham (Young Canadian); second, £8, J. Griggs, South Creake (Model the Second).

Stallion, suitable for getting high-stepping cobs.—Special prize of £5, W. Tuck, Little Soaring (Young Model).

BROOD MARES AND FOALS.

Agricultural brood mare, with foal at foot.—First prize, £15, C. Beart, Downham (Lioness); second, £10, R. Hopper, Whittlesea.

Agricultural foal.—First prize, £12, R. Smith, Kimberley; second, £3, R. Hopper, Whittlesea; third, £4, C. Beart, Stow Bardolph.

Agricultural brood mare and foal (Suffolk).—Prize, R. L. Lofft, Troston Hall (Mag).

Brood mare, adapted for breeding hunters, to be certified to have produced a living foal subsequent to the 1st of January, 1878.—First prize, £10, T. Betts, Winfarthing (Maria); second, £5, S. Bately, Southtown, Yarmouth.

Hackney brood mare, to be certified to have produced a living foal, subsequent to 1st of January, 1878.—First prize, £10, T. G. Nelecn, Sparham, Norwich (Lady Hilda); second, £5, W. Hammond, Fenshorpe (Beauty).

HORSES FOR AGRICULTURAL PURPOSES.

Mare, not exceeding six years old.—Prize, £10, J. W. Jones (Diamond).

Gelding, not exceeding six years old.—Prize, £10, J. Colman, M.P., Norwich.

Gobling not exceeding four years old.—Prize, £10, E. Worth, Aylsham (Britain).

Filly, three years old.—First prize, £12, F. N. Micklethwait, Taverham Hall (The Royal Pippin); second, £8, W. Hudson, Fideleum.

Filly, two years old.—First prize, £12, R. Hopper, Whittlesea, Cambs.; second, £8, W. Byford, Glemsford.

Yearling filly.—First prize, £12, H.R.H. the Prince of Wales, K.G. (Lady Codiva); second, £8, C. Marsters, Saddleborough (Princess).

Filly (Suffolk) not under four years old.—First prize, £10, J. Groat, Woodbridge (Smart); second, £5, R. Capon, Suffolk (Matchet the Second); third, W. Byford, Glemsford.

PAIRS OF CART HORSES.

Pair of cart horses, whether mare or gelding, without restriction as to colour, best suited for agricultural purposes, and which have been the property of the exhibitor at least three months next before the exhibition.—First prize, £12, R. Makeus, Kingshall, Stowmarket (Moggy and Matchet); second, £8, T. W. Murfet, Wiggenshall St. Mary, Lynn (Jolly and Farmer).

HUNTERS.

Mare or gelding, under seven years, adapted for hunting, equal to carry not less than fourteen stones.—First prize, £11, A. Taylor, Harleston; second, £15, J. Sadbury, Norwich (Warwick).

Mare or gelding, under seven years old, adapted for hunting, not equal to carry fourteen stones.—First prize, £10, J. T. Mills, Clermont, Watton; second, £7, T. Everitt, Fakenham (Peter); third, £4, T. L. Thompson, Norwich (Ace of Trumps).

Colt or filly, under five-years-old, adapted for hunting.—First prize, £10, R. G. Beart, Raynham, Brandon (Lincoln Lad); second, £7, R. Harvey, Culford Lodge (Warrior); third, £4, J. T. Mills, Clermont, Watton.

HACKNEY AND RIDING HORSES.

Riding mare or gelding, above fifteen and not exceeding fifteen hands three inches high.—First prize, £10, W. Dunning, Southrepps; second, £7, T. G. Nelson, Sparham (Gentle Annie); third, £4, W. Giddens, Wisbech (Norfolk Lass).

Hackney mare or gelding, above fourteen and not exceeding fifteen hands high, and in the possession of the exhibitor for three months previous to the exhibition.—First prize, £10, H. Wayman, Downham Market (Maritana); second, £7, W. Brandford, Swaffham; third, £4, F. Low, Norwich (Red wing).

COBS AND PONIES.

Cob, not less than thirteen hands three inches, nor more than fourteen hands three inches high, carrying (while being judged) at least fifteen stones, saddle and bridle included.—First prize, £10, J. Groat, Woodbridge (Lady Hayton); second, £7, T. Everett, North Creake.

Cob, not less than thirteen hands three inches, nor more than fourteen hands three inches, high.—First prize, £5, W. Hudson, Fakenham (Noggy); second, £5, H. Wymar (Charauto).

Pony, not under thirteen nor above thirteen hands three inches high.—First prize, £5, J. Green, East Dereham (Coarcted); second, £5, L. Taylor, Wymondham (Fairy).

Pony, not above thirteen hands high.—First prize, £5, J. P. P. Leeds, Kerdistone, Keephan (Lady Emma); second, £3, J. S. Postle, Smallburgh, Norwich (Lady Jane).

SPECIAL PRIZES FOR HARNESS HACKS.

Cob or pony no exceeding thirteen hands three inches high, to be shown in single harness.—Mr. F. Long's prize of £5, J. Green, East Dereham.

HARNESS HACKS.

£10, for the best mare or gelding, above 13 hand 6 inches high, to be shown in single harness, and to be contested for the first day of the show, H. Wayman, Downham Market (Maritime).

CATTLE.

SHORTHORNS.

Bull above three years old.—First prize, £15, William Linton, York (Sir Arthur Ingram); second, £10, Marquis of Exeter, Stamford (Telemachus 6th).

Bull above two and not exceeding three years old.—First prize, £15, H. T. Bland, Market Harboro' (General Flirt); second, £10, John Rowley, Pontfract (Fitz Arthur).

Bull above one and not exceeding two years old.—First prize, £12, H.R.H. the Prince of Wales, K.G., Sandringham (Baron Ryedale); second, £8, T. H. Bland, Market Harboro' (General Favourite).

Bull calf, not exceeding twelve months old, £7, John Morton, Downham (Prince Windham); second, £4, John Morton (Big Ben).

Cow above three years old, in calf or in milk, £12, J. J. Sharp Kettering (Julia 11th); second, £8, Marquis of Exeter (Te'macira).

SPECIAL PRIZE FOR SHORTHORN BULL.

The prize of £10 10s. was awarded to William Linton Sheriff Hutton (Sir Arthur Ingram).

Heifer above two and not exceeding three years old, in calf or in milk. C. W. Griffin, Peterborough (Lady Blanch 3rd) second, £8, G. J. Day (Florence).

Heifer, above one and not exceeding two years old, £10, Marquis of Exeter (Caroliua); second, £5, W. Clement Griffin, Werrington, Peterborough (Blush 8th).

Heifer calf, not exceeding twelve months old, £7, H.R.H. the Prince of Wales, K.G. (Fragrance); second, Clement Griffin, Peterborough (Network).

NORFOLK AND SUFFOLK RED POLLED CATTLE.

Bull, above three years old, £15, James Foster Palmer Attleborough (Davyson 3rd); second, £10, J. J. Colman, M.P., Norwich (Rufus).

Bull, above two and not exceeding three years old, £15, Henry Birbeck, Norwich (Bean); second, £8, LeStrange Hunstanton Hall (Osprey).

Bull, above one and not exceeding two years old.—First prize, £12, A. Taylor, Starston (King Charles); second, £8, E. Cooke, Norwich (Monarch 4th).

Bull calf, not exceeding twelve months old.—First prize, £7, J. F. Palmer, Attleborough (Othello); second, £4, R. T. Loft (Stont).

Cow above three years old, in calf or in milk.—First prize, £12, J. Hammond, East Dereham (Davy 12th); second, £8, J. J. Colman, Norwich (Rosa).

Heifer above two and not exceeding three years old, in calf or in milk.—First prize, £12, J. J. Colman (Fanciful); second, £8, J. Hammond, East Dereham (Davy 18th).

Heifer, above one and not exceeding two years old.—First prize, £10, A. Taylor, Starston (Needful); second, £5, A. Taylor, Starston (Novel).

Heifer calf not exceeding twelve months old.—First prize, £7, J. J. Colman (Bessy); second, £4, T. Fulcher, Elmham. **SPECIAL PRIZE FOR RED POLLED CATTLE.**

For the best collection of Norfolk and Suffolk Red Polled Animals, to include all exhibited in classes 9 to 16 inclusive.—Prize, the Breeders' Silver Cup or Plate, value £10 10s., J. J. Colman.

COWS AND HEIFERS.

Cow above three years old, in calf or in milk.—First prize, £10, J. Morton, Downham Market (Spot); second, £7, J. Chapman, North Walsham.

Heifer above two and not exceeding three years old, in calf or milk.—First prize, £10, J. Morton (Favourite); second, £7, J. G. Day, Norwich (Ruba).

Heifer above one and not exceeding two years old.—First prize, £8, T. Gunnell, Milton, Cambs (Lady Milton); second, £5, J. Morton (Pet).

ALDERNEY CATTLE.

Alderney bull of any age.—First prize, £12, J. C. Girling, Great Hautbois Rectory (Taxation 2nd); second, £5, H. E. Wortley, Frettenham (Napoleon).

Alderney cow or heifer of any age, in calf or in milk.—First prize, £12, E. Birkbeck, Norwich (Bride); second, £8, W. F. Thursby, Bergh Apton Rectory (Blue Bell).

FAT STEERS, COWS, AND HEIFERS.

Steer of any breed above three years old.—First prize, £12, R. A. Wortley, Aylsham; second, £6, J. J. Colman.

Steer of any breed, not above three years old.—First prize, £12, J. J. Colman; second, £6, R. Wortley, Suffield.

Cow or heifer of any age.—First prize, £12, and the Town and Neighbourhood of North Walsham Prize of £10 10s., E. Hubbard, Lowestoft; second, £6, J. Wortley, jun., Skepton.

SHEEP.

SOUTH-DOWNS.

Shearling ram.—First prize, £10, J. J. Colman; second, £7, J. J. Colman.

Ram of any age.—First prize, £10, J. J. Colman; second, £7, T. Fulcher, Elmham.

Pen of five shearling ewes.—First prize, £10, J. J. Colman; second, £5, H. R. H. The Prince of Wales.

Pen of ten ewe lambs.—First prize, £5, H. R. H. The Prince of Wales; second, J. J. Colman.

Pen of ten wether lambs bred by exhibitor from a flock of not less than five score ewes, size and quality to be taken into consideration.—First prize, £5, J. J. Colman; second, H. R. H. The Prince of Wales.

LONGWOOLS.

Shearling ram.—First prize, £10, T. Brown, Downham Market; second, £7, T. Brown.

Ram of any age.—First prize, £10, T. Brown; second, £7, T. Brown.

Pen of two ram lambs.—First prize, £8, T. Brown; second, £5, T. Brown.

Pen of five shearling ewes.—First prize, £10, T. Gunnell Cambs.; second, £5, C. Sell, Bassingbourne.

Pen of ten ewe lambs.—Prize, £5, R. C. Catling, Wisbech.

SHORTWOOLS.

(Of any breed not being Southdowns.)

Shearling ram.—First prize, £10, H. Lambert, Great Abington, Cambs.; second, £7, T. Fulcher, Elmham.

Ram of any age.—First prize, £10, T. Fulcher; second, £7, G. Cooke, Linton, Cambs.

Five shearling ewes.—First prize, £10, H. Lambert; second, £5, G. Cooke.

ANY BREED.

Pen of ten ewe or wether lambs of any breed, not being Southdown or Longwool.—First prize, £12, A. M. Robinson, Milton, Cambs.; second, £8, H. Lambert; third, £4, J. B. Ellis, jun., West Barsham, Walsingham.

Pen of three shearling wethers of any breed.—First prize, £7, C. Crawshay, Attleborough; second, £4, C. Crawshay.

Pen of five longwooled ewes of any age from a flock of not less than five score, having brought up a lamb or lambs.—First prize, £10, C. Sell, Lincoln.

Pen of five shortwooled ewes of any age having brought up a lamb or lambs.—First prize, £10, H. Lambert, Cambs.

Five blackfaced (Suffolk) shearling ewes.—First prize, £10, John M. Green, The Peace, Newmarket.

PIGS.

LARGE BREED

Boar, under two years old.—First prize, £5, R. E. Duckering and Sons, Kirton Lindsey (Fortschritt); second, £3, R. E. Duckering and Sons (Cultivator).

Breeding sow, in pig.—First prize, £5, R. E. Duckering and Sons (Adelheid); second, £3, R. E. Duckering and Sons (Frenkling).

Three breeding sows, not above eight months old.—First prize, £5, Sanders Spencer, St. Ives.

SMALL BREED (black).

Boar under two years old.—First prize, £5, Lord Rendlesham, Woodbridge; second, £3, Lord Rendlesham (Sham rock).

Breeding sow in pig.—First prize, £5, Lord Rendlesham.

Three breeding sows, not above eight months old.—First prize, £5, Lord Rendlesham.

SMALL BREED (white).

Boar under two years old.—First prize, £5, Sanders Spencer, Holywell, St. Ives (Omega); second, £3, Sanders Spencer, (Pat).

Breeding sow in pig.—First prize, £5, Sanders Spencer; second, £3, Sanders Spencer.

Three breeding sows, not above 8 months old.—First prize, £5, R. E. Duckering and Sons.

THORNE.

The twenty-eighth exhibition in connection with the Thorne Agricultural Society was recently held. The entries were as follow:—Horses 191; cattle 29; sheep 32; pigs 22. The general show of horses was a remarkably good one, and has perhaps not been exceeded at any exhibition the Society has yet held. The two and three-year-old carting horses were unusually good specimens, as also were the animals in the coaching class. There was a good show of three-year-old geldings and fillies, several of the animals having been brought from a great distance. Their merits were somewhat equally divided, and hence the judges had to exercise considerable care in making their award. After a close contest, their decision was given in favour of Governor, a red roan, the property of Mr. Henry Smith, Cropwell Butler, who thus carried off a silver cup of the value of £5 5s. Messrs. Cafferata and Co., Newark-on-Trent, came second with Sawyer, a pretty, compact roan gelding. The two-year-old geldings and fillies were numerously represented, there being no less than fifteen to compete for a silver cup of

the value of £3 3s. The winner, Excelsior, the property of Mr. J. T. Pindar, was a magnificent animal. This was the first time it has been shown, and £120 was offered for it on the ground. The draught horses, used exclusively for agriculture, were a splendid class. The winner of the first prize—a silver cup of the value of £7—belonged to Messrs. Cafferata and Co. The roadster geldings or mares to be driven in harness occupied almost an hour in judging. There were twelve entries. The first prize of £10 10s. was awarded to a seven-year-old bay cob mare, the property of Lady E. Spencer Churchill. The same animal secured the second and third prizes at Manchester Park, also the second prize in saddle and second in harness at Islington. Although the entries in the cattle department were not large, some very fair animals were shown. The bull class—not exceeding two years old—was a good one throughout, the younger animals especially being noteworthy. The animal which took the first prize was from one of the most fashionable tribes of Shorthorns. There was a capital show of sheep and pigs. The following are the awards:—

HORSES.—Agricultural mare and foal, M. Askren, Levels Thorne; 2, J. Coulman, J.P., Thorne. Hunter mare and foal, G. F. Statter, Whitefield; 2, T. A. Makin, Doncaster. Roadster mare and foal, J. T. Brown, Althorpe; 2, Richard Coggon, West Butterwick. Agricultural or Draught—Yearling colt or filly, Josh. Ward, Wadsley Bridge, Sheffield; 2, M. Durham, Thorne. Two-year-old gelding or filly, J. T. Pindar, Goole; 2, H. Smith, Cropwell Butler, Bingham. Three-year-old gelding or filly, H. Smith; 2, Cafferata and Co., Newark-on-Trent. Pair draught horses, used exclusively for agriculture, Cafferata and Co; 2, T. Tane, Rainsbut, Crowle. Gelding or mare, T. Tane; 2, J. Coulman. Hunters—Yearling colt or filly, T. Dudding, Garthorpe, Goole; 2, G. H. Ancerton, Howdensyke, Howden. Two-year-old gelding or filly, 1 and 2, T. Dudding. Three-year-old gelding or filly, A. J. Brown, North Elmsall Hall, Pontefract; 2, John Wresle, Brigg, Brocklesby. Gelding or mares, John Spurr, Doncaster; 2, T. E. Morrell, Hellaby Hall. Carriage—Yearling colt or filly, George Varley, Temple Hirst; 2, Ed. Coulman, Thorne. Two-year-old gelding or filly, M. Askren, Levels; 2, B. Howdle, North Cave. Gelding or mare, John Johnson, Brigham; 2, George Wadsworth, Howden. Roadsters—Yearling colt or filly, John Scriven, Saltaire; 2, George Snow, Burnham. Two-year-old gelding or filly, G. W. Scott, Doncaster; Spink Calvert, North Duffield. Three-year-old gelding or filly, Stephen Stavelly, Hayton; 2, R. Maw, Crowle. Gelding or mare, any age, J. Robinson, Hull; 2, D. R. Sowerby, Hull. Weight-carrying cob, any age or sex, F. P. Dale, Rawcliffe. 2, Lady Edward Spencer Churchill, London. Lady's hackney any age or sex, Lady Edward Spencer Churchill; 2, J. M. Axe, M.R.C.V.S., Doncaster. Pony, not exceeding 14 hands F. Holesworth, Shipton; 2, John Garbutt, Doncaster. Pony not exceeding 12 hands, Mrs. T. Robinson, Crowle; 2, Thomas Rowbottom, Gunhouse. Gelding or mare, driven in harness, Lady Edward Spencer Churchill; 2, E. H. Marfleet, Bassing ham. Gelding or mare, driven in harness, J. N. Pindar, Crowle; 2, W. Foster, Pontefract.

SHORTHORNED CATTLE.—Bull, any age, Thomas Atkinson, Unsworth; 2, Jonas Webb, Uxby. Bull, not exceeding

two years old, R. Botterill, Brough; 2, C. Wright, Tadcaster; 3, T. H. Beard, Whitley Bridge. Bull calf, not exceeding one year old, J. Webb, Ulsby; 2, R. Botterill, Brough. Heifer calf, not exceeding one year old, R. Botterill, Brough; 2, Thomas Atkinson, Unsworth. Cow, in calf, or milk, H. Fawcett, Leeds; 2, Thomas Atkinson, Unsworth. Heifer, in calf or milk, C. Strickland, Sutton-on-Forest; 2, M. Durham, Thorne. Heifer, not exceeding two years old, Henry Fawcett; 2, W. Smith, Goole.

SHEEP.—One shear improved Lincoln or long-woolled ram, 1 and 2, Henry Smith, Cropwell Butler. Improved Lincoln or long-woolled ram, any age, John Green and Son, Silsden 2, Henry Smith. Pen of five improved Lincoln or long-woolled ewes having suckled lambs up to the day of the show W. Roe, Newark; George Kenyon, jun., Thorne. Pen of five improved Lincoln or long-woolled gimmers, W. Roe; 2, A. Winder, Doncaster. Pen of five improved Lincoln or long-woolled lambs, W. Roe; 2, M. Askren, Levels. Tup lamb (within 15 miles of Thorne), M. Askren; 2, George Maud Thorne.

PIGS.—Boar, any breed, Thompson Hannam, Leeds; 2, Thomas Parkinson and Sons, Doncaster. Sow, any breed, Thompson Hannam; 2, Thomas Parkinson and Sons. Open gilt, any age, Rd. Haddinghall, Doncaster; 2, Thompson Hannam. Cottager's pig, Wm. Taylor, Leeds; 2, George Smith, Leeds. Boar, property of exhibitor, resident within ten miles of Thorne, G. Bowskill, Doncaster; 2, Thomas Parkinson and Sons.—Abridged from the *Leeds Mercury*.

THIRSK

The annual exhibition of the Thirsk Agricultural Society was held recently in the Old Cricket Field at Thirsk, under favourable auspices. During the nine years of its existence the Society has, by efficient management, gradually increased in popularity; whilst the liberal prizes it has been able to offer for competition have been the means of drawing stock to its exhibitions from all parts of Yorkshire. The exhibition of aged bulls was a remarkably good one, as also was that of three-year-old heifers. In the bull classes Mr. G. Yeates, Studley, carried off a couple of premier prizes, as also did Mr. C. Strickland, Sutton-on-the-Forest, in the heifer classes. The prize for the best cow for dairy purposes was awarded to an animal belonging to Mr. G. W. Metcalfe, Ampleforth, who also secured the special prize of £5 for the best cow, the property of a cottager whose annual rents collectively do not exceed £20. Mr. F. A. Milbank M.P., offered a silver cup of the value of £10 to the owner of the best three dairy cows, in calf or milk, the property of a tenant farmer. Some splendid animals were shown, the decision of the judges being in favour of a triplet belonging to Mr. T. Stamper, Highfield House, Oswaldkirk, York. The entries of horses numbered 228 against 226 last year. The general show was remarkably good; nothing better in fact could have been desired. The stallion draught horses were a remarkably good class, and would have done credit to a county show. A special prize of £20, for the best stallion for agricultural purposes, brought together half-a-dozen competitors. The victor was declared to be a three-year-old belonging to Mr.

R. Tweedie, Catterick. The three year-old hunting geldings were a fine lot, as also were the four-year olds and upwards competing for a silver cup, valued at £15 15s. The competitors numbered about a score. The prize was awarded to Baldersby, a gelding seven years of age, the property of Mr. J. B. Booth, Catterick. Osman, a chesnut gelding, four years of age, the property of Mr. J. S. Atkinson, Northallerton, came in for the second prize of £5. There were only four entries for the jumping competition, which was won by Whalebone, the property of Major Stappylton.

The following is a list of the awards.—

CATTLE.

SHORTHORNS.—Bull, two years old and not exceeding four.—J. Waind, Kirbymoorside. Bull, above one and under two years old.—1, G. Yeates, Ripon; 2, W. Rudsdale, Yarm. Bull calf under twelve months old.—1, G. Yeates, Ripon; 2, T. Stamper, Oswaldkirk. Cow or heifer in calf or milk, three years old and upwards.—1, C. Strickland, Easingwold; 2, T. Stamper.—Cow or heifer under three years old.—1, C. Strickland; 2, J. Waind. Heifer, one year old and under two.—J. and D. Linton, Bedale.—Heifer calf under twelve months old.—1, G. Yeates; 2, J. Kirby, Thirsk. **CATTLE OF ANY BREED OR CROSS.**—Cow for dairy purposes.—1, G. W. Metcalfe, Ampleforth; 2, J. T. Robinson, Thirsk. Cow, the property of a cottager.—1, G. W. Metcalfe; 2, W. Oastler, Thirsk. Three dairy cows, in calf or milk, the property of a tenant farmer.—1, T. Stamper; 2, J. Bellwood, Northallerton. Fat beast of any age, breed or sex (bulls excluded).—1, G. Knowlson, Easingwold; 2, J. T. Robinson.

SHEEP.

LEICESTER OR LONG WOOL.—Ram, one shear.—1, J. Green and Son, Leeds; 2, S. W. Tinker, Thirsk. Ram, aged.—1, J. Green and Son; 2, Messrs. Todd, Bedale. Three gimmer shearlings.—1 and 2, J. Green and Son.—**LEICESTER OR LONG WOOL (LIMITED TO THE DISTRICT).**—Ram, one shear.—1 and 2, T. Strickland, Thirsk Junction. Ram, aged.—1, S. W. Tinker; 2, J. and D. Linton. Three gimmer shearlings.—1, J. and D. Linton; 2, W. Hall, Thirsk. Three ewes, having suckled lambs in 1878.—1, W. Hall; 2, J. and D. Linton. Five fat Leicester or North sheep.—1, L. Manfield, Thirsk; 2, T. F. Imeson, Thirsk.

PIGS.

Boar of the large breed.—1, T. Hannan, Leeds; 2, T. Nicholson, York. Boar of the small breed.—1, T. Nicholson 2, W. H. Garforth, York. Sow of the large breed, in pig or milk.—1, T. Nicholson; 2, T. F. F. Borwell, Leeds. Sow of the middle breed, in pig or milk.—1, T. Hannan; 2, T. Nicholson. Sow of the small breed, in pig or milk.—1, T. Hannan; 2, E. Hodgkinson, Thirsk. Special prize, for the best pig, the property of a cottager whose annual rental does not exceed £8 (limited to the district).—1, W. Boddy, Sinderby; 2, T. Amos, Thirsk.

HORSES.

Special prize, for the best stallion for agricultural purposes, the winner to travel the district during the season 1879, and remain in Thirsk one night in each week during the season.—1, R. Tweedie, Catterick; 2, J. P. Crowther. Brood mare for breeding weight-carrying hunters, with foal at foot.—1, M. Wilkinson, Thirsk; 2, T. F. Imeson. Breed mare for

breeding coach-horses, with foal at foot.—1, J. Burton, Thirsk; 2, T. Highmoor, Ripon. Brood mare for breeding roadsters, with foal at foot.—1, R. Martin, York; 2, J. Lee, Thirsk. Special prize, for the best brood mare for breeding agricultural horses, with foal at foot.—1, H. Kirby, York; 2, W. J. Robinson, Thirsk.

HUNTERS.—Yearling colt for the field.—1, R. B. Manfield, Thirsk; 2, T. and W. Rishworth, Tadcaster. Filly for the field.—1, J. T. Robinson; 2, W. Hardwick, Northallerton. Two-year-old gelding for the field.—1, J. T. Robinson; 2, J. Welburn, Thirsk. Two-year-old filly for the field.—1, R. B. Manfield; 2, W. Scott, Boroughbridge. Three-year-old gelding for the field.—1, J. T. Robinson; 2, Viscountess Downe, Thirsk. Three-year-old filly for the field.—1, W. Fearby, Leppington; 2, B. F. Manfield. Hunting gelding or mare, four years old, to be ridden in the ring.—1, J. S. Atkinson, Northallerton; 2, G. H. Percy, Market Weighton. Hunting gelding or mare, four years old and upwards, to be ridden in the ring.—1, J. B. Booth, Killerby; 2, J. S. Atkinson.

COACHING.—Yearling colt or filly.—W. L. Robinson, Taormaby; 2, G. Thompson, Hutton's Amos. Two-year-old gelding.—1, W. and C. Harrison, Bossall; 2, W. Harrison, Easingwold. Two-year-old filly.—1, W. Strickland, Rosedale; 2, W. Kitching, Heighington. Three-year-old gelding.—1 and 2, W. Harrison. Three-year-old filly.—J. T. Robinson, Lockenby.

ROADSTERS.—Yearling colt or filly.—T. Rickaby, jun., Crayke. Two-year-old gelding, or filly.—1, R. Martin, Scoreby; 2, W. Rickell, Warton. Three-year-old gelding.—1, G. Beal, Huby; 2, W. Wilkinson, South Kilvington. Three-year-old filly.—1, J. Morley, Dishforth; 2, W. Kirby, Skirpenbeck. Gentleman's hackney of any sex, not exceeding five years old, and not exceeding 15h. 2in. in height, to be ridden in the ring.—1, C. Rose, Malton; 2, J. Dunnington, Jefferson, York.

AGRICULTURAL HORSES.—Yearling colt or filly.—1, J. Jackson, Great Ayton; 2, J. T. Shipley, Assenby. Two-year-old gelding.—1, G. Crookes, Danby Wiske; 2, C. Nicholson Littlethorpe. Two-year-old filly.—1, C. Wright, Eranham; 2, J. Morton, Skipton-on-Swale. Three-year-old gelding.—1, R. Tennant, Bilton; 2, H. Danby, Sheriff Hutton. Three-year-old filly.—1, R. T. Ogle, Keenbythorpe; 2, H. Lawson, Sutton Forest. Agricultural gelding or mare, four years old and upwards.—1, J. Green and Son; 2, J. Hare, Balk Jumper.—1, Major Stapylton, Helderby; 2, W. Atkinson, Masham.

PONIES.—Pony not exceeding 14 hands in height, any age, to be ridden in the ring.—1, M. B. S. Lane, Baldersby Park; 2, J. Morley, Dishforth.

HARNESS.—Horse or pony in single harness.—1, R. Martin, Scoreby; 2, H. Cantley.—Abridged from *Leds's Monthly*

"THE FERN WORLD."—The Queen has accepted from Mr. Francis George Heath a copy of his "Fern World," and has also desired General Sir T. M. Biddulph "to return Her Majesty's thanks" to the author for his book. The volume, first published last autumn, has just reached its fourth edition.

A lady, visiting the British Museum, said to one of the librarians, "Pray, sir, haven't you a skull of Oliver Cromwell here?" "No, madam," replied the man of learning and antiquity. "Dear me," said she, "I wonder at that, for they have a very fine one in the museum at Oxford."

THE AGRICULTURAL COLLEGE, CIRENCESTER.

—The summer session of this College has just ended. In the absence of the Earl of Ducie, who was unable to attend, the Principal distributed the prizes, &c. Diploma awarded to (full marks 1,800) James Mollison, Dochzarrock Lodge, Inverness—1,616; Reginald James B. Clements, 3, Beauport Buildings, Spa, Gloucester—1,633; Ricardo Razo, 4, Boscombe Road, Shepherd's Bush—1,476; Charles P. O. Selby Bigge, The Moat, Tunbridge—1,450; John Henry Waller, Waldringfield Rectory, Woodbridge—1,439; William Edward Akroyd, 26, Park Road, Regent's Park—1,263. Scholarships.—First scholarship to Beecher, Brooke-Hunt (O.S.), Le Marchant; second scholarship to Jephson, Falcon, Benson. The Holland medal was awarded to James Mollison.

THE CATTLE DISEASES BILL.—It is quite as easy for the foreigner to kill his cattle at home and pack and deliver the meat in London and other large consuming centres as it is for the carcass butchers of Aberdeenshire to send the meat which is so highly prized by us in the south. But supposing temporarily, the price of meat should be advanced fractionally, while the trade is settling down to the altered circumstances surely that is a very weak argument in support of a system which holds a sword of Damocles over the heads of breeders and graziers in this country, warps their energies, and cramps their operations. Far better to give the British agriculturists that security against the risk of disease coming from abroad, whether in the form of cattle plague, pleuro-pneumonia, or foot-and-mouth complaint, and so ensure an increased supply of good home-bred and home-fed meat, than to remain dependent upon foreign importation, which may be entirely arrested upon the occurrence of any sudden outbreak of some virulent disease on the Continent. We have little fear for the fate of the Duke of Richmond's Bill as it now stands, if our representatives will only throw their weight into the scale, which is now heavily loaded with common-sense, sound argument, and statistics, notwithstanding the strenuous opposition which is threatened from some of the manufacturing constituencies. This question affects the working power of this great nation is to have a degree to allow it to be handed over as a foot-ball to be kicked by the Ministerial and Opposition sides.—*Daily Chronicle*.

LARD IN BUTTER.—*The Prairie Farmer* state that Dr. Claassen, city chemist of Cleveland, Ohio, in a report on butter, gives the following as a simple test for adulteration by lard:—The suspected butter is melted, and about 50 grains of it poured into a test tube. When this is cooled to the temperature of the human hand, there is to be added, mixing slowly by agitation, 120 grains pure sulphuric acid. If the butter is pure the mixture will at once become ye low, and afterwards a bright yellowish red. If lard is present the mixture will pass from the colour last named to brownish red, brown, and perhaps brownish black. Turmeric or annatto is frequently used to colour adulterated butter. To detect either of these dyes the butter should be melted and shaken with twice the quantity of alcohol. The butter having subsided, the dye, if any is present, will appear above, in solution, in the alcohol, and taint it yellow; but from pure butter no colour will be extracted.

A beautiful widow of Newport, R. I., having left her châl for the season, was asked what induced her to desert such a charming retreat. "Too much balcony and too little Romeo," was her reply.

Miscellaneous.

A CHEAP WEATHER-GLASS.—Take a broad-necked bottle, such as are used for pickles or fruit jellies, and fill it with water within two or three inches of the brim; turn a clean oil-flask upside-down, with its neck within the pickle-bottle. Should the weather be set fair, the water in the neck of the flask will remain about half an inch above the level; but if the rain be near the water will rise gradually but quickly in the neck of the flask; and if rain be very near, and the atmosphere in consequence very heavy, the water may rise in the flask's neck as much as two or three inches within a few hours. No one should be without this useful instrument; it gives no trouble; the water does not require changing—out doors or in doors, heat or cold, are alike immaterial. In frosty weather it should not be forgotten that this instrument must be kept in a temperature above freezing, otherwise it cannot act; and should the bottle be left full of water it will probably break in the ordinary course with the congelation of the water. It is obvious that this simple apparatus will not indicate with scientific precision the amount of moisture in the atmosphere; but the warning given by the rise of the water in the neck of the flask may be sufficient to prevent disappointment in domestic arrangements, especially with regard to such an important matter in the household as selection of a good “drying day” for the family wash, a matter of great interest to the careful housekeeper.—*Cassell's Household Guide*

AN INVITATION.—A British agriculturist mourns because the “game laws” are more grievous in their effects than the occasional “blight of Heaven.” He hired a farm stocked it with cattle and sheep; he ploughed, he sowed, he reaped, he paid rent; his landlord also stocked the same farm with rabbits, hares, and pheasants, and sent to market the game which his tenant's produce had fed. Better come over and try life on freedom's soil—working some of Uncle Sam's vacant and unctuous acres.—*New York Tribune*.

DRESS.—*Piccadilly*, a new “Society” journal remarks that beauty of dress is at present obtained from Paris, owing to some inspiration worthy of some of the more intellectual of the Hebraicæ. Now, almost all these “fashions,” as they are called, have one distinct motive—to give the milliners work; and therefore to be as different to preceding ones as can well be. It can easily be seen that there can be but very few methods of perfect dress in the world, and that if it were necessary to invent a new method once every six months (or oftener) these would soon be exhausted, and recourse would have to be had to all sorts of ingenious devices and extravagances to keep up the requisite novelty. This is what happens in Paris; and as we follow the French with slavish submission, this is what happens in England, too. Let but an unholy inspiration enter the head of milliner or leader of the fashion, and straightway everyone must also be inspired in a like fashion, or remain in that outer darkness where, for women, alas! there is always gnashing of teeth. If our Englishwomen could only be persuaded to stand upon their dignity at last, and say “No, we have been dragged at your chariot-wheels long enough; we have imitated you till we have ruined our husbands and made frights of ourselves, and now we will do it no longer. We are sick of your caprices, and your follies, and your inconsistencies, and we will try it, for the future, we cannot dress like adies without your help.” This is what we

should like to hear our countrywomen say and stand to, and the result of it would be that we should no longer drift about from one fashion to another, according to the mutations of French taste, but have a rationally beautiful dress, suitable to our climate and our people, possessing the individuality of the English character and the sobriety of English taste.

WHAT A SPIDER EATS PER DIEM.—In order to test what a spider can do in the way of eating, we arose about daybreak in the morning to supply this fine web with a fly. At first, however, the spider did not come from its retreat, so we peeped among the leaves, and there discovered that an earwig had been caught, and was now being feasted on. The spider left the earwig, rolled up the fly, and at once returned to his “first course.” This was at half-past 5 A.M. in September. At 7 A.M. the earwig had been demolished, and the spider, after resting awhile, and probably enjoying a nap, came down for the fly, which he had finished at 9 A.M. A little after 9 we supplied him with a daddy-long-legs, which he ate by noon. At 1 o'clock a blow-fly was greedily seized, and then immediately, with an appetite apparently no worse for his previous indulgence, he commenced on the blow-fly. During the day and towards evening a great many small green flies, or what are popularly termed midges, had been caught in the web; of these we counted one hundred and twenty all dead and fast prisoners in the spider's net. Soon after dark, provided with a lantern, we went to examine whether the spider was suffering from indigestion, or in any other way, from his previous meals; instead, however, of being thus affected, he was employed in rolling up together the various little green midges, when he took them to his retreat and tea. This process he repeated, carrying up the lots in little detachments, until the web was eaten, for the web and its contents were buddled up together. A slight rest of about an hour was followed by the most industrious web-making process, and before daybreak another web was ready to be used in the same way. Taking the relative size of the spider, and of the creatures it ate, and applying this to a man, it would be somewhat as follows:—At daybreak, a small alligator was eaten; at 7 A.M. a lamb; at 9 A.M. a young carleopard; at 10 o'clock a sheep; and during the night 120 larks. This, we believe would be a very fair allowance for a man during twenty-four hours, and could we find one gifted with such an appetite and digestion we can readily comprehend how he might spin five miles of web without killing himself, provided he possessed the necessary machinery.—*New Era*.

A CLEVER MONKEY.—The following amusing incident^t appeared in “Nature” last week: A brave, active, intelligent terrier, belonging to a lady, one day discovered a monkey belonging to an itinerant organ-grinder, seated upon a bank within the grounds, and at once made a dash for him. The monkey, who was attired in jacket and hat, awaited the onset with such undisturbed tranquillity that the dog halted within a few feet of him to reconnoitre. Both animals took a long steady stare at each other, but the dog evidently was recovering from surprise, and about to make a spring for the intruder. At this critical juncture the monkey, who had remained perfectly quiet hitherto, raised his paw and gracefully saluted by lifting his hat. The effect was magical; the dog's head and tail dropped, and he sneaked off and entered the house, refusing to leave it till he was satisfied that his polite but mysterious guest had departed. His whole demeanour showed plainly that he felt the monkey was something “uncanny,” and not to be meddled with.

A NOTE FOR BEER DRINKERS.—A general impression prevails that "ignorance is bliss." This manifestly depends on the nature of the ignorance and the nature of the bliss; for example, it surely cannot be a blissful state to be acquainted with the following preparations that are advertised and, we presume, used by town and country brewers:—"Bavarian bitter, 1 lb. equals 64 lb. of hops. For adding to copper, or when racked." "Bisulphate of lime, for the prevention of acetous fermentation of beer." "Double humulin (aroma), for flavouring mild like pale ales, 1 lb. equal to 32 lb. of hops." "Burton water crystals, especially recommended to brewers for rendering ales more preservative, improving attenuation, dropping clearer, paler in colour, more sparkling." The quotations we have given are from the advertisement sheet of a well-known and officially published class of journal, and clearly show that ignorance produces, at any rate in the beer-drinker head-ache and stomach-ache, rather than the bliss that poets write of. Now, if we could but restore the brewers of England to that condition of ignorance when they could only brew beer with malt and hops, we might fairly regard it as a case of ignorance being bliss. As it is, however, this age of science has produced brewers that are chemists and wine merchants that are perfect masters in that mysterious department of knowledge which is euphemistically called "blending." We can scarcely complain of the danger that has arisen from a little knowledge; our trouble has clearly come from our drink makers knowing too much.—*Medical Examiner.*

A POTATO BRIGADE.—Mr. McKinlay informs us that he has this year performed the herculean task of collecting and planting 600 sorts of potatoes under name. Such a collection as this is unique, and exceeds all that have been before mustered together of the noble tuber. Last year a great seed firm mildly paraphrased the charge of the Light Brigade by taking an entire gallery of the Royal Aquarium by storm with 500 kinds. Should Mr. MacKinlay, with even more pluck, charge with his Potato Brigade of 600 strong into the doors of the Paris Exhibition next October he will doubtless crush the natives, whilst fortunately his victory will be bloodless. The collection of this great assortment will afford an excellent opportunity to correct much of the existent potato nomenclature.—A. D., in *The Gardener's Magazine.*

HUMOUR IN THE WITNESS-BOX.—In a trial at Winchester, a witness, failing to make his version of a conversation intelligible by reason of his fondness for "says I" and "says he," was taken in hand by Baron Martin, with the following result:—"My man, tell us now exactly what passed." "Yes, my lord. I said I would not have the pig." "And what was his answer?" "He said that he had been keeping it for me, and that he—" "No, no; he could not have said that, he spoke in the first person." "No, my lord; I was the first person that spoke." "I mean, don't bring in the third person; repeat his exact words." "There was no third person, my lord; only him and me." "My good fellow, he did not say he had been keeping the pig; he said 'I have been keeping it.'" "I assure you, my lord, there was no mention of your lordship at all. We are on different stories. There was no third person there, and if anything had been said about your lordship, I must have heard it." The baron gave in. Lord Mansfield once came off second best in endeavouring to make a witness use intelligible language. The man had deposed that he had not suffered any loss at the defendant's hands, because

he was up to him. "What do you mean by being up to him?" asked his lordship. "Mean, my lord? why that I was down upon him." "Down upon him?" repeated the judge interrogatively. "Yes, my lord; deep as he thought himself I stagg'd him." "Really," said Lord Mansfield, "I do not understand this sort of language." "Not understand it!" exclaimed the unabashed adept in slang; "not understand it! lord, what a flat you must be!"—*All the Year Round.*

ALL THE DIFFERENCE.—Many mothers are either compelled to stay away from church or take their babies with them. A poor woman took her little one in her arms to hear Dr. Parker. The loud voice from the pulpit awoke the child and made it cry, and its mother got up and was leaving the Temple, when the Doctor stopped her by saying, "My good woman don't you go away. The baby doesn't disturb me." "It isn't for that, sir, I leave," she replied; "it's you disturb the baby."—*Figaro.*

WHEAT OF TAOS.—Our readers will remember the advertisement of this novelty, a sample of which was in our window. *Hasting's Guide to California and Oregon* states that:—The wheat of Taos grows from 3 to 4 feet high, and is rust proof. The berry is very large, measuring on an average of one-half inch in length, and weighs about four pounds heavier to the bushel than the common wheat. The average crop is from 70 to 100 bushels to the acre. We have information from several respectable and creditable gentlemen that there has been an instance within their own knowledge of a farmer receiving 120 bushels to the acre, and that the next year, from a spontaneous growth upon the same ground, he received 61 bushels. To many it will appear impossible that one acre of ground should produce that quantity of wheat, and hence to them, the above statement will appear incredible; but as we have reliable and satisfactory proof we do not in the least doubt its entire correctness. The flour made from this wheat is not surpassed by the best made from white wheat.—*Bedfordshire Times.*

A HARD CASE.—Enter young husband, who throws himself into a chair, and exclaims: "What! Toothache again, Maria! I do call that hard upon a feller! Why, you had toothache when I left this morning! And here have I been at Epsom all day, with the jolliest lot o' fellers ever got together in one drag, and won a pot o' money, and had no end of a jolly time, and did think I should find something cheerful and jolly to greet a feller when I got home! And there you are!—Toothache again! I do call it hard upon a feller—precious hard!"—*Punch.*

NO SAE MUCH PROFIT.—One more story from the North of Ireland. He was a "Northern Farmer" *pur e simple*—had married three wives in the course of four years, and buried them all three—they happened to have been "comfortable," *ces demes*, and had brought him a trifle of money, and a bit of land, and maybe a pig or two, as their respective *dots*. To him the parson consolingly on the demise of No. 3: "Well, Andy, I'm sorry for your trouble; but any way you can't be badly off considering what they brought to you;" "Yer no just recht about yon, sir," said Andy pensively. "A tell ye what it is, sir: ye ma' b'leeve me that what wi' the fetchin' o' them in, an' the fetchin' o' them oot, *there's no sae much profit on them as maybe ye think!*"—*World.*

REVIEW OF THE CORN TRADE,

FROM *THE MARK LANE EXPRESS* FOR THE WEEK ENDING JUNE 24.

A rather higher temperature has prevailed during the past week, especially at night, but the weather remained in an unsettled state until within the last few days. Haymaking has been sadly delayed by the rain, and in many districts where cutting had taken place it had been impossible to secure the crop, at any rate until the end of last week, when two bright days enabled some carting to be done. Barley everywhere appears to have suffered severely from the continuous moisture, and no subsequent weather can repair the injury already done, while in spite of isolated reports to the contrary the wheat plant generally looks sickly and yellow, a condition of things which augurs unfavourably for a heavy sheaf of harvest. Despite the somewhat conflicting nature of agricultural advices the present situation of the cereal crops is highly critical, and nothing but a continuance of normal weather can prevent another addition to the succession of unproductive and unremunerative seasons which have proved well nigh ruinous to farmers. A good deal of low-lying land in Scotland has been flooded by the recent rains, and the soil is still too wet to admit of turnip-sowing in those districts where the operation has been delayed. Ireland has been more favoured in the matter of weather, and it is gratifying to hear that, up to the present, potatoes are free from disease. With the exception of France, where the wheat plant appears to have suffered almost as much as it has in this country, Continental advices promise a fair average yield, but it may be worth recording that in Eastern Russia thousands of acres of grain have been cut to pieces by a succession of unusually heavy hailstorms. American advices are couched in the most glowing terms, and making due allowance for exaggeration there can be little doubt that the harvest of 1878 will show an enormous yield of wheat both in the States and on the Pacific Slope. The deliveries of English wheat at the principal provincial markets have shown a decided falling off, and the offerings at Mark Lane have also been light, which tend to prove a depletion of stocks in farmers' hands, rather than any disinclination to sell in hopes of realising higher prices later on, as weather influences, usually paramount in the trade at this time of year, have been powerless to arrest the downward course of values attendant upon the heavy foreign imports. Depressed by heavy present and prospective supplies, and flooded

with continued offers from America and Russia, the foreign wheat trade has been reduced almost to a state of stagnation, and prices have again receded fully 1s. per qr. on the week for all descriptions off stands, with only the most limited consumptive demand thereat. At the commencement of the month it was anticipated that the trade might find some relief in a revival of the Continental demand, and such has indeed taken place during the past week, although the operations for foreign account off stands have been limited to the purchase of a few parcels of Calcutta wheat, the inquiry having manifested itself chiefly in the sale of several cargoes off coast. Indeed the Continental demand for cargoes of wheat off coast has been the most noteworthy feature of the week's trade. Maize has not suffered any further quotable decline, and Monday's prices of 23s. 6d. per 480 lb. ex-ship for prime new mixed American was repeated on Friday. The earlier days of last week were dull and showery, but a decided change for the better took place on Friday and with the exception of a severe thunderstorm which broke over the metropolis yesterday, the subsequent weather has been of a brilliant character. The action of the storm was fortunately confined to a comparatively limited area, but a considerable amount of damage was done by the hail, which fell in large quantities in and near London. Farmers have been busily engaged haymaking, and the welcome return of sunshine has enabled them to secure much of the crop, which, in those districts where cutting had commenced, had begun to rot upon the fields. The sales of English Wheat noted last week were 22,994 qrs., at 47s. 10d., against 22,914 qrs., at 6s. 1d. in the previous year. The London averages were 48s. 9d. on 1,081 qrs. The imports into the kingdom for the week ending June 15th were 2,016,340 cwts. Wheat and 193,786 cwts. Flour. There was a fair attendance of millers and country buyers at market on Monday last, and although reports from the agricultural districts were anything but favourable as to the state of the growing crops, little or no improvement was observable in the trade, owing to the depressing influence exercised by the excessive imports of foreign Wheat, both present and prospective. The value of all cereal produce showed a material decline on the currencies of the previous Monday week, and the business passing in spot grain was entirely of a

retail character. The supply of home-grown Wheat amounted to 1,926 qrs., but only the choicest lots attracted any attention, sales being difficult to effect, although holders readily granted a concession of 1s. to 2s. per qr. The week's imports of foreign were unusually heavy, in all 109,969 qrs., of which quantity nearly 59,000 qrs. were from the United States and Canada. Russia contributed something over 26,000 qrs., and Australia 12,805 qrs., the remainder of the supply being furnished by New Zealand, Germany, and the East Indies. The trade was wanting in animation, but prices were not lower than on the previous Friday, although the decline was 2s. per qr. on the fortnight, with a moderate consumptive demand thereat. The exports were 1,110 qrs. The supply of Barley was small, consisting only of 68 qrs. of home-grown and 8,047 qrs. of foreign, and with a limited enquiry, both malting and grinding descriptions sold slowly at barely former rates. Maize was also in moderate supply, the week's imports being only 3,523 qrs. Old corn was saleable at 28s. per qr. ex-store, which showed a decline of 6d. per qr., while new and round varieties gave way fully 1s. per qr. on the fortnight. The arrivals of Oats were 60,916 qrs., chiefly from Russia, and the trade ruled quiet for all descriptions, inferior sorts being 6d. per qr. cheaper, and choice also the turn lower to sell. On Wednesday the return showed 180 qrs. of English Wheat, and 42,020 qrs. of foreign. The market was very scantily attended, and complete stagnation prevailed in the trade. In the absence of sales prices remained nominally the same as on Monday for both wheat and feeding stuffs. On Friday the supply had increased to 280 qrs. of English wheat, and 46,669 qrs. of foreign. With brilliant weather and a thin attendance only a dull retail demand was experienced for wheat, at 1s. per qr. decline on Monday's prices, but maize and feeding corn generally was not quotably cheaper. The imports of flour into the United Kingdom for the week ending June 15th were 193,786 cwts., against 104,437 cwts. on the previous week. The receipts were 11,971 sacks of English, and 6,022 sacks and 19,622 barrels of foreign. The trade has been very dull, and the fall in the value of wheat has caused prices to suffer a further reduction of 1s. per sack and barrel. The week's imports of beans were 20,102 cwts., and of peas 47,636 cwts., showing an increase of 15,026 cwts. on the former, and 39,384 cwts. on the latter. Both articles have been affected by the prevailing dullness, and in the few sales made buyers have been enabled to supply their wants on rather easier terms. The deliveries of malt were 15,231 qrs., and the exports 1,452 qrs. The value

of this article has not fluctuated to any quotable extent during the past fortnight, but the trade continues very quiet. Very little business has been passing in agricultural seeds, but nevertheless prices have been maintained for all principal varieties, as stocks in London are small, and the unfavourable weather has also had some hardening effect on values. The demand has turned principally upon sowing mustard and rape, for both of which last week's currencies have been fully maintained. Hemp and canary remain inactive, but there has been some retail inquiry for foreign tares on former terms. The offerings of home-grown wheat at the country markets have again been light, and much of the supply has been in poor condition. Fine fresh-thrashed parcels have realised last week's prices, while secondary qualities have been difficult to move at 1s. per qr. less money. At Liverpool, on Tuesday, there was a fair attendance of millers, but the wheat trade was weak, and prices irregular, owing to the heavy imports and pressure to sell. Both red and white descriptions were quoted 3d. per cental cheaper on the week, but flour was unchanged, and barrels met with a somewhat improved inquiry. Barley and oats were dull and the turn easier, while maize, with continued liberal supplies, was 9d. per qr. lower on the week, dry mixed American being obtainable at 22s. 6d. to 22s. 9d. per 480 lb. The week's imports included 78,000 qrs. of wheat, and 67,000 qrs. of Maize. At Newcastle the grain trade has been very inactive, and wheat and flour have given way 1s. per qr. and sack respectively. Oats have been neglected, and maize has favoured buyers to the extent of 6d. per qr. At Hull and Leeds a reduction of 1s. per qr. has taken place in the value of both English and foreign wheat, while barley, oats, and beans have sold slowly at nominally late rates, and maize has receded 6d. per qr. At Edinburgh the market has been scantily supplied with grain from the farmers, and the wheat trade has ruled slow at a decline of 1s. per qr., while flour has also given way 1s. per sack, but spring corn realised previous prices. At Leith the weather has been dull and showery, but on the whole rather more favourable for the growing crops. The week's imports have been liberal of wheat and maize from America, but moderate of other articles. At market on Wednesday, Scotch wheat met a slow sale at barely previous values, while foreign was in limited request at about 1s. per qr. less money. Millers reduced the price of flour 1s. per sack, and all spring corn participated in the general dullness, although no quotable decline took place in values. At Glasgow the arrivals from abroad have been fair, and the grain trade still remains in a dull and depressed

condition. Wheat and flour were quoted 1s. per qr. and sack lower, at Wednesday's market, and there was very little inquiry at the reduction. Barley and oats favoured buyers, and maize was fully 6d. per qr. cheaper. At Dublin the weather has been fine, and the wheat market has relapsed into a state of stagnation. Prices have been very irregular, and in buyers' favour, but the amount of business passing has been too small to afford an index of the course of values. Maize has also ruled dull, new mixed American being obtainable at 23s. 6d. per qr. At Cork there has been a fair consumptive demand for both wheat and maize, and scarcely any change has occurred in prices.

The following are the Reports from Mark Lane during the past month:—

Monday, June 5.

The arrivals during the past week have been: English Wheat, 1,902 qrs.; foreign, 40,863 qrs. Exports, 2,944 qrs. The supply of home-grown Wheat fresh up to market this morning was again light, and the trade ruled very dull at a decline of 1s. to 2s. per qr. on the week. Of foreign the arrivals were fair, and with fine weather and a moderate attendance of millers a quick retail demand was experienced at 2s. per qr. less money than was obtainable last Monday.

Country Flour, 13,902 sacks; foreign, 3,700 sacks and 9,326 barrels. Sales progressed very slowly at a reduction of 6d. per barrel and 1s. per sack. The nominal top price of town-made was reduced 4s. per sack.

English Barley, 903 qrs.; Scotch, 55 qrs.; foreign, 26,268 qrs. Very little business done in either malting or grinding descriptions, quotations being the turn in buyers' favour for both.

Malt, English, 25,081 qrs.; Scotch, 218 qrs. Exports, 627 qrs. In quiet demand, at about former rates.

Maize, 8,868 qrs. Exports, 1,857 qrs. There was a moderate inquiry both for new and old corn, at a decline of about 6d. per qr.

English Oats, 232 qrs.; foreign, 62,499 qrs. Exports, 327 qrs. A slow trade for all descriptions, prices favouring buyers to the extent of 6d. to 9d. per qr.

English Beans, 421 qrs.; foreign, 39 qrs. Dull, at nominally late rates.

Linseed, 18,982 qrs. Unaltered.

Monday, June 10.

The arrivals of home-grown Wheat since Monday were 380 qrs., and in the limited amount of business passing former prices have been obtainable, but the trade has been very dull. The imports of foreign amounted to 39,680 qrs., and, with finer weather and a poor attendance, a quiet retail demand was experienced for Russian and American descriptions at Monday's reduced currencies.

There were 3,920 sacks and 14,380 barrels of Flour reported. Sales progressed very slowly, and a somewhat weaker tendency was observable in prices.

The supply of Barley consisted of 696 qrs. of home-grown and 1,600 qrs. of foreign. Both malting and grinding descriptions were in limited request, but values were not notably lower.

The imports of Oats amounted to 35,260 qrs., and business was restricted, sales being only practicable in retail at Monday's decline.

The arrivals of Maize were heavy, in all 54,420 qrs. Old corn was quiet, but not notably cheaper, while new was again the turn lower to sell.

There was no noticeable alteration in Malt.

There was a further arrival of 1,210 qrs. of Peas, but no Beans reported. In the absence of sales prices

remained nominally the same as on Monday last for both articles.

Linseed was dull, and rather easier.

The Agricultural Seed trade ruled quiet, and in the retail demand experienced the principal varieties supported Monday's currencies.

Monday, June 17.

The arrivals during the past week have been: English Wheat, 1,686 qrs.; Scotch, 240 qrs.; foreign, 10,969 qrs. Exports, 1,110 qrs.

There was a small supply of English Wheat fresh up to market this morning, and sales progressed very slowly at a decline of fully 1s. per qr. on the fortnight; of foreign the arrivals were very heavy, and with a good attendance of millers a moderate consumptive demand was experienced at 2s. per qr. less money than was obtainable a fortnight ago.

Country Flour, 11,971 sacks; foreign, 6,022 sacks, and 19,622 bls. A dull dragging trade at a reduction of 1s. per sack and barrel.

English Barley, 50 qrs.; Scotch, 18 qrs.; foreign, 8,047 qrs. With only a limited amount of business passing quotations were the turn in buyers' favour for both malting and grinding descriptions.

Malt, English, 14,911 qrs.; Scotch, 320 qrs. Export, 1,452 qrs. There was no new feature in the trade, which ruled quiet at about previous currencies.

Maize, 3,523 qrs. New mixed American gave way 6d. to 1s. per qr., while old corn was also rather easier.

English Oats, 771 qrs.; Irish, 125 qrs.; foreign, 60,916 qrs. Exports, 2,586 qrs. The trade was quiet for all varieties, at an all-round decline of 6d. per qr. on the fortnight.

English Beans, 406 qrs.; foreign, 4 qrs. Without alteration in value, but little inquired for.

Linseed, 10,478 qrs. Dull at about late rates.

Monday, June 24.

The arrivals during the past week have been: English Wheat, 1,617 qrs.; Scotch, 100 qrs.; foreign 61,084 qrs. Exports, 3,863 qrs. There was again a small supply of English Wheat fresh up to market this morning, and sales progressed slowly at a decline of 1s. to 2s. per qr. on the week. Of foreign the arrivals were large and with a good attendance of millers an improved demand was experienced at a reduction of fully 1s. per qr. on last Monday's currencies.

Country Flour, 12,767 sacks; foreign, 2,577 sacks and 758 barrels. No improvement took place in the trade, which ruled dull for both sacks and barrels at barely late rates.

English Barley, 121 qrs.; Scotch, 115 qrs.; foreign 22,588 qrs. Exports, 1,544 qrs. Both malting and grinding descriptions were in limited request, but there was scarcely any quotable decline in values.

Maize, 20,347 qrs. Exports, 706 qrs; Old Corn, ex store, was about 1s. per qr. cheaper on the week, while new sold slowly at last Monday's prices.

English Oats, 418 qrs.; foreign 71,895 qrs. Exports, 163 qrs. Business was somewhat restricted, and under pressure of large arrivals from abroad inferior descriptions were quoted 3d. to 6d. per qr. cheaper.

English Beans, 303 qrs. In limited demand at barely last week's prices.

Linseed, 2,259 qrs. A quiet trade at an occasional improvement of 1s. per qr.

English Malt, 15,739 qrs.; Scotch, 360 qrs. Exports, 717 qrs. A quiet trade, at about last week's currencies.

IMPORTANT TO FLOCKMASTERS.

THOMAS BIGG,

Agricultural & Veterinary Chemist,

By Appointment to his late Royal Highness
The Prince Consort, K.G.,

LEICESTER HOUSE, GREAT DOVER STREET,
BOROUGH, LONDON,

BIGGS 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 Scab, 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:—

1 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	8
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. HERBATH, the celebrated Analytical Chemist:—
Bristol Laboratory, Old Park, January 18th, 1861.

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 "yolk") in the skin, the

fleece, or the carcass. I think it deserves the numerous testimonials published. I am, Sir, yours respectfully,

WILLIAM HERBATH, Senr., F.C.S., &c.,

To Mr. Thomas Bigg Professor of Chemistry,
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.

"Secilton, 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 of 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."

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, £3, & £2.

GENERAL ADVERTISING.

C. H. MAY & CO.

ADVERTISING OFFICES,

78, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1846.

APPOINTED AGENTS TO THE ADMIRALTY, TRINITY HOUSE, &c., &c.

ADVERTISEMENTS INSERTED

IN ALL BRITISH, FOREIGN, AND COLONIAL PAPERS

TRANSLATIONS IN ALL LANGUAGES.

The Royal Farmers' and General Insurance Office.

ESTABLISHED 1840

TO INSURE AGAINST LOSSES BY

FIRE AND HAIL STORMS,

AND TO GRANT

INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.

Deputy-Chairman—B. P. SHEARER, Esq., 47, Gloucester-place, Portman Square.

Thomas Henry Burroughes, Esq., 17, Lower Berkeley Street. Richard L. Loveland, Esq., 4, Hare Court, Temple.

William Clutton, Esq., 7, Clifton Villas, Penge. John Reddish, Esq., 9, Highbury New Park.

A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury.

Major F. Anderson Stebbing, 4, Cleveland Gardens, Castle Hill, Ealing.

E. J. Hawker, Esq., 37, Cadogan Place, Sloane Street.

FIRE.—Insurances at moderate rates.

LIFE.—Insurances on equitable terms. Profits divided every five years.

HAIL.—Crops insured against Hail Storms at 5d. per acre.

LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand London, W.C., or of the Agents.

THE

MARK LANE EXPRESS

AND

AGRICULTURAL JOURNAL

IS THE

LARGEST AND THE LEADING FARMER'S AND GRAZIER'S NEWSPAPER.

PUBLISHED EVERY MONDAY EVENING, IN TIME FOR POST.

Office of Publication and for Advertisements, 265, Strand, London. May be had of all Booksellers and Newsmen throughout the Kingdom, price 7d., or £1 10s. 4d. per annum.

J. C. Nesbit and Son,

Analytical, Agricultural, and Consulting Chemists.

LABORATORY—

88, GRACECHURCH STREET, LONDON, E.C.

A LIST OF FEES SENT ON APPLICATION.

THE FARMER'S MAGAZINE.

VOLUME THE FIFTY-FOURTH.

THIRD SERIES

JULY TO DECEMBER, MDCCCLXXVIII

LONDON.

PUBLISHED BY ROGERSON AND TUXFORD, 265. STRAND

MAY BE HAD BY ORDER THROUGH ALL BOOKSELLERS

LONDON:

PRINTED BY HAZELL, WATSON, & VINEY, 365, STRAND.

Per
F. 54

v 54

INDEX.

A.

- Aerated Bread, 430
- Agricultural Returns, 167, 308
- AGRICULTURAL SOCIETIES:—**
 - Bath and West of England, 176
 - British "Dairy Farmers," 306, 356, 396, 448
 - Clydesdale Horse, 137, 215, 398
 - Essex, 429
 - Gloucestershire, 429
 - Hereford Herd Book, 137, 429
 - Highland, 44, 89, 396
 - Irish, 174
 - Jersey Herd Book, 137
 - Manchester and Liverpool, 449
 - Norfolk, 449
 - North Lincolnshire, 299
 - Royal of England, 37, 44, 175, 393
 - Shorthorn, 39, 137, 141, 184, 397
 - Smithfield Club, 398
 - Suffolk, 429
- Agricultural Table Talk, 296, 329, 334, 388, 427

B.

- Barley from Oats, 216
- Beer in the Harvest-field, 93, 284
- Bees and Flowers, 361
- Breeding of Carthorses, 190

C.

- Canadian Immigration, 107, 258, 415
- Cant of Sport. The, 295
- Cattle Diseases Bill, 22
- Cattle Trade Review, 229

CHAMBERS OF AGRICULTURE:—

- Bedale, 92, 373
- Central, 406, 418
- Cheshire, 449
- Derbyshire, 190
- Devon and Cornwall, 149
- Devonshire, 374
- Doncaster, 21
- East Kent, 374
- East Riding, 24, 498
- Essex, 93, 449
- Herefordshire, 409
- Howdenshire, 21
- Newbury, 185
- Norfolk, 449
- Notts, 22
- Scottish, 185
- Staffordshire, 409
- Sunderland, 409
- Swindon, 22

- West Riding, 24, 409
- West Suffolk, 449
- Worcestershire, 409
- York, 92, 449
- Cold Storage, 351
- Compressed Air as a Motor, 379
- Contagious Diseases (Animals) Act, 253, 397
- Co-operation and Analysis, 14
- Corn Trade Reviews, 78, 156, 233, 311, 390, 459
- Cyprus, 154, 307, 377

D.

- Dairy Farming, 109
- Deer *versus* Sheep, 215
- Depression in Agriculture and Commerce, 306, 432, 446, 448
- Diseased Animals as Food, 347
- Distress in America, 222
- Drainage, 152

E.

- Economy in the Disposal of Sewage, 328
- England's Sources of Supply, 285
- Entomology and Agriculture, 297
- Experiments with Fowls, 351
- Explosiveness of Flour Dust, 31

F.

FARMERS' CLUBS:—

- Blandford, 25
- Carmarthenshire, 228
- Central, 398
- Framlingham, 45
- Midland, 109
- Farm Ponds, and How to Utilise Them, by John K. Keene, 81, 188, 209
- Field Experiments, 30, 45
- Fixity of Tenure, 228
- Foot-and-Mouth Disease, 86
- Foreign Food, 225
- Fox-hunting Case, 455
- Free Trade in Land, 142, 218, 281, 288, 331, 363, 366

G.

- General View of British Agriculture: by James Card, 319, 380, 410
- Gennevilliers Sewage Gardens, 298
- Grain Currencies, 158, 235, 314, 392, 461
- Grain Trade of Hungary, 255

H.

Habits of Ants, 224
 Hay-lifting Apparatus, 93
 Historical Survey of French Agriculture, 28

HOME AND FOREIGN FARMING:—

Bavaria, 3
 Canada, 107, 223, 259
 Cornwall, 213, 421
 Cyprus, 307, 377
 France, 28
 Lombardy, 450
 New Zealand, 84, 371
 Persia, 278
 Russia, 287, 371
 Saravak, 453
 Turkey, 168
 United Kingdom, 319, 380, 410
 Horse-breeding, 25
 Horse-shoeing, 298

I.

Importation of Dead Meat, 93
 Importation of Live Stock, 4
 Injurious Dyes, 318
 International Agricultural Congress at Paris, 9
 Irish Field Experiments, 30
 Irish Land Question, 216.

J.

Joys of Harvest, 208

L.

Labour Question, 423, 433
 Land and the People, The, 32
 Landlord and Tenant, 454
 Lard in Butter, 75
 Large *versus* Small Farms, 225
 Life in New Zealand, 145, 245, 348
 Lincolnshire Farmers' Association, 138
 Literary Notices, 376
 Live Stock Notes, 56, 83, 106, 187, 212, 279, 291,
 346, 370, 414, 420
 London Corn Trade Association, 86

M.

MEETINGS OF THE HALF-YEAR:—

Aberdeen, 184
 Aberystwith, 305
 Alnwick, 172
 Bakewell, 372
 Bedale, 345
 Belfast, 100
 Berwick, 138
 Bishop Auckland, 305
 Boroughbury, 138
 Bradington, 88
 Bristol, 94, 114
 Bromsgrove, 154
 Cambridge, 149
 Carlisle, 173
 Carmarthen, 344
 Cartmel, 251

Chelmsford, 202
 Coventry, 302
 Crook, 184
 Derby, 269
 Doncaster, 97
 Dublin, 198
 Dumfries, 179
 Dunmow, 17
 Easingwold, 296
 Frome, 344
 Gainsborough, 184
 Halifax, 273
 Hatfield, 306
 Harrogate, 140
 Haverfordwest, 251
 Ipswich, 104, 106
 Islington, 53, 352
 Kelso, 201
 Keswick, 251
 Kington, 98
 Knutsford, 169
 Lancaster, 270
 Leek, 301
 Leicester, 183
 Long Sutton, 305
 Loughborough, 305
 Louth, 150
 Luton, 87
 Middleton, 251
 Montgomery, 342
 Morpeth, 201
 Newcastle, 52
 Newcastle Emlyn, 173
 Newport, Salop, 251
 Northallerton, 192
 Northampton, 249
 North Walsham, 69
 Norwich, 445
 Nottingham, 90
 Oxford, 57
 Paris, 6, 49, 384
 Penistone, 174
 Penybont, 251
 Pontefract, 91
 Rhyl, 202
 Riceall, 102
 St. Neots, 89
 Saltash, 41
 Snaith, 141
 Southampton, 102
 South Shields, 169
 Stowmarket, 92
 Swansea, 177
 Thirsk, 74
 Thorne, 73
 Todmorden, 252
 Toronto, 375
 Towyn, 251
 Tunbridge Wells, 373
 Wakefield, 306
 Watton, 252
 Whitehaven, 274
 Wirral, 252
 Wycombe Abbey, 250
 Memoir of Mr. Joseph Kay, 369
 Memorial of Mr. J. C. Booth, 339
 Mushrooms, 378

N.

Narcotics and Stimulants, 36
 National Alliance, The, 214
 National Progress, 300
 New Highways Act, 318

O.

Oats from Barley, 430
 Order of the Privy Council on Cattle Disease, 159
 Origin of the Durham Shorthorn, 203
 Origin of the Duchess Family, 207
 Our Food Supplies, 155, 285

P.

Paris Exhibition, 6-12, 49, 384
 Pauper Children, 217
 Pleuro-Pneumonia, 216
 Poetry, &c., 230, 309, 456
 Poisoning of Sheep, 166
 Position of Farmers, 387
 Prizes for Farms, 373, 383
 Programme of Sydney Exhibition, 387
 " Providence *versus* Pauperism," 435

R

Red Rust in Wheat, 1,
 Refrigeration in the Dairy, 379
 Root Shows, 416, 440-3
 Rotation of Crops, 363
 Royal Agricultural Benevolent Institution, 12

S.

SALES—MISCELLANEOUS:—
 Clydesdales at Hopton, 339
 Middle Park Stud, 338
 Yearlings at Cobham, 108

SALES OF SHORTHORNS:—

Duncombe Park, 277
 Gordon Castle, 341
 Holker, 293, 340
 Hopton, 339
 Shotley Hall, 275
 Stone Cross, Ulverston, 292
 Seed Corn; By T. Bowick, 237
 Sheep Dogs, 424
 Shorthorns and Herefords in America, 85, 148
 Strike of Farm Labourers in Kent and Sussex,
 435
 Tenancy *versus* Proprietorship, 227
 Tiptree Notes, 86, 144, 284, 360, 458
 Trials of Machinery, 97, 220

U.

Union Stock Yard, Chicago, 294
 Unity of Action in Agriculture, 398
 Useful Hints, 31, 76, 86, 93, 113, 144, 155, 186
 Uses of the Earthworm, 226
 Utility of Horse-shoeing, 298

V.

Vintage in France and Germany, 430
 Vivisection, 296
 Visit to Tillyfour, 112

W.

Weights and Measures Act, 227, 315, 362, 386,
 425, 439, 451
 Wheat and " Cheat," 286
 Wheat Crop, 223, 364
 World's Harve. t, 430

THE EMBELLISHMENTS.

	Page
Five to One	1
Lincoln Fat Ewes	81
Leonora	159
Treecing a Cub	237
Glengyle	315
Omega and Pride of Oxford	393

THE FARMER'S MAGAZINE.

C O N T E N T S.

JANUARY, 1879.

PLATE.—DESIDERATUM.

	Page
DESCRIPTION OF PLATE	1
AGRICULTURAL SOCIETIES	1
FARMERS' CLUBS	10
FARMERS AND THEIR MEN	17
FOREIGN AND BRITISH WAGES—FARMING	18
FARMERS AND THEIR FRIENDS	20
COLONIAL AGRICULTURE	21
SHORTHORNS AND HEREFORDS	24
OAKHAM FAT STOCK SHOW	24
FREE TRADE IN LAND—No. XIV.	27
THE BRITISH FARMER'S POSITION	28
BIRMINGHAM AND MIDLAND COUNTIES FAT STOCK SHOW	30
HULL AND EAST RIDING FAT STOCK SHOW	36
THE WEIGHTS AND MEASURES ACT	37
THE FOREIGN ANIMALS ORDER	38
LIVE STOCK NOTES	39
THE SMITHFIELD CLUB SHOW	41
SMITHFIELD, EDINBURGH, DUBLIN, CANTERBURY, LEWES AND BARNSTAPLE FAT CATTLE SHOWS	57
CHAMBERS OF AGRICULTURE	66
THE AGRICULTURE OF LOMBARDY—No. II.	67
REVIEW OF CORN TRADE	70



No. 2, Vol. LIII.]

AUGUST, 1878.

[THIRD SERIES.

THE
FARMER'S MAGAZINE,

AND

MONTHLY JOURNAL

OF

THE AGRICULTURAL INTEREST.

Dedicated

TO THE

FARMERS OF THE UNITED KINGDOM.

LONDON :

PUBLISHED BY ROGEYSON AND TUXFORD, 265, STRAND.

PRICE TWO SHILLINGS.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

PORT	...	...	24s.,	30s.,	36s.,	42s.	per dozen & upwards.
SHERRY	...	...	18s.,	24s.,	30s.,	36s.	„ „
MADEIRA	...	...	30s.,	36s.,	42s.,	48s.	„ „
<small>(As supplied to the wounded in the East.)</small>							
MARSALA	...	...	20s.,	24s.,	28s.,	32s.	„ „
CHAMPAGNE	...	...	30s.,	36s.,	42s.,	50s.	„ „
CLARET	...	...	12s.,	15s.,	18s.,	24s.	„ „
BURGUNDY	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		36s.,	42s.,	48s.,	54s.	„ „
MOSELLE	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
HOCK	...	...	20s.,	24s.,	30s.,	36s.	„ „
HOCK	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
SAUTERNE	...	...	18s.,	24s.,	30s.,	36s.	„ „
BRANDY	...	...	38s.,	42s.,	48s.		„ „
WHISKY	...	...	38s.,	42s.			„ „
RUM	..	...	40s.,	42s.			„ „
GIN	...	...	30s.,	32s.			„ „

PORT in Quarter Casks of 28 gallons, from £14 14s.

SHERRY in Quarter Casks of 27 gallons, from £10 10s.

Sole Agent for Rousseau & Cie Reims Champagne,
Rivaz & Cie Cognac Brandies.

TUXFORD & CO.,

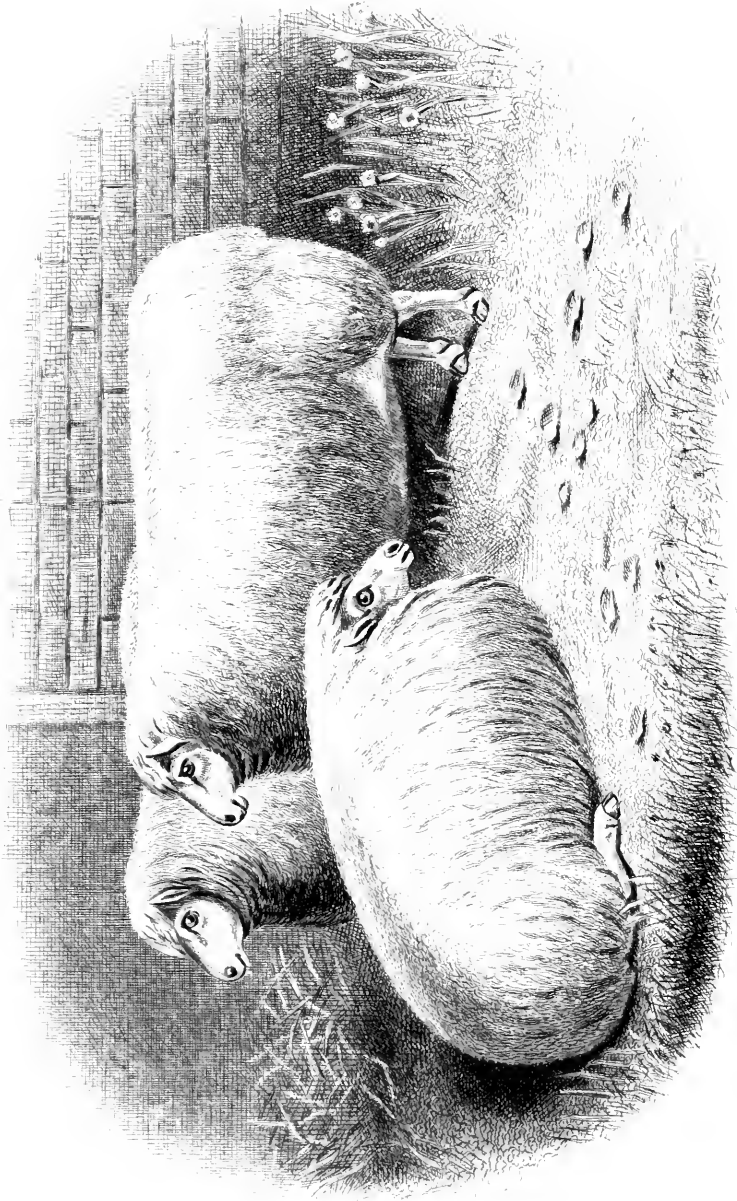
Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

SAMPLES ON APPLICATION.

ALL GOODS FORWARDED CARRIAGE PAID.



Amelia, ind. C. 1851



THE FARMER'S MAGAZINE

AUGUST, 1878.

PLATE.

LINCOLN FAT EWES.

A PRIZE PEN AT THE SMITHFIELD CLUB CATTLE SHOW, 1877. BRED AND FED BY
MR. J. PEARS, MERE, LINCOLNSHIRE.

The three grand-looking Lincoln ewes in our plate are representatives of Mr. Pears' well-known flock, who has been an exhibitor of them for many years, and competed at the Royal Agricultural Society, the Great Yorkshire, Lincolnshire, and other Shows with most of the leading Lincolnshire breeders, such as Messrs. Dudding, of Panton House; Marshall, of Branston; Nelson, of Brigg; Gunnell, of Milton; Wright, of Nocton Heath; Howard, of Nocton Rise; Clarke, of Sleaford; Morley, of Leadenham; Garfit, of Seothern; Byron, of Kirkby Green; Huck, of Buckminster, &c.

They show in their fatty, bull-like evenness to what "perfection" feeding can be carried or over-done, as we feel sure that for the London market had six been fed on what it cost to get the three ladies up in show trim, the meat would have been more to the taste of the majority of the consumers, as those following sedentary occupations in this great city, and even in factories in the north, cannot face fat meat like those continually in the open air, and the very sight of it deprives them of the little appetite they may have.

FARM PONDS, AND HOW TO UTILIZE THEM.

No. I.

By JOHN H. KEENE.

"Contrast our knowledge of water-culture with that of agriculture, and the result is simply degrading," wrote Mr. Francis Francis a decade ago in his book on "Fish Culture;" and the remark may safely be said to be true even now. Notwithstanding a Museum of Fish Culture at South Kensington, and the indefatigable labours of its founder, notwithstanding the eloquent brief held by Mr. Francis in the interests of this undiscovered mine of national wealth, and notwithstanding the unequalled natural resources of Great Britain, I believe I am quite within the mark in applying the humiliating sentence which opens this article, and in further asserting that fish culture is yet a drug in the market, few caring to adopt it as means either of recreation or food production. Of course I am aware we have amongst us enterprising landowners, such as Col. Goodlake, of Deubam, who so farms his three miles of the Colne as to be enabled to assert that he can catch with a rod and line 200 brace of trout in a day, who knows for a certainty that he has as many as half-a-million splendid trout—probably averaging a couple of pounds apiece—in his few

acres of water, and who is willing to portion off a mimic river for any one's use who may feel disposed to experiment on the different foods and conditions necessary to the successful production of fish food. I am also cognizant of the fact that a fresh-water preservation Bill is now before the Committee of Parliament having for its object the extension of the Salmon Fishery Acts to fresh and coarse fish. But this is as a drop compared with the ocean of possibilities in fish culture in Britain. Every pond and stream which does not dry up or run dry in summer should be utilized in these days of high pressure. Every pond on the farm represents so much land as it occupies wasted and so much water as compared with land doubly wasted unless it be utilised in somewhat the same way as I shall in these articles suggest.

Our Continental and trans-Atlantic friends manage these things much better than we do. The statistics presented before a recent conference in Germany on the condition of fish culture there were astonishing when we consider our own shortcomings in this respect. According to one speaker the ponds of Pietz in Lusatia, which cover

3,250 acres, yield at the rate of over £1 per acre, chiefly from carp culture. Baron von Rothschild in Upper Silesia presented much greater results. Some of the Barons's lakes of a little over 2 feet deep gave the return at the sale of two-year-old stocking carp of as much as £110 per acre. In Schleswig - Holstein, which was, but is not so famous now, for its carp fisheries, nevertheless can boast of 158 acres of fish ponds which have recently been let for ten years at an annual rental of £606 per annum, with an agreement for the renovation of all sluices, and the arrangement of other improvements, which together, it was stated, will cost little less than £300. Surely this is good business. In Holland, again, fish-farming is reduced to a science. The ponds are usually made in series of two, three, or four, communicating with each other by means of hatches so arranged that when one pond is empty the other is full. By this and other happy arrangements no time need be lost in the capture of the inhabiting fish, and facilities are of course given for cleaning and re-stocking. Similarly the French are fully alive to the interests of fish culture. M. Coste, Professor of Embryology in the College of France in 1835 represented the success of the two pioneers of French fish-culture, Gehin and Remy, to the Minister of Agriculture, and ere long arose as a result the magnificent establishment at Huingue, which covers about seventy acres of land, and is well endowed, and sending at this time millions of impregnated ova of various fishes to all parts of the land. Again, the Americans with characteristic astuteness foresaw the splendid development of which their broad lakes and mighty estuaries, their great rivers and abounding streams were susceptible, and although their fish-culturists have had an easy task, owing to the strength and adaptability of the natural conditions of their many waters, the result, they have achieved are by no means despicable. Their Legislature in reference to the many constituted fisheries is almost perfect, and they can boast of clever practical fish culturists in Seth Green, Professor Baird, Mather, and others. As I write, a passage in an exhaustive report on American fish culture printed in an American journal of natural history and sport catches my eye and sufficiently illustrates the enterprise of our kinsmen. This is how it runs:—"Thousands of streams, rivers, lakes, and ponds have been stocked with the young of different species of fish, and already the work has proved most fruitful in results. The shad of the Atlantic have been transported in the egg state from our coast across the continent to the Pacific, while the ova of the Pacific salmon have been carried over the same route to this side of the continent, and the young fry hatched therefrom introduced into rivers in which the salmon had never been seen. The shad has not only been transferred from ocean to ocean, but it has been successfully introduced into our inland waters, where, it is confidently believed, it will propagate and become acclimated." After this my reader will agree with me that it is humiliating to record that our own

Piscicultural Society has years since gone over to the many, and that nine-tenths of our chief landowners and sportsmen really know but little more now than did the good people of Sussex when Wilfrid came to their succour; for as Bede tells us, "The Bishop when he came into the province and found so great a misery of famine taught them to get their living by fishing. The sea and rivers abounded with fish; yet the people had no skill to take them, and no skill to make use of them when they had them."

From the remarks thus made the reader will perceive that at any rate other nations are alive to the value of the waters of their lands, and it may be advisable here to consider for a moment in what that value consists. It consists in its productiveness—in the ease with which it may be cultivated. It is unlike the land, which as one of the poets has said "only requires tickling with the hoe in order to cause it to laugh into harvest" (only? and as some of my readers know that *only* often means much labour, forethought, experimental knowledge—the hardest to acquire of all knowledge—and expenditure of capital). Even if we leave the water, with a brace of fish in it, to increase and multiply, the result under ordinary circumstances would be remarkable in point of number if not size. There is no animal on land that can for one instant compete with a fish in point of fecundity; not even the superlatory rabbit can compare with the eel or trout, or indeed with any fish. Take the grilse for example. Roughly speaking each member of the *salmonide* family produces at the rate of 1,000 ova for each pound of its own weight. Suppose a grilse to weigh nine pounds it can in about eighteen months reproduce, say, 8,000 of its own species capable of going down to sea like the parent fish, and assuming that under no circumstances of perfect culture more than 50 per cent. could return, even then we find 4,000 fish of from five to ten pounds return in a few months from their descent—a trifling amount roughly of about 300 tons of delicious food.

Of course it would be quixotic in the extreme to imagine that such a result could even be approximately reached by any amount of ingenuity or trouble on the part of the pisciculturist, but the fact of such being within the bounds of possibility is significant of what may be accomplished in fish breeding and rearing. The fecundity of all other fresh-water fishes is immensely greater than that of the *salmonide*, and nearly all are desirable additions to the table of the rich if properly fattened and cleansed. Why therefore, should they not be to the poorer classes in these days, when so many comparatively every winter suffer privations of extraordinary rigour (even amidst our great national wealth) from lack of food? An absolute fish diet is not here recommended, but the remark must certainly be made—and it has been made often enough before—those that starve, starve within reach of an available cornucopia, a horn of plenty. One single example of culpable waste is sufficient to illustrate the importance of this part of the subject. Eels, surely acknowledged by all a delicious fish when properly cooked, and seldom less

than 10d. per lb. in the metropolitan markets, annually following a natural instinct, escape by tens of thousands into the estuary with the equinoctial floods, and never return. How can they? And yet we import hundreds of tons from Holland and elsewhere.

But the space allotted me fails. I have considered in outline the subject of general pisciculture. In another communication I hope to remark on the relative value of our British fishes accessible to the ordinary agriculturist, and after that, with the Editor's permission, I shall give practical directions in reference to the actual stocking of such waters as may be in possession of the average farmer, both with

a view to sport and food production. The economic utilization of "water power," not only as this term is generally understood, in turning fly wheels and working piston rods, is fraught with interest, and in view of what may be done with a little outlay to develop such a resource, in view of what is being done in other countries, bearing at the same time in mind the growth of population and resultant increase of the price of provisions and their production, I hold that a consideration of such a subject as I have the honour to write about is worth the thoughts of those of whose interests *The Marl Lane Express* takes cognizance.

L I V E S T O C K N O T E S.

The Royal Show at Bristol is a thing of the past. The many-coloured bunting has disappeared from the streets, and the citizens are restored to their wonted bearing. It becomes us, then, to sit down and consider the facts and probable issue of the exhibition. That things are on the go, that the tide of stock alone ebbs and flows, is sufficiently manifest from what we saw on the pleasant turf of the Durdham Downs. Most remarkable sight of all was the line of shapely cattle hailing from the Principality. The doom of those gaunt mountain breeds, it used to be said, was long since rung. If our reader were to search back the pages of the "Farmers' Magazine" he would find abundant disputation on this subject. But the virtue of old inherited blood is not so easily trodden out. How often one has pointed to the excellence of the Welsh mountain mare as the ancestress of swift, hardy, surefooted hunters. Then the justly popular and profitable Shropshire sheep is the outcome of a Southdown graft upon the stock of the old Cannock Chase gipsy flocks. Wherever you find old blood good, remarkable for any single virtue, whatever it may be, you will be wise to use it. Its accumulated excellence, shrunken though it be in course of time, will expand amply under cultivation. To return however, to our immediate subject, there are few to which the native flocks and herds of Wales are so much indebted as to Lord Penrhyn. At last year's Merionethshire show at Bala there were some cows and a bull of the black breed, remarkable, the one sex for their refined air, even build, and deep milking udder, the other for his proud, spirited bearing, and the solid meat over his long cylindrical frame. "What do you think of them?" I was asked by a friend. "Very good, thanks to the Galloway cross," was my reply. Their owner was within earshot, and with the peppery spirit of the Celt sprang immediately forward to deny this aspersion on his property. He had known the breed these score of years and more, and there had never been any cross. Where did he obtain them? Why, from close to Bangor. That's just the reason, my good friend, and I showed him that before that date Col. Douglas Pennant had ardently cultivated the cross. During the subsequent quarter of a century the native lines of contour had reasserted themselves, retaining the borrowed mellowness of handling. He was not quite pacified, but facts are facts nevertheless, and in proof thereof I take from a pigeon-hole a catalogue, dated September 20, 1859, of a "great annual sale of breeding stock at Penrhyn Castle, Bangor, North Wales," the first ten lots being "fifty ewes, two and three shear of the Cheviot and Welsh mountain cross in pens of five each." Twenty-five Cheviot ewes, at an average of about two guineas,

and a "splendid Cheviot ram, two shear, winner of seven prizes in Scotland, and of the first prize as shearing at the Chester Royal Show," I secured, through an agent, for ten guineas, to go into Monmouthshire, where they have left their decided mark. That straight quarter and well set-on tail which distinguishes the breed you can see now impressed upon the flocks of the Carnarvonshire hillside. Then, after some lots of Leicester ewes of a prize strain of Sandy's, and some Shropshires—for the Colonel tried every sort that he thought might do good—we come to a lot of Shorthorns of old-fashioned blood, mainly Wetherell's manipulation, and then to the commended black Welsh bull Llewellyn, and then to "heifers in calf to a Galloway bull, winner of the first prize at Locherbie, N.B." Here the cat is out. The Galloway cattle came originally from Poland about the same time that the Shorthorns came from Holstein, and by their square frames and thick mellow hides have helped to improve more than one native breed on which they have been used. England has not always been in front. It owes much to the Continent in many ways. Nor, indeed, has the Continent itself always led. At this moment Paris is in ecstasies over the delicious tinting of the Japanese fans, &c., having only herself quite recently discovered the laws of colour, which the barbarian has long since known. Are not our dumping pigs, again, due to a Chinese importation? But, to recover our line, whilst the Shorthorns have been seen at least as good before, and, with a few snub exceptions, there are signs of an increasing roughness in the Hereford contingent, the once despised black Welsh were the cynosure of all eyes. The native squirearchy have now an easy task before them, thanks to the provident assistance of Colonel Pennant, Sir Richard Bulkeley, &c., because the generally prevalent character of the cattle at Bristol was rather that of North Wales, than the long-legged, long-horned Castle-martin bred of South Wales, a choice specimen of which thirty years since we owned by help of a local friend, and whose stately proportions somewhat leggy and fearfully broad atop, one used to wonder at as a sort of coal black giantess amidst a herd of Alderneys and Ayrshires. In the Hereford breed Mrs. Edwards' heifers were simply perfect, but the red soil people will have to take more care in their breeding generally than they have done of late if they would maintain their pride of place. Everyone was delighted to see Lord Fitzhardinge so clearly triumphant with his Ruga Niblett and his Kirklevington Empress 3rd, two as perfect specimens of the fashionable Shorthorn as it is possible to conceive. A temporary shade was thrown upon the plucky Berkeley Castle purchase of Duke of Connaught by the ordinary, even

wretched character of some stock got by him exhibited at Birmingham and elsewhere. Cannot the dams have been at fault? I have seen beautiful stock many months ago by this costly bull whose merits are fully appreciated by the cognoscenti, and who is said long since to have cleared all debt off his back; on this occasion both bull and cow were of the right sort. Another sight of the show, quite of an exceptional order at any exhibition, were Mr. C. Wilson's ponies. I have seen and admired them at their Westmoreland home. What grand thighs, what strong, clean, steel-pointed action they have! "Sir George" wants only the least more fullness of eye, and a wee bit carving out of face-bone, to be as perfect as could be imagined. Mr. Wilson's mares were very choice. Assuredly he has only to go on breeding and accumulate to have regular sales, which would far surpass anything Mr. Milward ever did in that line. Fond as one has ever been of the small horse, brought up amidst the celebrated "Apricot" sort at Rug, North Wales, of which strain Mrs. Frisby's chesnut undoubtedly came, I have never seen so choice a collection of strong and yet wiry cobs as this Westmoreland exhibit. Amongst the sheep Mr. Hutchinson's old sheep was declared by Mr. Sanday to be about the best he ever handled of the breed. This to decide would require a special education, but it required no one to tell you what a marvel of meat and wool Mr. Morrison's Hampshire Down ram was. It would be difficult to know how to build an animal of shape more adapted to carry mutton in all the best places. It would be as great a puzzle as the having to suggest to bees a more economical disposition of space than the hexagonal cell they use. The pig classes contained in Mr. Garfit's Berkshire sow one of the finest specimens of the Berkshire breed ever shown: so deep, so long, so, in fact, voluminous, and

yet so well packed. This gentleman is young in year but old in judgment. He has had the sense to secure when opportunity allowed, females of the capital old Blanche tribe of Shorthorns—a sort which must recover the high fame it once had, when foreign ports open and a breaking up of the trade stagnation takes place. His success at this very meeting with two of this breed shows the wisdom of sticking by such an approved old sort. And yet how grand a cow of this very line hung fire so sadly at the last Siddington sale! What a fine collection was scattered for a song at Papillon Hall! People will not think for themselves and be guided by past facts. There is so much puerile "follow the leader" action in the market!

There was nothing very startling amongst the large horses, whether for draught or riding purposes, at this show. The splendid exhibition of the Liverpool teams had no attempt at parallel. But on these occasions there is always an opportunity of picking up capital specimens of stallions and mares, a trifle small for prize-taking, but possessing to their measure all the best attributes of the race. Nor was the opportunity wanting on this occasion. There was especially a first-class specimen of a dappled grey carter, which a well-known and practised judge declared to have been quite overlooked. Nor was this the only useful thing to be picked up for the improvement of home teams. Pig fanciers are quite right in protesting against white spots on a black pig, or black spots on a white one. In old days it was certain disqualification to own such suggestive disfigurement. If it were not for this what would be easier than for the famous black Suffolk swine to recover from the white small breed that prized *nez retroussé* which they seem quite to have lost.—"VIGIL," July 22.

NOTES FROM NEW ZEALAND.

Province of Auckland.—This province has been greatly refreshed by recent copious rains. Pastures have assumed a rich green colour, and afford a fair bite for stock, notwithstanding the advanced period of the season which has now been reached. This was very much wanted in every district, the past summer having been probably one of the dryest, if not the most so, of any year since the founding of the colony, and stock have undergone great hardships, more particularly in localities where a scarcity of water was experienced in addition to the shortness of herbage. Stimulated by the high prices ruling for corn and breadstuffs, the bulk of which has to be imported from Otago and Canterbury, the farmers of this province are turning their attention to the growth of cereals. A good deal of wheat has already been sown in fine condition, and a considerable breadth of grass land is in process of being broken up for the same purpose. Wheat does admirably, giving a return of 1½ tons of clean grain, with no expense for preparing tillage, but the simple inversion of the surface turning the green side down. The state of the labour market has of late years made tillage almost an impossibility; but now, with a slightly increased distribution of labour, and higher prices for corn, on account of long carriage and consequent high freight, there is a prospect of being able to make tillage pay. The wages of farm labourers are still high, 30s. a week being as nearly as possible the average, few men working under this, unless the money payment is supplemented with a house, keep of a cow or two, and other advantages useful to a man with a family, and often the latter must be given along with the sum stated. Singularly enough the increased breadth of corn grown

has brought the farmers and the promoters and supporters of the Game-Laws—which include, along with all true sportsmen, all members of the Acclimatisation Society—into almost deadly variance. The pheasant season opened on the 22nd of this month, and although considerable quantities of birds were sent on that evening, and filled the butchers' and poulterers' shops pretty well, being disposed of at 6s. a couple, still the enormous bags that were confidently expected from the Waikatoe, Wairoa, and other districts in the interior, have not been realised, and much disappointment and positive chagrin have been the result. The settlers call the Acclimatisation Society "a pack of noodles" for ever introducing the pheasant at all, coupling its name with that of the common house sparrow, which certainly has increased so rapidly as to become a dreadful nuisance, and say they can scarcely seed a field without running the risk of every grain being eaten, and, in spite of the stringency of the Game Laws, which inflict a £10 fine for every bird killed out of the three months licensed season, shoot, trap, and poison at all seasons, to the very noticeable decrease in their numbers this year. The Society, on the other hand, say that, even admitting a certain amount of injury to seed-corn, the destruction of grubs, caterpillars, grass-hoppers, and other insects compensates a hundredfold for such losses. They do not advance this theory without having undeniable facts to support it, as the past season has been exceedingly free from insect ravages, the farmers themselves rejoicing in this escape from heavy loss, but giving the credit of it to the tit-lark, sky-lark, hedge-sparrow, and other soft-billed birds, and completely exempting the pheasants and house-sparrows from giving

any assistance in this beneficial operation. Probably this is carrying their side of the argument too far, as both birds, although they possibly may prefer corn, eat insects and grubs greedily enough. Much interest is evinced all over the province in improving the breed of live-stock, and Clydesdale horses, Shorthorned cattle, Cotswold, Leicester, and Merino sheep and Berkshire pigs, are bred to a perfection that could scarcely be expected in so young a colony.

In Shorthorns the recent defeat of Australia at the Sydney Show, by a bull from Auckland taking the champion cup, is a very truth-telling illustration of the perfection to which this class of cattle has been brought in New Zealand, and will no doubt give a still further impetus to careful and pure breeding. In a country like this, of vast extent compared with its population, the price of meat must necessarily be low, the consumption being so limited; consequently badly bred animals are scarcely of any value, and can give no return for their feeding—a fact to which breeders are becoming fully alive; they are therefore making strenuous efforts to improve every description of stock by the introduction of first-class sires. The following are the prices at which stock and produce have been disposed of during the week at the leading auction-yards. — First-class riding-horses £40, middling and inferior from £20 down to as low as £3 10s., draught colts from £30 to £37. Dairy cows sold at from £7 10s. to £12, strippers from £3 10s. to £5; fat cattle of best quality 30s. per 100lb.; weaned calves 32s. 6d. to 40s. Coarsely bred yearlings scarcely a shade more than 40s.; two and three-year-olds from £3 15s. to £4 12s. 6d.; better bred animals of these ages £6 to £7 each. Well-finished widders made as high as 22s. each, mixed from 14s. to 17s. 6d., ewes from 10s. to 15s. each, fat lambs from 6s. to 9s., and store widders from 8s. to 10s. each. Hay ranged from £4 15s. to £6 5s. a ton; oats 5s. per bushel of 40lb.; bran £7 per 100lb.; potatoes from £3 10s. to £4 per ton, and of rare quality; butter from 1s. 2d. to 1s. 4d. per lb., good qualities getting very scarce as the winter progresses; Canterbury cheese from 5d. to 7d. per lb.; eggs 3s. per dozen, and not to be had at all times even at that. Bone-dust was £7 to £10; Mexican guano £10 10s. to £12, and Peruvian guano £18 per ton.—May 28.

HEREFORDS *versus* SHORTHORNS IN AMERICA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—As there is quite a stir here between Herefords and Shorthorns—and the Herefords are coming rapidly into favour—I am induced to tell you a little of what is going on. At the Michigan State Fair, one year ago last September, that Society offered a prize for the best herd of any breed. Mr. Thos. Clark, then of Elyria, Ohio, now of Beecher, Illinois, showed his herd of Herefords, the only herd exhibited, and took the first prize, with Shorthorn men as judges. To the superiority of the Herefords in uniformity of character, symmetry, quality, weight, and compactness the judges had to succumb. The Editor of *The Michigan Farmer* was one of the judges. He never bred an animal of any kind in his life, nor am I sure that he ever owned one; but he took the responsibility upon himself to write an apology to the Shorthorn breeders for what the judges were compelled to do. This apology was one of the most ridiculous editorials ever penned.

... Mr. Clark applied again for another opportunity to show against Shorthorns, but was forbidden an entrance. The only excuse the executive committee

could make was that the Shorthorn interest was so strong in Michigan it would not do to oppose it. Mr. Miller, Mr. Clark, and Mr. Powel applied for the privilege of showing against them this fall, but they still kept the premiums of the Herefords lower and less in number than those of the Shorthorns; hence they left the Shorthorn men to ride roughshod over vacancy, as there will not be a Hereford herd on the fair-ground at Detroit this fall. The Illinois State Show this year gives the same prizes to Herefords as to Shorthorns, and a liberal prize for the best herd of any breed; Lafayette, Indiana, the same, St. Louis following suit, and others ready to do so next year. The Toledo Society offers the same prizes to Herefords as to Shorthorns, 500 dollars for the best herd of any breed, and individual prizes for the best single animals of any breed. Mr. Miller intends dividing his herd of Herefords between Illinois and Toledo, also his flock of Cotswolds and herd of Berkshires. There will be seven herds of Herefords shown to meet the Shorthorns, as this Society has been liberal enough to make the show open to the world. The low average of the Bates cattle of Messrs. Avery and Murphy at their sales at Chicago has brought up the "Bates mania" with a sudden check. I never saw a more sober looking lot of men than those belonging to that "ring." Although I think the Bates "ring" in this country has done more injury to the Shorthorn cause than anything else, I am truly sorry for some of them, who have lost so much money. Messrs. Avery and Murphy are fully able to bear it, but lots of others have gone, and others must go, the day of high prices for pedigree without the animal being over. Something more must be had beside bone and paunch. The feeders on the plains have found this out, and the Herefords are taking the lead there. The white faces in every drove coming across the Western trails bear testimony much to their credit, and the drovers say that it takes one year longer to bring a coarse Shorthorn to market than a Hereford, where all have to shift for themselves on the same feed.

I am, Sir, yours, &c.,

WM. H. SOTHAM.

Toledo, Ohio, U.S.A.

Mr. Sotham's continual denunciations of Shorthorns must be taken *cum grano salis*, and we shall be glad to insert a reply to his strictures from any American advocate of the breed.—Ed.

SHEEP MANAGEMENT.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I am inclined to believe that the following particulars of a very interesting and important case of sheep management ought to be made public, so that sheep breeders may be able to judge whether some of the ailments with which sheep are affected, and which are frequently looked upon as uncontrollable and incurable, may not be avoided by a proper system of dietary.

In August, 1874, I purchased a blackfaced shearling ewe, with several others, and she was served by a longwooled ram early in the following October. In the spring of 1875 she produced two lambs which appeared healthy, but both became rickety in May of the same year.

In the spring of 1876 the same ewe had two more lambs, also by a longwooled ram. One lamb was born rickety, and lived only a few days; the other lamb appeared healthy until May, when it became very rickety.

In the spring of 1877 the ewe had only one lamb, which appeared to be healthy until early in the following June, when it also became rickety, but scarcely so much so as the former lambs.

During the summer of 1877 the ewe was taken from the flock, and it was not my intention to breed from her again, my shepherd observing "that it was no good to breed from a ewe which always had trumpery and rickety lambs."

I described the case to Mr. Woods, of Merton, and asked his opinion respecting it. He remarked that possibly the ewe might be made to produce healthy lambs, and that they might remain free from the rickets; at any rate he would like to see what could be done. He expressed a wish to have the ewe at Merton, where she could be fed under his own immediate direction. I gladly fell in with the request, and sent the ewe to Merton in the autumn of last year. She was served by a Southdown ram, and in the spring of the present year she produced three fine strong and healthy lambs, which remained at Merton until the 15th of May last, when I sent my shepherd for them, and he brought them to my farm. They were healthy when he brought them, and at this moment they are as strong and healthy as any lambs can possibly be, and there is every appearance of their remaining free from rickets.

I have merely given a plain statement of facts, and leave flockmasters to form their own conclusions from the particulars I have ventured to lay before them.

I am, Sir, &c.

FAIRMAN J. MANN.

*Church Farm, Shropham, Thetford,
Norfolk, July 10.*

LOSSES FROM FOOT-AND-MOUTH DISEASE.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Being an old subscriber to your useful paper, and having read your "Samples" with very great pleasure, I beg to offer you for consideration a small list of my losses through Foot-and-Mouth Disease. Commencing in 1851, I had 17 dairy cows down with it, 12 being totally spoiled. A neighbour going through them the time they were suffering, said, "I would not give you £1 each for them." I never got them right. All of them had club feet, some one and some two; and several cast their calves. It took three and four men nearly all the morning to dress their feet, one never leaving them, carrying water, mowing grass, and moving them, as many of them could not get up when down. This went on for three months or so, until the cold weather set in, many of them getting maggots in their feet with all the attention. I considered it more than £200 loss. Pigs and young cattle all had it, sheep escaping. I was again a sufferer in 1864, when 25 cows had this disease very badly, and I lost one. I had 60 ewes all down, and this took £1 a head out of them, and it was three months before they could be got sound, taking a man half his time to attend to them. The following year it attacked a lot of 15 heifers, and all had it but 1. The disease came again very badly the next summer, when 28 cows were all down in a week. From making 35 cheese in a fortnight my produce sank to 8 small ones. 2 cows were totally spoiled, cast their calves, and went dry, good nursing only saving their lives. I made £18 of them twelve months after to the butcher. I had another visitation in 1875, 10 cows taking it out of 26. It passed off well, as knowing it to be in the neighbourhood, I gave 1 lb. of Glauber salts each, and 2 lb. to some of the freshest. I think that it did good to all the young stock. There were 70 ewes all down with it, and they suffered worse than ever. Many of them being worth 70s. to 80s. each, got down £1 in value, all their hoofs coming off, and many getting maggots in them. It took me 2 years to get them sound, as it broke out again in their feet. There are now in my dairy 4 first-rate cows

each deficient of one quarter, through having the disease when calves. As this is only from memory it would not be anything like the actual loss which I have suffered, and which I should think would be considerably over £1,000 if I had kept a correct account. As this is only my individual loss, what would it amount to over a whole dairy county? It is like game damage—no one can estimate it.

I am, Sir, &c.

TREVOR HOLLAND.

Oak Fields Farm, Rugeley, Staffordshire.

LONDON CORN TRADE ASSOCIATION.

We have received a copy of the rules and objects of this new association. The following are given as the objects:—"The chief objects of this association are, among others, to promote and establish in the corn trade uniformity in commercial usages, founded upon just and equitable principles, especially with regard to contracts, charter parties, bills of lading, policies of insurance; to appoint arbitrators and umpires when requested; to collect samples of the various kinds of grain to serve as standards for arbitrations; to provide a suitable room where standard samples shall be kept and arbitrations may be held; to introduce any reforms and undertake any arrangements which from time to time may commend themselves to the majority of the members of the executive committee, respecting insurances, dock business, questions relating to shipowners, and any matter of interest to the trade generally." The rules and other information can be obtained of Mr. Julius Kressmann, 11, Trinity-square, Tower-hill, London. E.C.

JUSTICE TO THE STEAM PLOUGHS.—Although we may, and do, suffer from the too free use of the steam plough during the two or three following seasons, it appears by my crops that we are recovering from the damage, and may probably be ultimately benefited. I have some splendid crops on the land steam-ploughed, but then, as my bailiff says, we had such crops before and now, without the steam plough, for we have always been deep cultivators by subsoiling. The steam plough made work more costly after its use, for, by mixing so much of the stiff poor subsoil with the seed-bed the land became more difficult to work by man or horse. But drainage, deeper cultivation, and ample manuring, ensure great and profitable crops—varying according to seasons. A neighbouring farmer, who is still using the steam plough, or rather cultivator, told me this morning that he finds it answers best to horse plough his land before he steam cultivates it. He thus gets more friability and less great blocks: and, in fact, the cultivator acts as a subsoil plough. I consider this to be a wise arrangement. I notice that my second growth of clover, on the land steam-ploughed 18 inches deep some three years ago, looks green and fresh, although we have had no rain for 28 days. The first growth gave a bulky crop of hay. Shallow cultivation will not do, although, for wheat, we should consolidate the soil after very shallow ploughing. The use of the steam plough is rapidly extending in this neighbourhood. We shall soon begin to learn how to apply it most advantageously. No doubt there is profit and advantage in having the command of the steam plough at one's own time at home. But then we must have local engine and blacksmiths' shops combined, and know something ourselves about steam machinery. It appears to me that in preparation for a mangel or root crop the land should be well manured and horse ploughed, and afterwards the powerful steam cultivator used to break up the subsoil, and let the surface soil and manure gradually intermix with it. My neighbour sometimes ploughs his land twice before steam cultivating. After all it comes to this, that the steam plough should have attached to it (as was done on my farm in 1856 or 1858) a subsoil plough or cultivator, so that the top and under soil should be moved independently of each other, and resting one on the other. If farmers insisted on this, and would pay for it, the engine makers would soon adapt them; but, at present, as Mr. Carey said to me, "If I had such a one no one would use it but you," and, strange to say, no neighbour has followed my practice of subsoiling, although I have done it for 25 years—so strong is the force of old customs in practice. "Where there's a will there's a way."—J. J. MECHI.

AGRICULTURAL SOCIETIES.

BEDFORDSHIRE.

The annual show of stock under the auspices of the Bedfordshire Agricultural Society was held at Luton, on July 18. This is the 79th year of the Society, and its growth may be gauged from the fact that in 1851 the value of the prizes amounted to £170 and the Society had 150 members; last year it gave away over £500 in prizes and numbered more than 400 members. The entries in the agricultural department were 378. This year the prizes offered amounted to over £600, while the entries numbered 449. As in former years, the horses formed the most interesting portion of the show. The stallions had been previously exhibited and adjudged at Bedford, the classes shown on Thursday being draught horses and nags. The first to enter the ring were the yearling colts of which there were five, the blue ribbon being awarded to Mr. Bosworth's brown colt bred by Mr. Lyon. Among the fillies there was a close run between two competitors from Bedford, but eventually first honours were awarded to Mr. Roger's chesnut, while Messrs. Howard were awarded the second prize. The pair horse contest was a close one, the whole of the animals being well matched. Mr. Allwood secured the ribbon, and he subsequently took the first for the best agricultural mare in any class with one of the pair. Earl Cowper's and Mr. Marsh's teams, which took second and third honours respectively, were composed of very powerful draught horses. In the mare and foal classes, the mares were good, but the foals were less satisfactory. There were ten competitors among the hackneys of any age, and the quality of several were so nearly on a par that a considerable time was spent in the selection. Major Quentem, of Cheltenham, rode a gelding, which had previously taken honours at the Agricultural Hall. The action was good and the animal was well ridden, but the owner had to be contented with commendation, the prize being awarded to a weight-carrying cob belonging to Mr. Ritchie, of Regent Street, London. The second class under 15 hands were sooner disposed of, Mr. Hall's Bessie bearing away the ribbon, and Mr. Franklin's Perfection securing the commendation of the judges. For the best cob above 13 and under 15 hands Mr. Ritchie's again took the first place, with Mr. Pratt's Wylie, a good second. Major Quentem exhibited a handsome cob in this class, but failed to win. The ponies did not give much trouble, Mr. Walby's Violet being far and away the best of the lot. There were thirteen entries of carriage horses, some of which were exceptionally good. Mr. Browning's chestnut mare did not at all take kindly to the collar, nor was her appearance very prepossessing. In a preliminary trot round the field the mare plunged most furiously, and refused to move with the curb on. She, however, showed going powers, but on entering the ring she recommenced plunging, and the stewards, fearing an accident, ordered her to be unharnessed. Major Quentem's mare slipped her bit before entering the ring, and threatened to do some mischief, but her qualities were so superior while under inspection that she was awarded the first prize, while Mr. Haylock was obliged to be satisfied with the second place. For cobs over 15 hands there was a close competition, Mr. Hawkin's Ruth in the end being the favourite. The harness ponies and brood mares were an average lot, but in Class 17 from four years old horses or mares for hunting purposes some difficulty was found in selecting the best animals. Mr. Hayward's Mr. Pedley's, and Mr. G. Higgins gave the judges some trouble; but Mr.

Higgins' Evelyn was selected for the chief favour. Among the hunters under six years old, in the Oakley Hunt, the competition was between Mr. Blof's Graffham and Mr. Peacock's Charlie, the former being declared the winner among the hunters under six years old in the Cambridgeshire hunt, the judges selected Mr. Crisp's gelding Sailor, but a protest was entered on the part of Mr. Hayward's Sedition, that Sailor did not belong to the Cambridgeshire. The prize horses from among the Hertfordshire Hunt were all powerful animals, Mr. J. Brown's Amazon taking first place for horses up to 15 stone, and Mr. Crisp's Sailor to 14 stone.

The cattle were paraded before Mr. George Garne and Mr. J. How, and included some good animals. The first among the bulls was symmetrical, and the second more especially distinguished for size. Class 31, for bulls between one and two years, did not show so well, but promised better for next season. The Channel Islands cattle were good, and excited considerable interest. The cows in Class 33 were heavy, and some of them showed signs that the season during which they will be exhibited in future will be few. In Class 34 a cow was entered by the Marquis of Exeter, but was detained in quarantine on the way from Paris. Mr. Marsh's Diana, which stood first at Bristol, and has already gained so many premier prizes, occupied her accustomed place on the prize list. In the dairy cow classes the Channel Islands breed outnumbered the Shorthorns, there being 15 of the former and 13 of the latter.

Classes 43 to 53 embraced the sheep, and the show exceeded former years by a long way. The Oxford Downs were fine animals, and on the whole they were superior to the long-woolled pens, which had much of the Lincoln and Leicester blood.

The pigs came well up, both in number and quality. There were six classes, and they were all animals that might be profitably bred from.—Abridged from the *Bedfordshire Times*.

JUDGES.—CART HORSES: Mr. R. Crawley, Mr. J. Linton and Mr. J. Martin. NAG HORSES: Mr. H. D. Bayly, Mr. J. M. K. Elliott, and Mr. G. Lepper. CATTLE: Mr. G. Garne, and Mr. J. How. SHEEP AND PIGS: Mr. E. Little and G. M. Sexton.

PRIZE LIST,

HORSES.

Cart stallions.—First prize, £20, T. Stokes; second, G. H. Stokes.

Yearling cart colt.—First prize, £5, J. Bosworth; second, £3, T. Connor.

Yearling cart filly.—First prize, £5, J. Rogers; second, £3, J. and F. Howard.

Two-year-old cart gelding.—First prize, £6, J. Walker; second, £4, R. Eve.

For the best two-year-old cart filly.—First prize, £6, H. Purser; second, £4, R. Horrsell.

Pair of cart horses for agricultural purposes.—First prize, £15, F. Allwood; second, £10, Earl Spencer; third, £5, R. Marsh.

Mare and foal for agricultural purposes.—First prize, £10, Miss Trevor; second, £5, H. Purser.

Cart foal.—Prize, £8, G. Street.

Cart mare or gelding of any age.—First prize, £10, F. Allwood; second, £5, F. Street.

Hackney of any age.—Prize £10, J. Ritchie.

Hackney of any age, not exceeding 15h. Lin. suitable for general purposes.—Prize, £5, J. Hall.

Cob above 13 and under 15 hands.—First prize, £5, J. Ritchie; second, £3, C. Pratt.

Pony not exceeding 13 hands.—Prize, £5, J. Walby.

Harne horse not under 15hands lin., to be shown in single harness.—First prize, £10, G. A. F. Quenten; second, £5, J. W. Haylock.

Cob not exceeding 15 hands, to be shown in single harness.—Prize, £10, E. Hawkins, Hitchin.

Harness pony not exceeding 13 hands, to be shown in single harness.—First prize, £5, E. F. Squire; second, £3, W. King.

Mare in foal or with foal at foot, suitable for breeding hunters, the foal to be by a thoroughbred horse.—First prize, £10, J. Hargreaves; second, £5, W. J. Buckmaster.

Four-year-old horse or mare for hunting purposes, bred in the county of Bedford.—Prize, £10 10s., G. Higgins.

Hunter not exceeding 6 years old last spring, up to 13 stone, being the *bona fide* property of a tenant farmer or his son residing within the limits of the Oakley country.—Prize, £10, J. T. Blott.

Hunter not exceeding 6 years old last spring, up to 13 stone, being the *bona fide* property of a tenant farmer or his son residing within the limits of the Cambridgeshire Hunt.—Prize, £10, J. W. Crisp.

For the best hunter of any age up to 15 stone, being the *bona fide* property of a tenant farmer or his son, from 1st January, 1878, residing within the limits of the Hertfordshire Hunt.—First prize, £20, J. Brown; second, £10, J. Cox.

Hunter of any age up to twelve stone, being the *bona fide* property of a tenant farmer or his son, from 1st January, 1871, within the limit of the Hertfordshire Hunt.—First prize, £15, J. W. Crisp; second, £5, S. Sworder, jun.

For the horse of any age that jumps his fences in the best manner.—First prize, £5, F. Elliot; second, £3, R. B. Allen.

For the horse that jumps his fences in the best manner, that has been hunted with the Berkhamstead staghounds or the Hertfordshire foxhounds, the *bona fide* property of subscribers to the above packs or farmers or farmers' sons residing within the limits of the said Hunt.—Prize, a silver cup, value £10, J. Harveyson.

CATTLE.

BULLS.

Bull above 2 and under 5 years old.—First prize, £10, C. H. Griffin; second, £5, W. H. Wodhouse.

Bull above 1 and under 2 years old.—First prize, £10, W. Clarke; second, £5, C. H. Griffin.

Channel Islands bulls.—First prize, £6, H. Kingsley; second, £4, G. Leigh.

COWS.

Cow of any age.—First prize, £10, J. J. Sharp; second, £5, T. C. Part.

Cow or heifer in calf or in milk, not exceeding 3 years old.—First prize, £5, R. Marsh; second, £3, T. Kingsley.

HEIFERS.

Heifer not exceeding 2 years old.—First prize, £5, J. J. Sharp; second, £3, F. Fowler.

Three animals of the Shorthorn breed, including a bull, a cow in calf or in milk, and a heifer not less than 12 months old.—First prize, £25, W. H. Wodhouse; second, £10, J. J. Sharp.

Three animals, including a bull and a pair of heifers not exceeding 18 months old.—Prize (a piece of plate, value £20), J. J. Sharp.

DAIRY COWS.

Dairy cow in-milk or in-calf.—First prize, £10, G. Street; second, £5, R. Checkley.

Dairy cow bred in the counties of Beds. or Herts.—First prize, £10, H. Kingsley; second, £5, W. M. Howe.

Channel Islands cow.—First prize, £6, Lord Dacre; second, £4, Mrs. Gerard Leigh.

FAT CATTLE.

Fat ox.—Prize, £5 and cup £5 5s., G. Sawyerby.

Fat cow or heifer.—Prize, £5 5s., J. A. Mumford.

SHEEP.

Long-woolled shearing ram.—First prize, £5, C. Sell; second, £2 10s.

Short-woolled shearing ram.—First prize, £5, C. Howard; second, £2 10s., J. Treadwell.

Pen of five long-woolled shearing ewes.—First prize, £5, C. Sell; second, £3, F. Allwood.

Pen of five Down or cross-bred shearing ewes.—First prize, £5, J. Treadwell; second, £2, G. Street.

Pen of five breeding ewes, of any age or breed, which shall

have suckled lambs up to the first day of June, 1878.—First prize, £5, C. Sell; second, £2, J. Treadwell.

Pen of three fat long-woolled shearing wethers.—First prize, £5, and second, £2, C. Sell.

Pen of three fat Down or cross-bred shearing wethers.—First prize, £5, W. Cooper; second, £2, C. Howard.

Pen of five long-woolled ewe lambs.—First prize, £5, F. Allwood; second, £2, C. Sell.

Pen of five Down or cross-bred ewe lambs.—First prize, £5, W. Clarke; second, £2, F. Street.

Pen of five long-woolled wether lambs.—First prize, £5, and second, £2, C. Sell.

Pen of five Down or cross-bred wether lambs.—First prize, £5, W. and S. Lucas; second, £2, J. H. Blundell.

PIGS.

Boar above twelve months old, intended for use.—First prize, £5, and second, £2 10s., S. Spencer.

Boar under twelve months old, intended for use.—First prize, £5, S. Spencer; second, £2 10s., J. and F. Howard.

Sow with pigs.—First prize, £5, S. Spencer; second, £2 10s., A. Flower.

In-pig sow.—First prize, £5, S. Spencer; second, £2 10s., W. James.

Pen of three sow pigs under twelve months old, intended for breeding purposes.—First prize, £5, J. and F. Howard; second, £2 10s., S. Spencer.

Pen of three fat pigs.—Prize, £5, S. Spencer.

BRIDLINGTON.

The forty-third annual exhibition of the Bridlington Agricultural Society was held on July 17. The weather was most favourable, and the attendance as a consequence was large. The entries numbered 252, as compared with 248 last year; and consisted for the most part of horses, the East Riding being more noted as a horse-breeding than as a cattle-breeding district. The cattle entries numbered 31, as against 28 last year. They were all Shorthorns, and though small in number, the quality was excellent. In the class of aged bulls there were nine entries, and the prize was taken by Baron Goldschmidt 3rd, aged three years and ten months. It belongs to Mr. John Jordan, Speeton, and was bred by Mr. Crowe. In the yearling bull and calf classes the entries were few, being only two in the former and one in the latter. In the class for cows in calf or milk the entries were five in number, and the principal prize was awarded to Lady Janet, a four year old roan, bred and owned by Mr. Wm. Knapton, Kelk. A silver cup, offered for the best Shorthorn (male) on the ground, for breeding purposes, was awarded to Baron Goldschmidt 3rd. A second silver cup, offered for the best female for breeding purposes, was given to Lady Sarah, a red and white cow, aged five years and four months, owned by Mr. William Knapton, Kelk, which was passed over in her class as a cow in calf or milk, although the prize in that class was given to an animal also owned by Mr. Knapton. Sheep numbered nine entries; last year they were almost *nil*. Pigs showed a falling off as to numbers, there being only 14, against 24 last year. Horses numbered 198, against 196 last year. The horses formed a splendid show, and among the entries were many well-known prize animals. Special prizes were offered for the best hunting mare or gelding, for the best jumper of any description, for the best ladies' hackney, for the best jumper not exceeding 14 hands high, and for the best hackney gelding or mare not under 14 hands 2 inches high. In these classes there was a large number of entries, and the competition was very close, the animals in several of the classes being all of first-class quality.

PRIZE LIST.

SHEEP.

Shearing ram, adapted for the district.—First and second prizes, Executors of the late F. Jordan, Eastburn, Driffield.

Pen of three shearing rams, adapted for the district.—Prize, Executors of the late F. Jordan.

Pen of five shearing gimmers.—Prize, Executors of the late F. Jordan.

CATTLE.

NORTHOKN.

Two years old or aged bull.—First prize, J. Jordan, Spceton; second, J. Crust, Catwick.

Yearling bull.—First prize, Executors of the late F. Jordan; second, J. Thompson, Anlaby, Hull.

Bull calf under twelve months old.—Prize, J. Snarry Sledmere, York.

Cow in calf or milk.—First prize, W. Knapton, Kelk; second, C. Strickland, Sutton-on-the-Forest, Easingwold.

Two years old heifer.—First prize, C. Strickland; second, Executors of the late F. Jordan.

Yearling heifer.—First prize, J. Snarry; second, Executors of the late F. Jordan.

Heifer calf under twelve months old.—Prize, J. Rowley, Stubbs Walden, Pontefract.

Ram for breeding purposes.—Prize, J. Jordan.

Ewe for breeding purposes.—Prize, W. Knapton.

HORSES.

HUNTERS.

Mare and foal.—Prize, G. Leighton, Osgodby, Searborough.

Three years old gelding.—First prize, Sir C. W. Strickland, Bart.; Roynton Hall; second, T. Suddaby, Skipsea.

Three years old filly.—Prize, T. Suddaby.

Two years old gelding or filly.—First prize, Sir C. W. Strickland, Bart.; second, J. P. Crompton, Thornholme.

One year old gelding or filly.—First prize, Sir C. W. Strickland, Bart.; second, R. Dixon, Dunnington.

COACHING.

Mare and foal.—First prize, J. and T. Reader, Holme, York; second, J. Train, Hull.

Three years old coaching gelding.—Prize, W. Johnson, Lowthorpe.

ROADSTERS.

Hackney mare or gelding, four years old and upwards.—First prize, T. Nicholson, Watton; second, W. H. Cranswick, Thornholme.

Hackney mare and foal.—First prize, R. Martin, Scoreby, York; second, T. Jackson, Scarborough.

Three years old hackney gelding or filly.—First prize, L. Major, Wetwang; second, J. P. Crompton, Thornholme.

Two years old hackney gelding or filly.—First prize, W. Rickell, Poeklington; second, J. P. Crompton.

AGRICULTURAL.

Mare or gelding.—First prize, W. T. Barlow, Selby; second, H. Lawson, Easingwold.

Mare and foal.—First prize, W. T. Barlow; second, R. G. Smith, Bridlington.

Three years old gelding or filly.—First prize, H. Lawson, second, W. Wright, Beverley.

Two years old gelding or filly.—First prize, A. Walker, Beverley; second, E. J. Medforth, Lissett Tythe Farm.

One-year-old gelding or filly.—Prize, R. G. Smith.

Nag or mare pony not exceeding 14 hands high.—First prize, F. Holesworth, Market Weighton; second, J. Medealf, Bridlington.

Nag or mare pony not exceeding 12 hands high.—First prize, W. Johnson, Lowthorpe; second, Mr. Lamplough, Dringhoe.

Hunting foal.—First prize, J. S. Darrel, York; second, C. Harrison, Haisthorpe.

Coaching foal.—First prize, J. Train, Hull; second, Messrs. J. and T. Reader, Holme.

Hackney foal.—First prize, R. Martin, York; second, J. Bell, Hull.

Foal for agricultural purposes.—First prize, W. Tennant, Selby; second, T. Hall, Burton Agnes.

PIGS.

Boar, large breed.—First prize, W. Beal, Kelk; second, J. Graham, Leeds.

Sow or gilt, large breed.—First and second prizes, W. Beal.

Boar, middle breed.—First prize, J. Graham; second, J. Coleman, Carnaby.

Sow or gilt, middle breed.—First prize, Rev. N. C. Strickland, Reighton; second, W. Beal.

Cottagers' pig.—First prize, W. Beal; second, T. Elliot, Bridlington.

SPECIAL PRIZES.

Hunting mare or gelding of any age.—First prize, C. Legard, Baynton; second, E. Thompson, Hull.

Four years old hunting mare or gelding.—First prize, E. Thompson; second, J. Lett, York.

Jumpers of any description.—First prize, T. Beforth, Whitby; second, J. P. Crompton, Thornholme.

Ladies' hackney.—First prize, M. Goodlass, Skerne; second, J. Cranswick, Low Caythorpe.

Juniper not exceeding 14 hands high.—First prize, W. Barrett, Hull; second, R. Hudson, Malton.

Hackney gelding or mare not under 14 hands 2 in. high.—First prize, R. Martin, York; second, J. Wilson, Reighton. —*Leeds Mercury.*

HIGHLAND AND AGRICULTURAL.

On July 17 a meeting of the Directors of this Society was held in their Chambers, 3, George IV. Bridge, Edinburgh.

DEATH OF ADMIRAL SIR W. J. HOPE JOHNSTONE AND MR. CARRUTHERS, OF DORMON.

The following resolutions were agreed to:—

1. "That the Directors of the Highland and Agricultural Society of Scotland regard it as a duty to record the deep and sincere regret with which they have received the intimation of the death of Admiral Sir William James Hope Johnstone, K.C.B., and their sense of the valuable assistance which the Society has for so long a time received from him as convener of the Argyll Naval Fund Committee."

2. "That the directors of the Highland and Agricultural Society of Scotland record their deep sense of the severe loss occasioned to the Society by the death of Mr. Carruthers of Dormont, a member of the board."

3. "That these resolutions be engrossed in the minutes of the society, and the Secretary be instructed to transmit a copy of them to Lady Hope Johnstone and Mrs. Carruthers, of Dormont respectively."

Letters were submitted from Sir James H. Gibson-Craig, Bart.; Mr. Young, Keir Mains, on behalf of the Keir Trustees; and from Captain Elliott Lockhart, of Borthwickbrae, acknowledging and returning their sincere thanks for the resolutions passed at last general meeting in regard to the late Right Hon. Sir William Gibson-Craig, Sir William Stirling-Maxwell, and Mr. Elliott Lockhart.

PARIS AGRICULTURAL CONGRESS.

Professor WILSON reported that, in accordance with the instructions of the Board, he and the Secretary had gone over to Paris, and had attended all the meetings of the International Agricultural Congress recently held there.

AGRICULTURAL EXPERIMENTAL STATIONS.

Dr. AITKEN reported that the agricultural experimental stations were progressing satisfactorily, that there was a good braid at both stations considering the drought, and that the effects of the various manures were already visible upon the crop, and would well repay inspection.

HUNTINGDONSHIRE.

The annual show of horses, horned cattle, sheep, and pigs in connection with the Hunts Agricultural Society was held at St. Neots on July 17, in the presence of a large number of spectators. Samuel Day, Esq., generously placed his paddock at the disposal of the committee, and the necessary arrangements of the show were admirably carried out under the superintendance of Mr. Arthur George Dille, the Secretary. A long range of shedding was fitted up for the horses and horned cattle; and the sheep and pigs were accommodated in pens. The poultry was shown beneath two spacious tents. There was some machinery exhibited, but no awards were offered in this department. The number of entries for the past seven years has been as follows:—1872, 411; 1873, 525; 1874, 592; 1875, 504; 1876, 419; 1877, 413; 1878, 430. The entries for horses were much larger than those of last year, but the breeding and store stock, pigs, and poultry was not so large. The show

of sheep was larger. Mr. J. Goodliffe, of Huntingdon, secured three cups for his hunters, which had never been shown before. The animals were very fine, and elicited much admiration. He secured both cups in Class 8 as exhibitor and breeder. Mr. Hall, of Ely, secured the £25 cup with a fine animal. The show of Shorthorns was hardly up to the usual standard, especially in some of the minor classes. The Marquis of Exeter took the £21 cup with *Telemachus* 6th. The exhibition of sheep was excellent. Mr. Street, of Somersham, was a large prize-taker, as was also Mr. Gannell, of Milton, Cambs, and Mr. Robinson, of Milton, Cambs. Mr. Spencer, of Holywell, showed some remarkably fine animals in the pigs class and took several prizes. He was a prize-taker at the Royal show with some of these animals. There was a large show of implements, but no prizes were given. The day was fine and the company numerous.

P R I Z E L I S T.

HORSES.

Stallions exceeding three years old, for agricultural purposes (open).—Prize, £20, R. K. Folley, Long Sutton.

Stallions not exceeding three years old (open).—Prize, £10, J. Golden, Ramsey.

Cart mares suckling foals (open).—First prize, £10 cup, R. H. Griffin, Boro' Fen, Peterboro'; second, £3, J. Beldam, Bluntisham.

Two-year-old cart geldings.—First prize, £6, W. Rowell, Bank, Peterboro'; second, £3, —, Looker, Wyton Manor.

Two-year-old cart fillies.—First prize, £6, J. Rowell, Bury; second, £3, B. Brown, Hemingford House.

Yearling cart colts.—Prize, £5, S. Fyson, Warboys.

Yearling cart fillies.—Prize, £5, J. Rowell.

Cart foals.—First prize, £2, L. Ekins, Warboys; second, £1, C. E. Ivatt, Rampton.

Pair of cart horses.—Prize, £10 10s. cup, W. Rowell.

Best cart mare or filly in the yard.—Prize, £21, R. H. Griffin.

Mares or geldings above three and under four years old, for hunting purposes.—Prize, £10 cup (being breeder) and £5 5s. cup (being owner), J. Goodliffe, Huntingdon.

Mares or geldings above four and under five years old (open).—Prize, £25 cup, G. S. Hall, Ely.

Mares or geldings five years old and upwards.—Prize, £10 10s. cup, J. Goodliffe.

Hunters up to 12 stone, that have never won a prize.—Prize, £5 5s. cup, —, Prier, Leighton.

Mares and foals for hunting purposes.—First prize, £10 and £10 cup, J. Goodliffe; second, £5, and £5 cup, E. Maule, Godmanchester.

Mares or geldings above five years old, over 14 hands and not exceeding 15 2, adapted as roadsters (open).—First prize, £5 cup, C. E. Ivatt, Rampton; second, £3, J. Hall, Bythorn House, Thrapston.

Hackney cobs not exceeding 14 hands.—Prize, £5 5s. cup, J. Paine, jun., Great Paxton, St. Neots.

Ponies not exceeding 13 hands.—Prize, £1 1s., T. Collett, King's Rippton.

Mares or geldings in single harness, not under 14 hands.—Prize, £5 5s. cup, J. Rowell.

Roadster mares or geldings above four and under five years old, not exceeding 15 hands 1 in.—Prize, £10 cup, —, Elliston, Great Stukeley.

CATTLE.

Bulls not under two years old.—First prize, £8, C. W. Griffin, Werrington; second, £4, Duke of Manchester, Kimbolton Castle.

Bulls above one and under two years old.—First prize, £6, —, Looker, Wyton Manor; second, £3, T. Gannell, Milton, Cambs.

Bulls under one year old.—First prize, £4, Duke of Manchester; second, £2, J. J. Sharp, Kettering.

Cows of any age.—First prize, £5, J. J. Sharp; second, £3, B. Brown, Hemingford House.

Cows adapted for dairy purposes, and not eligible to be entered in the Herd Book.—First prize, £21 cup, W. H. Armstrong, Brompton; R. H. Ekins, Werrington.

Heifers under three and over two years old.—First prize, £4, C. W. Griffin; second, £2, W. H. Armstrong.

Heifers under two years old, not eligible to be entered in the Herd Book.—First prize, £3, T. Gannell; second, £1 10s., J. Hall, Hlythorn House.

Heifers under two years old.—First prize, £3, J. J. Sharp; second, £1 10s., C. W. Griffin.

Steers under three and over two years old.—Prize, £5, J. How, Broughton, Hants.

Steers under two years old.—Prize, £3, J. Brown, Needingworth.

Best pair of steers of any age or breed, not being pure-bred Shorthorns.—Prize, £4, C. Hall, Eaton Socon.

Best bull (open).—Prize, £21 cup, Marquis of Exeter, Burghley Park.

Best bull over 18 months and under four years old, to serve cows within the limits of the Society at not exceeding £1 1s. each.—Prize, £10, T. Gannell.

Best cow in the show.—Prize, £10 10s. cup, C. W. Griffin.

SHEEP

LONG-WOOLS.

Three shearing wethers.—First prize, £4, C. Sell, Bassingbourne; second, £2, T. Gannell, Milton.

Five ewes which have suckled lambs to the 1st of June last.—First prize, £4, C. Sell; second, £2, G. E. Daintree, Fenton.

Five wether lambs.—First prize, £4, C. Sell; second, £2, T. Gannell.

Five ewe lambs.—First prize, £4, T. Gannell; second, £2, T. Close, jun., Barnack.

Five tup lambs.—First prize, £4, T. Gannell; second, £2, T. Close.

SHORT-WOOL OR MIXED BREED.

Three shearing wethers.—First prize, £4, J. Lewin, Wyton; second, £2, C. Sell.

Five ewes that have suckled lambs to the 1st of June last.—First prize, £4, A. M. Robinson, Milton.

Five wether lambs.—First prize, £4, A. M. Robinson, second, £2, J. Lewin.

Five ewe lambs.—First prize, £4, A. M. Robinson; second, £2, F. Street, Somersham park.

Five ram lambs, any breed except long-wools.—Prize, £5 5s., Mr. F. Street.

Best pen of ewes in the yard.—Prize, £10 cup, F. Street.

Best pen of lambs in the yard.—Prize, £5 cup, F. Street.

Shearing rams (open).—Prize, £10 cup, H. Smith, Cropwell Butler.

Extra class.—Prize, F. Street.

PIGS.

Boars, large breed.—First prize, £3, S. Spencer, Holywell, St. Ives; second, £1 10s., Mr. Battock, Hemingford Abbots Berkshire boars.—First prize, £3, J. P. Miller, Fenstanton second, £1 10s., Mr. Battock.

Boars, small breed.—Prize, £3 and £1 10s., S. Spencer.

Breeding sows, large breed.—First prize, £3, S. Fyson Warboys; second, £1 10s., J. P. Miller.

Ditto, small breed.—Prizes, £3 and £1 10s., S. Spencer.

Three yelts over four and under eight months.—Prizes, £3, and £1 10s., S. Spencer.

Best pig in the yard.—Prize, £4 5 cup, S. Spencer.—*Stanford Mercury*.

NOTTINGHAM AND NOTTINGHAMSHIRE.

MEETING AT NOTTINGHAM.

In reporting this show *The Nottinghamshire Guardian* says:—A glance at the show-ground of this Society, just beyond the famous cricket-ground of the County Cricket Club, Trent Bridge, Nottingham, told a tale that was repeated at every instant and wherever the eye was turned. The first exhibition was a success in the fullest and best sense, and demonstrated that the effort which had been put forward was well-timed and judicious. The weather, which we in former notices predicted was the sole questionable or uncertain condition of things upon which the success of the whole depended, was admirably fine. The fresh breeze which swept down the valley of the Trent mitigated the otherwise somewhat too fierce heat of the sun, and the temperament of the hundreds who from the

earliest hour were upon the show-ground to enjoy the great sight, to them, of the cattle being brought in and stalled, appeared to be as undisturbed by any care for anything subliminary, save the most lively curiosity and admiration for all they saw around them. On entering the ground, horses stretched away right and left, parallel to the wall fencing off Bridford-lane, and along the cricket-ground boundary, close behind the pavilion, whose aspect is well known to the vast majority of Nottinghamian people. The former line was taken by the hunters and roadsters, who were altogether an uncommonly fine class. The specimens put forward in this initial effort to start a show worthy of the county were not unfit representatives of the shire which for genuine sport in the field often pushes hard famous Lincolnshire and Leicestershire, its nearest neighbours. The position next the pavilion was held by agricultural horses, who were also in good form; a number of stallions which were paraded about the ground were especially noticeable. The horned cattle of various kinds were placed in continuation of the row in which the agricultural horses stood, and were also a good lot. There was not a large entry of sheep, but as representative specimens they stood well. The numerous entries by the Duke of Portland, the Earl of Harrington, Mr. Cooper, of Bulwell Hall, Mr. Savile, of Rufford Abbey, and other gentlemen of position in the county showed how much interest they at any rate thought it was worth while to bestow upon such competitions as stimulating healthy rivalry. In pigs the entry was larger than in sheep, and fully as good in its various ways. Not unnaturally, the poultry and pigeons were the objects of considerable attention, and it may fairly be said that they were worthy of it. For agricultural implements there were no prizes offered, but, judging from the show which was put forward without that inducement, it appeared to be quite unnecessary.

PRIZE LIST.

HORSES.

HORSES FOR AGRICULTURAL PURPOSES.

Stallion for getting agricultural horses.—First prize, £10, J. Nix, Alfreton (Beauchief); second, £5, G. Horspool, Newark (President Lincoln).

Brood mare with foal at foot.—First prize, £5 5s., J. N. Oakes, Alfreton; second, £3, W. H. Potter, Lockington.

Pair of dray horses, geldings, or mares.—First prize, £10, Messrs. Cafferatta and Co., Newark (Farmer); second, £5, J. H. Oakes, Alfreton.

Gelding or mare, four years old and upwards.—First prize, £10, Cafferatta and Co., Newark; second, £3, T. H. Oakes, Alfreton.

Three year old gelding or filly.—First prize, £5, J. Snodin Stenesby (Prince of Wales); second, £3, H. Smith, Bingham (Governor).

Weight-carrying hunter (mare or gelding) five years and upwards up to 14 stone.—First prize, £10, G. Peck, Retford (Morning Call); second, £3, M. Lewis, Nottingham (Lady Gray).

Hunter (mare or gelding) five years old and upwards, up to 12 stone, but not equal 14 stone.—First prize, £10, W. Lambert, Nottingham (Viscount); second, £5, W. Wright, Wollaton (Rosamond).

Four year old hunter (mare or gelding).—First prize, £7, G. Brewster, Edwalton; second, £3, G. Peck, Retford (Rustic).

CATTLE.

SHORTHORNS.

Bulls three years old and upwards.—First prize, £10, T. H. Oakes, Alfreton, Derby (Newlands); second, £3, T. H. Oakes, Alfreton, Derby (Canley Darlington).

Bulls above two and under three years old.—First prize, £15 F. J. S. Foljambé, Worksop (Flag of France); second, £3 R. Finney, Derby (Waterloo Herdsman).

Bulls above one and under two years old.—First prize, £10, T. H. Oakes, Alfreton (Amos); second, £3, Duke of Portland, Mansfield (Paragon).

Bull calf not exceeding one year old.—First prize, £5, W. T. Lamb, Welbourne; second, £3, F. W. Park, Retford (William Fort).

Cow three years old and upwards, in calf or milk.—First prize, £7, G. M. Hutton, Gainsborough; second, £3 3s., Colonel Ellis, Bagworth.

Heifer above two years and under three years old, in calf or milk.—First prize, £10, T. H. Oakes, Alfreton; second, £3, Miss E. A. Crawford, Southwell, Notts (Promise).

Heifer above one and under two years old.—First prize, £5, T. H. Oakes, Alfreton; second, £3, Earl of Harrington, Derbyshire.

Heifer calf under one year old.—First prize, £3, G. M. Hutton, Gainsborough; second, £2, F. W. Park, Grove Retford (Aylesbury Walnut).

Cow for dairy purposes, of any breed, in calf or milk.—First prize, £5, F. J. S. Foljambé, Worksop (Eugenie); second, £3, — Domleo, Leicestershire.

Butchers' Special Prize for the best pen of 5 fat sheep.—First prize, £5, G. German, Ashby-de-la-Zouch; second, £2, Duke of Portland, Mansfield.

SHEEP.

LONG WOOLS.

Aged ram.—First prize, £5, H. Smith, Bingham (Hermit); second, £2, J. Rodkin, Grantham.

Shearling ram.—First prize, £5, second, £2, H. Smith, Bingham, Notts.

Five shearling ewes.—First prize, £5 5s., W. Roe, Newark; second, £2, H. Alcock, Linby.

SHORT WOOLS.

Aged ram.—First prize, £5, G. German, Ashby-de-la-Zouch second, £2, Duke of Portland, Mansfield.

Shearling ram.—First prize, £5, G. German, Ashby-de-la-Zouch; second, £2, G. German.

Five shearling ewes.—First prize, £5, Duke of Portland, Mansfield; second, £2, Earl of Harrington, Derby.

PIGS.

Large or middle white—boar.—First prize, £3, second, £1, Duke of Portland.

Berkshire breed boar.—First prize, £3, P. H. Cooper, Notts; second, £1, H. Marshall, Bingham, Notts.

Sow, in pig or milk.—First prize, £3, A. J. Williams, Worksop; second, £1, P. H. Cooper.

Any other small breed, black or white—boar.—First prize, £3, J. D. and C. E. Andrews, Wollaton, Notts; second, £1, P. H. Cooper, Notts.

Sow, in pig or milk.—First prize, £3, G. Hodgkinson, Mansfield; second, £1, Duke of Portland.—*Nottinghamshire Guardian*.

PONTFRACT.

The twenty-first annual exhibition in connection with this Society was held in the two fields adjoining to the Tanshelf station on July 18. The weather was all that could be desired, if it is excepted the heat, which was almost unbearable. The numbers, however, who visited the show appeared greater than in any previous year, especially during the afternoon, when the ground was crowded. The Pontefract Borough Prize Band had been engaged for the occasion, and during the day discoursed some popular music. As to the show itself it was pronounced to be the best yet held. The entries were stated to be in excess of any previous year, and the quality of stock superior to any that has yet been shown. Horses were an unusually good class, and in numbers were larger than at any former show. The best of the lots were the brood mares, the pairs of draughts, and the aged roadsters. There were also some very good hunters. Of cattle, though the entries were not numerous the quality was unexceptional. The cows in calf or milk were one of the best lots that has been seen at Pontefract. Sheep too were first-class, especially the shear rams, and the long woolled gimmer lambs. There were also some superior sheep, both in the classes for wethers and gimmers. Pigs have been seen in larger numbers, though, considering that they all came out of the district, the quality has very rarely been excelled. There were also some fine specimens among the dogs, poultry, and pigeons, particularly in the two latter departments. The exhibits of butter and eggs were in both cases few, though the quality was spoken of as remarkably fine.—*Doncaster Gazette*.

FARMERS' CLUBS.

STOWMARKET AND CENTRAL SUFFOLK.
THE ANNUAL SHOW.

The second annual show in connection with the Stowmarket and Central Suffolk Farmers' Club was held on July 12 in the grounds of Capt. Oakes.

Taking the agricultural horses as a whole they were very good indeed, and some fine specimens of the Suffolk breed were to be seen on the ground, drawn not from specially prepared animals, but from the yards of the surrounding farmers, and accustomed to the usual hard work of the farm. The cart horses were indeed considered as "something wonderful," and few local shows could equal them. The mares and foals were very strong in numbers and quality, and some sharp competition resulted, the prize being ultimately awarded to a very fine and large mare of Mr. T. Maw, Needham Market, although Mr. S. W. Hunt ran him close. The foals were up to the average. From the ten best mares entered, the judges quickly selected the two winners, and the quality of Mr. L. Webb's animal led them to bestow a deserved commendation upon it. The three-year old fillies were not a very smart lot, and the judges did not deem them of sufficient merit to justify the bestowal of the second prize. Mr. T. Carter had a splendid animal in the older gelding class, and the judges could not do otherwise than give it the prize. There were several who were very close to it in point of merit, and one of these secured the second prize. The young geldings were a capital class, and here Mr. Makins took the first prize. Four good-looking, well-matched teams entered for the special prize of five guineas, presented by Lieut.-Col. Parker, for the best team of four. All the horses were in the height of condition, and made a good display. Plenty of bone and muscle were the leading features, and the judges were so convinced of the quality of these horses that they commended the whole class, awarding the prize to Mr. Makins; Mr. Calver, Mr. Lambert, and Mr. J. Lankester, were the other exhibitors. Messrs. Oakes, Bevan, and Co.'s premium of £5 for the best pair of plough horses was keenly contested, and the Rev. H. Hill finally secured the coveted prize, Mr. C. Calver receiving a commendation. The riding horses were very good throughout, and rather above the average quality of last year's show. The harness classes were really excellent, and won high praise both from the judges and the spectators. In the weight-carrying cobs the prize, presented by W. W. Wells, Esq., Bramford, was somewhat closely contested, and its final bestowal gave rise to some adverse criticism, as the animal commonly acknowledged to be the best, a cob belonging to Lieut.-Col. Parker, was rejected as not being able to carry the necessary weight. The prize was awarded to an animal belonging to the Rev. F. Steward, of Barking, which was thought to be inferior. The prize for the best cob in the show fell to Mr. T. Woodward, of Old Newton, but the rejected cob had its revenge in the harness classes, where it carried off the special prize presented by H. Birkbeck, Esq., of Ipswich, although the winners of one or two other prizes competed. In this latter class

a second prize of £2 was awarded because of the excellence of the animal exhibited. Mr. Thornhill's prizes for the best jumping hunter were, after an interesting contest, carried off by Mr. E. Wells, of Bramford, and Mr. A. Clutterbuck, of Stowmarket. The young riding horses were not very good, and the show here was somewhat scanty. In the neat stock all the polled classes were good. The Shorthorns were not up to the mark, but the highest praise can with safety be given to the fat beasts. The class for pairs of fat beasts contained a grand lot, good enough for any show. The winners in this class, the property of Mr. J. Scott, of Felsham, were especially fine, and were well worthy to head so excellent a class. Of sheep there was a short show, but what were present were of a good quality, while in the pig classes there was really no competition.—*Bury Post*.

EXHIBITION AT STOWMARKET.

The second summer exhibition of the Stowmarket and Central Suffolk Farmers' Club was held on July 12, on the grounds of Mill House, Stowmarket, by kind permission of Captain Hervey A. Oakes. As on the last occasion, the show of agricultural horses was a magnificent one. The class for mares with foal at foot was perhaps the best. The geldings over three years old contained some grand animals, but those under three were an odd lot and rather weak. The teams of four mares or geldings were so good that the judges commended the whole class. The pairs of plough horses were equally meritorious. There were over 100 horses suitable for agricultural purposes, and, as might be expected, there were some of all sorts—good, bad, and indifferent—but the majority were useful farmers' horses, and were certainly a credit to the district.

The riding horses, cobs, and ponies were, for a purely local show, quite in keeping in point of excellence with the agricultural horses. The young hackneys were very poor, but the harness and riding classes generally were good, especially the former. The strongest and most attractive class was that of hackney mares or geldings, not less than 14 h.h. and not more than 15.2 h.h., exhibited in harness. There were lots of fine goers, and the judges had some difficulty in making their awards. Amongst the jumping hunters were some grand creatures, and the jumping was excellent. Some of the weight-carrying cobs were of the right stamp, but others found their way into the class that certainly had no business there, being too light. There were some hand-ome little creatures amongst the ponies, that belonging to Mr. S. Page, which took the first prize, being a perfect picture.

The exhibition of neat stock was a great improvement upon last year. A Shorthorn bull sent by Colonel Parker, M.P., was greatly admired, as were also the cows in the different classes.

The show of sheep and pigs was small. A new feature was an exhibition of shepherds' dogs. There were eight entries, and they received a good deal of notice from the visitors.—*Ipswich Journal*.

CHAMBERS OF AGRICULTURE.

BEDALE.

A meeting of the Bedale Chamber of Agriculture was held at Bedale, on July 9, Captain Clarke, the president of the Chamber, occupying the chair.

Mr. TEALE, the Secretary of the Chamber, introduced a discussion on the Valuation of Property Bill.

The CHAIRMAN said there was one clause which required great consideration, and it was this—that if the Bill passed, rent would be taken as the minimum for the valuation.

After several members had taken part in the discussion, Mr. TEALE, in reply, stated that there was nothing in the Bill fixing the rent as the minimum value. The Bill said that the "estimated value" was to be made by the overseer; it did not say "rent or estimated value."

A vote of thanks was accorded to Mr. Teale for introducing the discussion, and to Captain Clarke for presiding.

YORK.

A meeting of this Chamber was held on July 11, at the Queen Hotel, Micklegate. Mr. J. DUNN, of Kelfield, the President, occupied the chair, and there was a good attendance of members.

The CHAIRMAN referred to several Bills before Parliament especially interesting to agriculturists, and, with respect to the Cattle Diseases Bill, proposed the following resolution, which was carried unanimously:—"That this Chamber regrets the opposition which has been offered to the Contagious Diseases (Animals) Bill of 1878, believing that the provisions of that Bill by prohibiting the introduction of diseases would largely increase the supply of English fed meat, and thereby tend to balance supply and demand so as to benefit the consumer. That this Chamber offers no objec-

tion to the concessions already made by the Government, and trusts that the Bill, as it at present stands, will be pressed by its promoters without any parting from its salutary provisions." Mr. J. L. FOSTER then read a paper on the Valuation Bill.

ESSEX.

At a meeting of this Chamber, held at Chelmsford on July 19, the discussion of the Valuation Bill was deferred, and the following resolution relating to the Cattle Diseases Bill was moved by Captain Delf, and carried unanimously:

"That this Chamber views with some alarm the concessions that have already been made in the Cattle Diseases Bill, and earnestly prays the Government to be firm to the principle of slaughter at the ports of all animals coming from countries which cannot show a clean bill of health to the satisfaction of the Privy Council and Parliament."

SUBSTITUTE FOR BEER IN THE HARVEST FIELD.

A correspondent of *The Norwich Mercury* writes as follows:—May I crave another small space in your paper to make a few remarks on the above heading? I have now by me the testimony of more than twenty individuals, who all speak of the glorious results that have been achieved by the use of non-alcoholic drink. Let me give your readers one of them. A parish churchwarden and farmer joined the Church of England Temperance Society two years since. Several of his men and boys followed his example. In harvest time he paid the usual wages, and gave in addition the customary beer-money to the men, 4. 6d. weekly, and to the boys in proportion. Besides the wages and beer-money, he provided them *gratis* with a plentiful and regular supply of the beverage the ingredients and preparation of which are given below. Some of the men who were beer drinkers, but declared their willingness, not only to abstain during the harvest work, but also, without joining the Temperance Society, to forego their old habit of beer-drinking as long as those *who had* joined did so. This voluntary abstinence for the most part continues.

What is the result? Your readers shall have it in the very words as I have it, "Decided success." Not only were the men enabled to work heartily and well together through the entire harvest, without bickerings, disputings, or any unpleasantness, but they did so, as they willingly admit, without, in the least degree, wanting beer, and as being satisfied, better in health, *able to do more work*, less fatigued, and, moreover, considerably better in pocket than with it.

Will the agriculturists of Norfolk allow me to suggest a trial of this plan this year? I know one farm in West Norfolk where nearly every man ceased, during the harvest, to drink beer or cider, and all acknowledged that the work had been done as well, if not better, *without* than with their usual medium of beer or cider. How many accidents in the harvest field are traceable to the beer-drinker? May I not say many *deaths* occur through the evil habit of "taking a drop too much" as the saying goes.

The beverage above referred to:—

To make one gallon:—Take half a pound of oatmeal quarter of a pound of cocoa, and half a pound of sugar; mix with a little cold water into a thick paste; put the whole into a gallon of boiling water, or into hot water and boil it. The men like it best warm, as more pleasing to the palate and more effective in quenching thirst, and even satisfying hunger. If used cold, it must be fresh, and never more than a few hours old. The cost of this gallon is cheap enough—half a pound of oatmeal, 1½d.; quarter of a pound of cocoa, 2½d.; half a pound of sugar, 1½d. Thus 6d. per gallon, or 1½d. per quart, is the outside cost of the beverage.

THE HIGHWAYS BILL.—On July 15 a deputation consisting of town clerks, mayors, and other persons representing many boroughs of England, and accompanied by the following members of Parliament:—Mr. Chamberlain, Mr. Norwood, Sir Charles Forster, Mr. Aslibury, Mr. Merewether, Mr. Hamond, Mr. Barran, Mr. Arthur Mills, Mr. W. K. Wait, Mr. Torr, Mr. Johnson, and Mr. W. H. Foster, had an interview with the President of the Local Government Board at Whitehall to protest against quarter session boroughs being

made liable to contribute to the county rate for the maintenance of main roads distrupiked since 1870. Mr. Chamberlain introduced the deputation. The mayors of Norwich, Exeter, and Cambridge, and Councillor Hargrove, of Carlisle, addressed Mr. Selater-Booth to the effect that an attempt had, just been made by some of the county members in Committee on the Highways Bill to insert clauses which would make boroughs with separate courts of quarter sessions liable to the county rate for the maintenance of main roads distrupiked since 1870. Those efforts had hitherto been frustrated, but it was apprehended, as Mr. Booth had promised to reconsider the subject, that perhaps such a clause might be passed by the Government. Mr. Selater-Booth, in reply, said that under no circumstances could there have been any intention to press that the quarter session boroughs should contribute towards the expenses of the main roads of the county without receiving an equivalent return from the latter. The Government had thought it better to exempt from the operation of the Bill the quarter sessions boroughs; for unless new machinery was devised magistrates in quarter session counties could not go into quarter session boroughs and levy a rate for this particular purpose. The Bill now simply placed the county roads upon the county rate, and there was no necessity to depart from that arrangement.

HAY LIFTING APPARATUS.—*The Scotsman* thus describes a patent hay-lifting, carrying, and elevating apparatus, the invention of Mr. J. B. Taylor, Seton West Mains, Prestonpans. The apparatus is in two distinct portions—one movable and the other stationary. The movable machine, known as the lifter and carrier, consists of a waggon with fixed front wheels. At the back are swivel wheels, which can by means of levers acting on both sides be laid in a horizontal position. When so placed the waggon forms a sloping platform, which is run in front of a hayrick. Ropes are attached by means of hooks to the front part of the waggon passed round the hayrick, drawn forward over the waggon, and made fast to the horse's chains. The horse being moved forward the rick is drawn from the ground on the waggon platform, which is restored to its normal position by working the levers of the swivel wheels. The waggon so laden with the rick of hay is then drawn by the horse to the stackyard, where the stationary elevator is erected. The elevator consists of a high sloping platform, close to the lower end of which the hay waggon is drawn up. Ropes are once more passed round the rick, taken up to the end of the elevator, passed through two pulleys, and then attached to a horse. The forward movement of the horse draws the rick off the waggon and up the sloping platform of the elevator, from which it may either be capsized on to the haystack or left on a level staging at the end of the elevator to be forked on to the stack. The chief novelty in the apparatus would seem to be the swivel wheels of the waggon.

IMPORTATION OF DEAD MEAT.—A Parliamentary paper has been issued giving the importation of dead meat into the United Kingdom in the years 1876 and 1877. The following summary gives the quantity and value of the import for each month in the two years:—

	1876.		1877.	
	Quantity. Cwt.	Value.	Quantity. Cwt.	Value.
January	81,992	£216,536	136,396	£373,344
February	114,920	283,639	154,949	405,518
March	110,928	278,890	186,213	492,369
April	95,708	231,682	140,409	352,716
May	69,896	172,313	190,350	459,926
June	76,037	182,929	125,655	308,851
July	56,919	130,362	95,634	246,189
August	73,263	186,901	67,802	180,366
September	81,883	202,240	81,797	221,311
October	94,893	241,397	134,830	356,791
November	144,014	378,973	127,733	330,336
December	167,167	404,102	139,622	357,101
Total.....	1,167,580	£2,923,184	1,581,420	£4,117,808

A PROLIFIC SOW.—Recently a sow, the property of Mr. Young, of the Gardenstone Arms Hotel, Laurencekirk, dropped twenty pigs, nineteen of which are alive.

THE IMPLEMENTS, &c., AT BRISTOL.

[SEE ALSO OUR REPORT ON PAGE 128.]

Burgess and Key, of London, had entered a self-binding reaper for exhibition, but it was not quite ready, and did not appear. It is a string-knotting binder, and will, it is to be hoped, be ready for the trial field in August. The reapers and mowers of this firm have been recently improved, as we have stated in previous notices. One of the reapers shown on their stand was of lighter construction than the rest, being especially adapted for use in foreign countries, where the corn is light and the horses are small. The direct-thrust principle for reapers and mowers, which Burgess and Key, we believe, were the first to adopt, is an undoubted advantage, and the oilers placed over all important action parts save much time, and prevent waste of oil.

The most prominent of the exhibits of Waite, Burnell, Huggins, and Co., of London, was McCormick's self-binding reaper, a very effective-looking machine, which made good work in the green rye at Oxford. It has been improved since last year in the adjusting gear of the twister, and in the double crank and cam for imparting the reciprocating motion to the machine. The lawn mowers of this firm we have several times referred to in terms of highest praise. We did not notice any novelties in these or the other exhibits. The "Tiger" horse-rake is not new, but was noticed for the first time; we believe, in the Smithfield Show report. Another self-binding reaper was exhibited by the Johnston Harvester Co., of New York and London. This machine ties with string, which it forms into a common knot as usually tied when the two free ends of a cord are brought together and knotted in the simplest and most secure fashion. There cannot be a better knot for the purpose, and if the sheaves can be bound tightly with it none could fail to prefer it to a twist. We shall look with interest to the performance of this reaper in the trials which are to be held during harvest near Bristol, where it is to be hoped this and all other self-binders at the show will appear. It would be rash to express any opinion upon the efficiency of binders which we have not seen at work in the field, however ingenious and apparently effective they are; but we are informed that the Johnston binder was at work last harvest in America. The firm also showed two reapers of new construction for Continental use.

The self-binder exhibited by Osborne and Co., of Liverpool, is the same as appeared at the Royal Show last year; but the firm have a new machine nearly ready which they intend to send for trial. It was intended to have it ready for the show, but it was not quite completed in time.

Neale's string-knotting binder, in its simplified form, as referred to in our notice of implements at Paris a fortnight ago, was shown at Bristol, and is entered for trial. We have from the first taken a great deal of interest in this ingenious machine, and shall be glad to have an opportunity of seeing it at work in the trial field.

Samuelson and Co., of Banbury, showed their new "Imperial" reaper, fitted with six arms for rakes and dummies, which may be controlled, and the sheaves retained on the platform or delivered at pleasure. The cutter bar is hinged, so that it can be turned up for travelling, and is in a line with the axle of the travelling wheel. The "Favourite" lawn mowers of this firm have also been improved. Like most of the other large manufacturers of reapers, Messrs. Samuelson have a self-binder in hand. It was not ready for exhibition at Bristol, but is to appear, we understand, at the trials.

We were much pleased with James Smyth and Sons' (Peasenhall, Suffolk) new corn drill, the "Nonpareil," as it embodies several important improvements upon the famous and much-used "Eclipse." Possessing all the advantages of this old favourite, the new drill has these in addition: It is fitted with newly-patented hoppers, which do not require to be removed when the cup barrel has to be taken out of the box. It has new support bearings, which drop when the cup barrel has to be removed; also new cog-wheel gearing, which allows of more variation in seeding with eight wheels than was formerly attainable with twelve; a new arrangement for ensuring uniformity of seed delivery on hilly land; and moveable tips to the coulters, which can be renewed when worn instead of having new coulters, as was formerly necessary.

Robert Boby, of Bury St. Edmund's, showed his hay-makers, corn dressing machines and screens, barley haveler, hand seed drill, &c., in which we did not notice any important modifications. J. and H. Keyworth, of Liverpool, have improved their reapers, mowers, and horse rakes; and Powell Brothers, of Wrexham, showed some improved chaffcutters.

Coleman and Morton, of Chelmsford, showed their famous cultivators, manure carts, corn screens, patent horse pitchfork, and some improved whippetrees. David Tilley, of Cowbridge, Glamorganshire, had a new dibbling machine for turnip and mangel seed, very simple and cheap.

An important improvement in steam cultivators has been introduced by Barford & Perkins, of Peterborough. This consists in a very simple and ingenious arrangement by means of which the cultivator can be lifted instantaneously out of work at any time, either when turning at the headlands, or when working in the middle of the field, and as easily put back into work again, both operations being done without stopping the engine. The cultivator instead of being fixed to the axle in the ordinary way is made to rest on two inclined slide bars in which the axle revolves. The lifting power is obtained by two notched eccentrics and two notched wheels keyed on the axle, the cogging of which lifts the frame and tines clear of the ground. A double pawl similar to the escapement of a clock is carried in a convenient position in the slide brackets and drops into a catch at the top of the slide bar, holding the tines clear of the ground. When it is required to put the cultivator into work the steersman pulls the top of the pawl out of the catch, and in doing so brings the bottom of the pawl (by the escapement principle) into a notch which regulates the depth. With this arrangement any depth may be obtained without stopping the implement, so that different depths may be worked in the same field when variation of soil renders such difference desirable, without at all impeding the work.

A new corn and seed drill, very simple and cheap, was exhibited by William Brenton, of Polbathic, Cornwall. The corn is worked out through apertures by means of notched rollers, the apertures being adjustable simultaneously or separately as desired. Drill cups are superseded, and very few cog-wheels are required. Mr. Brenton also showed a broadcast corn, seed, and manure machine on the same principle, and a turnip, mangel, and manure drill, to which a corn box can be fitted, so that manure may be sown broadcast when the corn is drilled. An ingenious method of fastening galvanized roofing for corn and hay stacks was also to be seen on

this stand. John Crowley & Co., of Sheffield, showed several improvements in their famous chaff-cutters, including Edwards' patent safety arrangement, which we have on a previous occasion referred to as very valuable. The chaff-cutters were to be seen at work in the machinery-in-motion department. Woods, Cocksedge, & Co. had some improved mills, chaff-cutters, and root-cutters; and H. S. Crump, of Gloucester, showed some novelties in sheep and cattle troughs. On Nicholson & Son's (Newark) stand were an improved grist mill, hay rakers, and horse rake.

Picksley, Sims, and Co., of Leigh, showed the new reaper which we spoke highly of in our report of the Oxford Show, where it made very good work in the trial-field; an improved double-action pulper and slicer; and a combined reaper and mower, fitted with new arrangement for back self-delivery, which will save the labour and expense of manual delivery—a very useful improvement.

Selling cattle, sheep, and pigs by live weight, as recently advocated in these columns, may be managed by getting one of Bartlett and Son's (Welsh Back, Bristol) cattle weighing machines, with enclosure especially adapted for live stock. A new sheep-clipping machine, which appeared to us to be the best we have yet seen, was shown by W. Clarke, of 232, Oxford-street, London.

Ruston, Proctor, and Co., of Lincoln, showed a new self-feeding apparatus for thrashing machines.

Marshall, Son, and Co., of Gainsborough, showed engines for agricultural work, fitted with steam-jacketed cylinders, patent automatic expansion gear, feedwater heater, &c.: a traction engine, with two speeds, and fitted with steel gear; and thrashing machine with recent improvements. W. G. Bagnall, of Stafford, exhibited a new locomotive engine, suitable for contractors and colliery proprietors, and some horizontal engines, with vertical boilers for various purposes. Seekings and Ellery, of Gloucester, and Shanks and Son, of London, also showed improved engines. Bradley and Craven's (Wakefield) new brick-making machine attracted a great deal of attention; as did also Helliier and Co.'s (Bristol) tile-making machine. Hind and Lund, of Preston, had a new mill for granulating middlings, and a feeder and mixer made specially for feeding fine flour.

Charles Burrell and Sons, of Thetford, have their S-horse power traction engine for steam cultivation fitted with compensating gear and Burrell's patent winding drum on the hind axle. Their 6-horse power agricultural locomotive engine is fitted with two speeds, and with Burrell's patent winding drum and compensating gear combined, thus enabling the engine to be used for a variety of purposes, such as loading timber, or hauling a thrashing machine out of any place too soft to bear the weight of the engine.

The Dunston Engine Works Co., of Gateshead-on-Tyne, worked their new patent stone breaker and their new bone mill, both of which did their work in a very efficient manner. The latter machine is used for crushing grain, oilcake, locust beans, chalk, rock salt, and other commodities, as well as bones. The Machinery and Hardware Exhibition Agency, of London, exhibited an improved $\frac{1}{2}$ -horse power steam engine, driven by the "Alpha" patent portable gas-making apparatus; a newly-designed smith's hearth; a patent portable farm forge; and a Bessemer steel anvil. Improved crushing mills were shown by G. E. Sherwin, of Birmingham, and Nelson Fedder, of Cardiff, the latter being for sugarcane.

Frederick Savage, of King's Lynn, showed a 7-steel-tine self-lifting and turning cultivator, the action of which he thus describes in his circular:—"I employ means to lift the cultivator by the forward rope before or

at the headland, thus saving the extra strain upon the rope at the time of moving the travelling anchor, while by the same means the tines can be lifted out of the ground in any part of the field, so as to clear themselves when they get choked, without stopping the engine; to accomplish this I place a revolving shaft across the frame of the implement just behind the two hind wheels, which are generally run on crank axles. On the cross shaft I fix two cross arms just long enough when pressed on the ground to lift the tines clear out of the work; the arms can be regulated to suit any kind of land. Turning around the shaft is a lever arm; the lever carries a pawl, which works with a ratchet wheel on the cross shaft. When the lever is moved forward the shaft revolves, and the arms are raised up off the ground into a position from which they can readily be thrown forward over the top of the axis and allowed to drop on to the ground whenever tines are required to be lifted." For this cultivator Mr. Savage received a medal at the recent meeting of the Norfolk Society.

A model of Darby's Pedestrian Broadside Digging Machine was shown by W. and S. Eddington & Co., of Chelmsford. This very ingenious steam-cultivating implement was brought before the public for the first time at the last Smithfield show, where it attracted very general attention. Its mode of working has been previously described in these columns as being quite on a new principle, the engine and digger being combined, and travelling over the land together with a peculiar motion, similar to walking, which has given the name "pedestrian" to the implement. Messrs. Eddington also had on their stand several other novelties in the form of a special contractor's portable steam engine; a mill for washing clay, chalk, &c.; an elevator for raising slurry from the wash-mill, or any other fluid; an iron pug mill; and a portable mortar mill, mounted on wheels for travelling. William Foster & Co., of Lincoln, exhibited an 8 horse-power and 6 horse power portable steam engine, and two thrashing machines, fitted with latest improvements. Davey, Paxman & Co., of Colchester, showed their steam corn drier, and an assortment of their vertical, horizontal, and portable engines, with recent improvements. Some capillary milk refrigerators, entered for trial, were shown by Lawrence & Co., of London. Dell & Son, of London, had a good show of modern milling appliances, including a dustless wheat separator, a cockle extractor, a silk flour dressing machine, an "Economic" middlings purifier, a "Duplex" grain sorter, an "Economic" smutter and separator, flour mixer, wheat damper, &c. Charles Hopkinson, of Retford, and Corcoran, Witt & Co., of London, had also some improved grinding mills, and a variety of millers' requisites, with latest improvements, as had also J. H. Carter, of London, and James Walworth, of Bradford.

P. Van Gelder, of the International Agency for Mill Machinery, Liverpool, showed an improved cockle and seed separator, and an oat and barley separator, which is a very ingenious invention. The working of the latter machine is as follows:—"The inside of the cylinder is provided with semi-spherical holes or cavities in which the round seeds lodge, and are raised above the catch-board by the slow revolving of the cylinder. The grain, owing to its oblong shape, remains in the cylinder and moves towards its end, where it is discharged separately. The round seeds are propelled by means of a worm running on the top of the catch-board. The separating of oats and long barley from wheat is on the same principle, with this difference, that now the wheat lodges in the cavities, and the oat, owing to its larger size, drops down, and is discharged through the apertures made for this purpose. The dimensions of cylinder as shown are 5 feet 7 inches in length, by 17 inches diameter. Capa-

city 18 bushels per hour: speed, 13 revolutions per minute. Some millstone dressers, and other millers' instruments, were also on this stand. Wilkins and Son, of Colne, exhibited several improvements in dairy appliances, entered for trial, as did also H. E. Mines, of Bristol. Tuxford and Sons, of Boston, make a speciality of centrifugal pumps for drainage and irrigation, which are fitted with valves and strainers. They showed also improved engines and thrashing machines. New pattern metallic grinding mills for steam and hand power, a new potato-raising plough, root pulper and cleaner, and other implements, were to be seen on the stand of Samuel Corbett and Son, of Wellington.

J. J. Bartlett's (Wimborne) stacking machine is well known. It can be driven by a thrashing machine or by pony gear, and will deliver to the height of 28ft. One man can fold it up in a few minutes, so that it will enter a shed only 4ft. high. Mr. Bartlett showed also an improved pony gear for driving the stacker, a set of whippletrees for three horses abreast, &c.

Richard Garrett and Sons, of Saxmudham, showed their agricultural, self moving, and portable engines, with improved fire-box; thrashing machines, fitted with patent self-acting drum guard; drills, horse-hoes, manure distributors, dressing machines, &c.

SEEDS, MANURES, &c.

In noticing agricultural improvements it would be an ill compliment to pass by the stands of our leading seedsmen, who are constantly improving their existing stocks, and introducing novelties for field and garden use. Wise in their generation, they by no means hide their light under a bushel, and well it is for the growers of roots, grasses, and other crops that their many excellent productions are placed prominently before all visitors to shows and all readers of newspapers, because their careful selections have undoubtedly proved of very great advantage to the country. Immediately inside the entrance to the showyard was to be seen the great stand of Sutton and Sons, of Reading, with its frontage of 130 feet, upon which was displayed their collection of upwards of 250 dried specimens of natural grasses, including the most suitable varieties for permanent pasture, lawns, and ornamental purposes generally, some of which were used at the International Exhibitions of Vienna and Paris; specimen models of Sutton's Champion swede, and other varieties of their roots, cabbages, potatoes, &c.; roots of their various well-known varieties, such as the Golden Tankard, Berkshire Prize, and Mammoth mangels, in an excellent state of preservation; three hundred different sorts of Sutton's farm, vegetable, and flower seeds; one thousand different kinds of vegetable, flower, farm, and grass seeds in glass cases, labelled with their popular and botanical names; a collection of upwards of fifty varieties of potatoes, including Sutton's Magnum Bonum, a kidney variety, which is very highly spoken of; and a display of handsome silver cups, which with other valuable prizes amounting to upwards of £500, are presented by Messrs. Sutton this year for the best field crops and pulled specimens grown from their seeds.

Close by was another great stand of the same character as the one just described—that of Webb and Sons, of Wordsley, Stourbridge. Here were to be seen samples of Webb's seeds for the farm and garden, shown in small bags, over 1,000 being labelled with the names of the different varieties they contain; an extensive collection of peas in pod, selected from upwards of 120 varieties now growing at Messrs. Webb's Seed Farms at Kinver; over 500 beautiful specimens of dried natural and cultivated grasses, suited for the geological formation of the various soils, for permanent pastures, parks, lawns, croquet and cricket grounds, &c.; growths of clovers and grasses exhibited in pots; a fine display of field roots (showing

their excellent keeping properties) and specimens as growing for seed of swedes, turnips, and mangels, including Webb's Imperial swede and well-known sorts of turnips and mangels; admirable specimens of their prize medal cereals; and a fine collection of potatoes, of which we understand Messrs. Webb have upwards of 500 varieties now in cultivation in their trial fields—a very useful experiment, the results of which we hope will be carefully and exactly recorded for the guidance of potato-growers. The cups, &c., nearly £500 in value, to be awarded as prizes at the next Wordsley Root Show, were also displayed, together with numerous gold and silver medals awarded to home and foreign growers of the seeds of the firm in competition at various shows.

H. Wheeler and Son, of Gloucester, also had a tasteful stand, on which we noticed a large collection of grass seeds, farm seeds, and specimens of dried grasses. A very useful feature of Messrs. Wheeler's exhibition was their collection of grasses which are to be avoided in laying down permanent pasture. It is of the utmost importance to know what *not* to grow in pasture, and what to get rid of by means of manuring, feeding, and stimulating the better varieties, and Messrs. Wheeler's specimens are instructive with this end in view. The grasses best suited for each of the principal geological formations are carefully denoted.

The exhibitors of cake, manures, cattle medicines, &c., were numerous, and we really do not know, without testing, what are "improvements" or the reverse in their manufactures, excellent as some of them undoubtedly are. The "Special" corn and luscious cakes of P. C. Matthews, Son, and Co., of Driffield, and the stock-medicines of Day, Son, and Hewitt, of London, are well-known to all farmers. Thomas Farmer and Co., of London, showed a collection of the raw materials used in the manufacture of artificial manures, besides specimens of their manufactured articles: and Morris and Griffin, of Wolverhampton, and Goulding, of Dublin, were amongst the exhibitors. Messrs. Henry Down & Co., of Woburn, Beds., had a stand on which they exhibited sample packets of "Down's Farmers' Friend," the well-known preventive of smut in wheat, which has been improved by being carbolicised, in order to render it a protection to seed-corn from the ravages of rooks and vermin.

There was a vast collection of miscellaneous exhibits in no way specially connected with agriculture, which occupied space that—as the muddle in one part of the machinery-in-motion department showed—could ill be spared. The labours of visitors and critics will be greatly lightened when the Royal Agricultural Society's Show ceases to be also a great bazaar of miscellaneous articles of commerce.

QUEENSLAND STOCK STATISTICS.—The report of the Chief Inspector of Stock (says *The Week*) just presented to both Houses of Parliament is not a cheering one. From it we learn that there was a decrease in 1877 in the number of sheep in the colony of 710,715. Out of the thirteen pastoral districts mentioned in the report, six—Bourke, Gregory North, Gregory South, Maranoa, Mitchell, and Warrego—show a total increase of 470,574. The largest increase—249,829—was in the Mitchell district. The total decrease in the seven districts of Burnett, Darling Downs, Kennedy, Leichardt, Moreton, Port Curtis, and Wide Bay was 1,181,289. The Darling Downs showed the greatest decrease—448,552; Leichardt coming next with 407,453; the Kennedy next with 155,794; then the Burnett with 112,608; the Moreton with 36,321; Port Curtis with 13,441; Wide Bay showing the least decrease, 7,115. These losses are to be almost entirely attributed to the drought.

A BAD EXCHANGE.—The best fruit America ever sent Ireland—the Potato. The worst Ireland ever sent America—the Orange.—*Punch*.

AGRICULTURAL SOCIETIES.

DERBYSHIRE.

TRIAL OF MOWING AND HAYMAKING MACHINES.

The Derbyshire Agricultural Society inaugurated a new field of operations recently by holding an exhibition of mowing, haymaking, and raking machinery at Chaddesden. The chief interest was centred in the trials of mowing machines, for which there were a large number of entries, very representative, and including some of the leading makers in England. The competitors in this department were as follows:—Mr. A. C. Bamlett (Thirsk), two machines; Messrs. A. Handyside and Co. (Derby and London), two machines of Phillips's patent; Messrs. Harrison and McGregor (Leigh, Manchester), two machines; Mr. Kearsley (Ripon), two machines; Messrs. Samuelson (Banbury), two machines; Messrs. Lowcock and Barr (Shrewsbury), one machine; and Messrs. Powell Brothers and Whitaker (Wrexham), one machine. The ultimate conclusion of the judges, who were Mr. John Wheatley (Fulford Terrace, York), Mr. P. Cauldwell (Pouncefort Court, Ledbury), and Mr. Arthur Tomlinson (Stenson), was as follows.—First prize, gold medal, Messrs. Harrison and McGregor's No. 6 machine; second prize, silver medal, Mr. McGregor's No. 11 machine. The special merits of the winning machines were their easiness of draught, noiselessness, and splendid cut. Messrs. Powell Brothers and Whitaker's machine was highly commended and Mr. Samuelson's was commended. A special silver medal was awarded to Mr. Fell's excellent one-horse mower.

The show of haymaking machines was very limited, but this was probably owing to the fact that there is little scope for mechanical genius in that direction compared to the construction and improvement of mowers. Messrs. H. A. Bamford and Son, of Uttoxeter, was represented by an "Albion" double-action haymaker; Messrs. Jeffery and Blackstone, Stamford, by a haymaker with seat in front; and Messrs. Howard, of Bedford, by a machine of their construction. The only horse rake exhibited was the manufacture of the "Gem" Horse Rake Implement Company, Dunstable. The awards were given as under: For haymakers, gold medal, Mr. Bamford; second prize, withheld. No prizes for rakes were awarded.

DONCASTER.

This three days' show was recently opened under the most favourable auspices, the weather being magnificent, and the show itself (according to *The Leeds Mercury*) was the best yet held by the Doncaster Society. As was the case last year, the exhibition was held on the Race Common, a very considerable area being enclosed for the purpose. The entries were considerably in excess of those of former years, as the following contrast with the show of last year, which was itself in advance of previous years, will show:

	1877.	1878.		1877.	1878.
Cattle.....	64	88	Dogs.....	214	222
Sheep.....	70	72	Implements.....	56	56
Horses.....	279	289	Shoeing.....	10	—
Pigs.....	34	57	Butter and eggs	42	35
Wool.....	6	5		—	—
Poultry.....	173	214	Total...	982	1,024
Pigeons.....	34	42			

The horses were, as usual, the great feature of the show, and the hunters were a magnificent lot, such as one only meets with occasionally in a favoured locality at the annual meeting of the great county show. Several of the Islington horses put in an appearance, and, as last year, met better animals. The five-year-old hunter was a particularly fine

class, and the judging of this, and indeed of the four-year-olds, was scrutinised most keenly. The driving classes were also most interesting; indeed, the most fashionable blood of the country was well represented. So it is with the Shorthorns, which are a splendid collection, in which the names of our most famous breeders figure very prominently. The entries of sheep are about the same as last year, and Leicesters and Lincoln show a healthy rivalry amongst the more noted competitors. Pigs are a larger class than last year, and amongst them are many of the leading prize-takers of recent shows. A finer display of poultry has never been witnessed at Doncaster Show, the entries being considerably in excess of those of any former year, and the judges had their work set in assigning the relative merits of many of the leading "exhibits." Prizes are not offered at this show for implements, but there was a large display by most of the leading makers nevertheless, and this proved a very interesting feature of the show, more especially the machinery in motion. There was, however, nothing particularly new, save, perhaps, Wood's self-binding harvester, invented by the exhibitor, Mr. W. A. Wood, of London. The attendance was about the average for the opening day, and included most of the leading county families in the neighbourhood, there being a gay and distinguished assembly on the stand during the afternoon, including the President of the Society (Lord Auckland), the High-Sheriff of the County (Mr. Wm. Aldam), and other Yorkshire notabilities.

PRIZE LIST.

CATTLE.

SHORTHORNS.

Bull, any age above three years.—First prize, W. Handley, Milnthorpe; second, T. Atkinson, Unsworth.

Bull, above two and not exceeding three years old.—First prize, W. Tennant, Selby; second, Stand Stud Company, Manchester.

Bull, above one and not exceeding two years old.—First prize, T. Willis, jun., Bedale; second, G. M. Hutton, Gainsborough.

Bull calf, above five months and not exceeding twelve months old.—First prize, J. Webb, Uceby; second, A. H. Browne, Alwick.

Cow, of any age above three years old, in calf or milk.—First prize, H. Fawcett, Oley; second, T. Atkinson.

Heifer, not exceeding three years old, in calf or milk.—First prize, Stand Stud Company; second, G. Ashby-Ashby, Rugby.

Heifer, not exceeding two years old.—First prize, Marquis of Exeter, Stamford; second, R. Botterill, Brough.

Heifer calf, above five and not exceeding twelve months old.—First prize, G. M. Hutton, Gainsborough; second, T. Atkinson.

ALDERNEY, JERSEY, OR GUERNSEY.

Cow or heifer, in calf or milk.—First prize, J. E. Groom, Hooton Roberts; second, R. J. Streatfield, Bawtry.

Cow for dairy purposes.—First and second prizes, Mrs. Brammer, Doncaster; third, Parkinson Brothers, Doncaster.

SHEEP.

LEICESTERS.

Shearling ram.—First prize, J. Green and Son, Salsden; second, Executors of F. Jordan, Driffield.

Ram of any age.—First prize, T. H. Hutchinson, Catterick; second, H. Burton, Malton.

Pen of five shearling gimmers.—First prize, Executors of F. Jordan; second, H. Burton.

LINCOLNS.

Shearling ram.—First prize, H. Smith, Bingham; second, Messrs. Dudding, Wragby.

Ram of any age.—First prize, H. Smith; second, R. Wright, Lincoln.

Pen of five shearling gimmers.—First prize, J. Byron, Sleaford; second, R. Wright.

SHORTWOOLS.

Shearling ram.—First prize, J. F. Groom, Rotherham; second, W. Baker, Atherstone.

Pen of five shearing gimmers.—First and second prizes, W. Baker, Moor Barns, Atherstone.

SPECIAL PRIZES.

Pen of five longwool shearing gimmers, bred by and the property of a farmer residing within 15 miles of Doncaster.—First and second prizes, J. Winder, Newton, Doncaster; third, H. Cross, Armathorpe, Doncaster.

Pen of five ewes, the property of a farmer residing within 20 miles of Doncaster, that shall have suckled lambs to the time of the Show.—First prize, J. Winder; second, W. B. Tate, Rossington, Doncast. r.

Pen of lambs, bred and reared by a member of the Society.—First prize, W. Roe, North Scarle Field, Newark; second W. Baker.

HORSES.

Stallion for getting agricultural horses.—First prize, J. F. Crowther, Knowle Grove, Miffield; second, W. Johnson, Hatfield, Doncaster.

Entire agricultural colt, foaled in 1876.—First prize, W. and T. Buckle, Eryhome Farm, Darlington; second, W. Johnson.

Stallion for getting roadsters.—First prize, Stand Stud Company; second, N. S. Brough, Lodesborough Wold, Market Weighton.

Brood mare, for breeding agricultural horses, with foal sucking.—First prize, R. C. Workman, Almholme, Doncaster; second, T. Tune, Crowle, Doncaster.

Brood mare, for breeding roadsters, with foal sucking.—First prize, R. Martin, Scoreby, Flaxton, York; second, R. Gledhill, Park Road, Bradford.

Brood mare, for breeding hunters, with foal sucking.—First prize, G. F. Statter, Park House, Whitefield, Manchester; second, S. Webster, Race Common, Doncaster.

Three-year-old agricultural gelding or filly.—First prize, J. Snodin, Stonesby, Melton Mowbray; second, Cafferata and Co., Newark-on-Trent.

Two-year-old agricultural gelding or filly.—First prize, Stand Stud Company; second, G. Crooks, Danby Wiske, Northallerton.

Yearling agricultural colt.—First prize, J. Jackson, Great Ayton, Northallerton; second, J. Ward, Wadsley Bridge, Sheffield.

Yearling agricultural filly.—First prize, J. Grimes, Newton-on-Trent; second, T. C. Peck, Hayton, Retford.

Pair of draught horses, used exclusively for agricultural purposes.—First prize, Cafferata and Co.; second, T. Tune.

Pair of draught horses, used exclusively for agricultural purposes, having been not less than twelve months the property of the exhibitor, residing within 20 miles of Doncaster.—First prize, R. C. Workman; second, T. Tune.

Gelding or mare, for agricultural purposes.—First prize, H. Pullene, Baxter Hall, Selby; second, T. Tune.

Dray horse or mare, for town work.—First prize, T. Tune; second, H. Pullene.

Yearling roadster, gelding or filly.—First prize, T. E. Morrell, Mellaby Hill, Rotherham; second, W. B. Houlden, Sprothro', Doncaster.

Two years old roadster gelding or filly.—First prize, W. Rickell, Warter, Pocklington; second, J. P. Crompton, Thornholm, Burton Agnes, Hull.

Three years old coaching gelding or filly.—First and second prizes, J. Kirby, Burton Fields, Stamford Bridge, York.

Gelding or mare, to be shown driven in single harness, over 15 hands 2 inches.—First prize, Stand Stud Company; second, E. H. Marfleet, Bassingham, Newark.

Gelding or mare, to be shown driven in single harness, under 15 hands 2 inches.—First prize, Stand Stud Company; second, R. Wray, Mersingham, Kirton Lindsey.

Pony, any age or sex, under 14 hands, to be shown driven in single harness.—First prize, J. Garbutt, jun., Hayfields, Doncaster; second, W. Foster, Pontefract.

Brougham horse or mare, driven in single harness.—First prize, E. H. Marfleet; second, L. Uttley, Norton, Doncaster.

Four years old hunting gelding or filly, equal to carry 15 stone.—First prize, F. P. Newton, Norton, Malton; second, R. Nelson, Barton Hill House, York.

Four years old hunting gelding or filly, equal to carry 15 stone.—First prize, A. J. Brown, North Elmsall, Pontefract; second, J. P. Crompton.

Five years old hunting gelding or mare, substance and breeding to be taken into consideration.—First prize, J. Smith Humberton, York; second, C. Legard, Boynton, Bridlington PIGS.

Boar, large breed.—First prize, R. E. Duckering and Sons, Northorpe, Kirton Lindsey; second, J. Graham, York Road, Leeds.

Sow, large breed, in pig or milk.—First prize, R. E. Duckering and Sons; second, A. Crowther, Bridge Street, Bury.

Boar, small breed.—First prize, R. Dickin, Old Road, Heaton Norris, Stockport; second, A. Crowther.

Sow, small breed, in pig or milk.—First prize, A. Crowther; second, T. Parkinson and Sons, Town Mills, Doncaster.

Boar, large breed, not exceeding twelve months old.—First prize, R. E. Duckering and Sons; second, J. Garbutt, jun.

Sow, large breed, not exceeding twelve months old.—First prize, J. Garbutt, jun.; second, S. Shakeshaft, Bilby, Doncaster.

Boar, small breed, not exceeding twelve months old.—First prize, R. E. Duckering and Sons; second, T. Parkinson and Sons.

Sow, small breed, not exceeding twelve months old.—First prize, R. E. Duckering and Sons; second, R. Addiaall, Fisher Gate, Doncaster.

Pen of three store pigs, of any breed, the same litter.—First prize, T. F. F. Borwell, Camp Field, Leeds; second, A. Crowther.

Pen of three breeding pigs, of the same litter, not exceeding six months old.—First prize, W. Simister, Middle Hill Gate, Stockport; second, R. E. Duckering and Sons.

Cottager's pig, not exceeding twelve months old.—First prize, J. Tasker, Union Street, Doncaster; second, A. Large, Fitzwilliam Street, Doncaster.

Boar of any breed, not qualified to compete in any other class.—First prize, J. Graham; second, J. P. Miller, Fenst nton, St. Ives, Hunts.

Sow of any breed, not qualified to compete in any other class.—First and second prizes, B. St. John Ackers, Prinknash Park, Painswick, Gloucestershire.

WOOL.

Five fleeces of wool, grown by the exhibitor.—First and second prizes, C. R. Workman.

HEREFORDSHIRE.

THE MEETING AT KINGTON.

The seventy-ninth annual show of the Herefordshire Agricultural Society was recently held at Kington. *The Hereford Journal* describes it as the most successful show that the County Society has held, and adds: "The Herefordshire Society has passed through many vicissitudes, and when one looks at its present prosperous condition and increased popularity one cannot but admit that great credit is due to the Committee. Some few years ago the exhibition only lasted two days, and was held in the meadow adjoining the Cattle Market. It was felt that to only have the show for a single day marred its success, and Mr. T. Duckham (the Secretary), Lord Bateman, and other gentlemen interested in the Society, advocated its being held for three days. Some dissented from this proposition, and said that it would not be a success; others even went so far as to say that the extension would be the cause of the Society collapsing altogether. But the extension was carried, and as regards the number of exhibits of all kinds it was a great success. Financially it was not, but that was solely due to the unpropitious state of the elements, from whose vagaries the Society has nearly always been a pecuniary sufferer."

Of the live stock *The Hereford Times* says:—"Numerically the show was the stoutest in this department the Society has ever seen, the total entries being 333 as against 281 last year, an exhibition that was then justly regarded as one of the most successful we have ever had the pleasure of chronicleing. This year the entries of lots—not individual specimens—are 93; of Shorthorns 6; of Channel Islands and other breeds 4, and of dairy cattle

1. Thus we see that notwithstanding the liberal inducements offered to Shorthorn breeders they fight shy of coming into competition with the famous and handsome indigenous breed of the county, while it shows that the minds of the alarmists who predicted the swamping of the white faces from the relaxation of the Society's rules (which formerly limited the exhibits to our native cattle) were unnecessarily disturbed. Then the sheep classes were equally well represented, there being 56 pens of Shropshire Downs, 19 of the pure Radnor Forest Breed, and of Cotswolds and cross-breeds 9. The presence of the Radnor Forest specimens—the finest mutton in the world—was a feature of special interest, because it is the first time they have ever been presented at a Herefordshire Agricultural Show, and was the direct result of its having been given a migratory character; for we now see—to use a figure of speech by way of illustration—if we cannot induce Dunsinane to come to Birnam Wood, Birnam Wood must go to Dunsinane." The Herefords were, of course, the chief feature of the show, and of them *The Journal* enthusiastically remarks: "We cannot and need not say more for this breed than that they were all beautiful and good." Such a summing up renders particular criticism unnecessary; but people who do not live in Herefordshire will be apt to take it *enim gratias salis*. There were, as above stated, 93 entries, and if all were beautiful and good the Herefords are indeed getting on in the world. We can only regret that we were not there to see them, but when four important shows are held in one week they cannot conveniently be all visited. There was only one entry in the class for dairy cows, a somewhat significant fact. The show of horses was the largest ever got together by the Society. Agricultural horses, although not very numerous, were, according to the local critics, of extraordinary merit.

PRIZE LIST.

JUDGES.—HEREFORDS: W. Groves, Brampton, Salop; J. Walker, Knightswick, Worcester. SHORTHORNS AND CHANNEL ISLANDS: J. Thompson, Badminton, Gloucestershire; W. Nevett, Yawton Villa, Shrewsbury. SHEEP—SHROPSHIRE AND RADNOR FOREST: H. Masfen, Penriferd, Wolverhampton; H. Powell, Selly Hall, Knighton. COTSWOLD AND OTHER BREEDS: I. C. Theyer, Walford Court, Ross. W. H. Brown, Ufcott, Swindon, Wilts. HORSES—AGRICULTURAL: R. Bridgwater, Great Porthamel, Brecon; J. Rogers, Altyr-y-nnes, Abergavenny. HUNTERS AND ROADSTERS: Col. Luttrell, Badgworth Court, Weston-Super-Mare; C. E. Morrell, Claines, Worcestershire. PIGS: I. C. Theyer, Walford Court, Ross; W. H. Brown, Ufcott, Swindon, Wilts.

CATTLE.

HEREFORDS.

Bull, cow, and their offspring.—First prize, £10, S. Robinson, Lynhales, Kington (Regulus); second, £7, W. Taylor, Showle Court, Ledbury (Thoughtful); third, £3, P. Turner, The Leen, Pembridge (Corsair).

Bull, not exceeding one-year-old.—First prize, £10, J. H. Arkwright, Hampton Court, Leominster (Conjurer); second, £7, T. J. Carwardine, Leominster (Lord Oxford); third, £5, J. Price, Court House, Pembridge (Hercules).

Bull, not exceeding two-years-old on the 1st July, 1878.—First prize, £10, J. Price (Arthur Turis); second, £5, J. L. Hewer, Marden, Hereford (High Sheriff).

Bull, exceeding two-years-old on the 1st July, 1878.—First prize, £10, A. Rogers, The Rodd, Kington (Grateful); second, £5, J. Lewis, Lower Hill, Hereford (Telescope).

Heifer, not exceeding one-year-old.—First prize, £5, J. H. Arkwright (Gaylass Hb); second, £3, W. Taylor (Empress).

Heifer, not exceeding two-years-old on the 1st July.—First prize, £5, J. Morris, Lullham, Madley, Hereford (Empress); second, £3, Mrs. S. Edwards, Wintercott, Leominster (Spangle 3rd).

Heifer in calf, or in milk, not exceeding three-years old on the 1st July, 1878.—First prize, £5, Mrs. S. Edwards (Leonora); second, £3, Mrs. S. Edwards (Beatrice).

Cow in calf or in milk. First prize, £5, E. J. Lewis Breinton, Hereford (Little Beauty); second, £3, R. Bridgford, Kinnersley, Hereford (Belle).

Steer, not exceeding one year old on the 1st July, 1878.—First prize £5, Mrs. S. Edwards; second, £3, Mr. F. Platt (Pertly).

Steer, not exceeding two years old on the 1st July, 1878.—First prize £5, Mr. J. Arkwright; second, £3, Mr. J. Morris.

Steer, exceeding two years old on the 1st July, 1878.—First prize £5, Mr. F. Platt (Plato); second, £3, Mr. W. Taylor.

Four breeding cows or heifers exceeding three years old, in calf or milk.—No entries.

Bull, calved on or after the 1st March, 1877.—First prize £7, Mr. T. Fenn, Stonebrook House, Ludlow (Rinaldo); second, £3, Mr. R. Bridgford, Kinnersley Hereford (Treasure Trove 2nd).

Pair of heifers calved on or after the 1st March, 1877.—First prize £7, Mr. J. Price (Lady); second, £3, Mr. T. J. Carwardine (Plum).

Pair of heifers, calved on or after the 1st March, 1877.—First prize, £5, A. Rogers, The Rodd, Kington (Fancy); second, £3, S. Robinson, Lynhales, Kington (Mermaid 2nd).

Pair of heifers, calved on or after the 1st March, 1876.—Prize, £5, J. Welson, Bestbrook, Radnor (Lady Alice).

Pair of cows or heifers, exceeding three years old, with calves, or certified to calve within three months of the 25th June, 1878.—First prize, £5, J. Turner, Eardisley, Hereford (Girl of the Period); second, £3, S. Robinson, Lynhales, Kington (Water Lily 2nd).

Pairs of steers, calved on or after the 1st March, 1877.—Prize, £5, T. Lewis, The Woodhouse, Shobdon.

Pair of steers, calved on or after the 1st March 1876, bred by the exhibitor, residing in Radnorshire, or within the area of the Kington Poor Law Union, and who has never won a prize for cattle at either the Bath and West of England or Royal Agricultural Show.—First prize, £5 (the gift of Mr. G. Pardington), R. Bebb, Barton, Kington; second, £3, J. Welson, Bestbrook, Radnor.

SHORTHORNS.

Cow and her offspring, the offspring not exceeding one year old.—Prize, £10, R. Stratton (Prairie Flower).

Bull not exceeding one year old.—Prize, £10, R. Stratton, The Duffryn, Newport, Mon. (Autumns).

Bull exceeding one year old.—Prize, £10, R. Stratton (Hampton).

Heifer not exceeding one year old.—Prize £5, J. Criddle, Great Malvern (Sweet Briar).

CHANNEL ISLANDS.

Bull not exceeding two years old.—Prize £3.—No entry.

Cow or heifer, exceeding two years old.—First prize, £5, J. Meredith and Co., Kington (Blossom); second, £3, J. Meredith and Co. (Daisy).

DAIRY COWS.

Pair of cows any breed in milk, milking properties to be considered.—Prize, £5, A. Sherratt, Ocle Pitchard, Hereford (Beauty).

SHEEP.

SHROPSHIRE.

Shearling ram.—First prize, £5, T. Fenn, Stonebrook House, Ludlow; second, £3, Mrs. H. Smith, Sutton Maddock Shifnal, Salop.

Ram of any age.—First prize, £5, T. Fenn, Stonebrook House, Ludlow; second, £3, F. Bach, Onbury, Salop.

Five breeding ewes.—First prize, £5, T. Fenn; second, £5, J. E. Farmer, Felton, Ludlow.

Five shearling ewes.—First prize, £5, Mrs. H. Smith, Sutton Maddock, Shifnal, Salop; second, £3, J. E. Farmer.

COTSWOLDS.

Shearling ram.—Second prize, £3, W. Wheeler, Long Shipston-on-Stour. The second prize only was awarded in this class.

Ram of any other age.—Prize, £5, W. Wheeler.

Pen of five ewes that have suckled their lambs to 1st July, 1878.—First prize, £5, Mrs. E. Yeomans, Stretton Court, Hereford; second, £3, Mrs. E. Yeomans.

Pen of five shearling ewes.—Prize, £5, Mrs. E. Yeomans.

Any other breed. Shearling ram.—First prize, £5, H. J. Bailey, Rosedale, Tenbury; second, £3, H. J. Bailey.

Ram of any other age.—Prize, £5, H. J. Bailey.
Pen of five shearling ewes.—First prize, £5; second, £3. No entry.

RADNOR FOREST BREED.

Shearling ram.—First prize, £5, J. Welson, Bestbrook, Radnor; second, £3, R. Mynors, Evancoyd, Kington.

Ram of any other age.—First prize, £5, R. B. Mynors, Evancoyd, Kington; second, £3, J. Whittal Owens, Gwernargyll, Penybont.

Pen of five ewes and lambs.—First prize, £5. R. B. Mynors; second, £3, W. Welson.

Pen of five yearling ewes.—First prize, £5, R. B. Mynors, Evancoyd, Kington; second, £3, J. Welson, Bestbrook, Radnor.

Pen of five wethers, two years old and upwards.—First prize, £5, J. Welson; second, £3, J. Bebb, Hergest, Kington.

SHROPSHIRE.

Shearling ram.—First prize, £5 [no award]; second, £3, E. J. Morris, Gwinnaffell, Knighton.

Ram of any age.—First prize, £5, J. Taylor, Elsdon, Kington; second, £3, A. Rogers, The Rold, Kington.

Pen of five ewes and lambs.—First prize, £5, P. Turner, The Leen, Pembridge; second, £3, T. Nott, Letton Court, Brampton Brian.

Pen of five shearling ewes.—First prize, £5, T. Nott, second, £3, S. Robinson, Lynhales, Kington.

Pen of five shearling wethers.—First prize, £5, J. Taylor, Elsdon, Kington; second, £3, S. Robinson.

PIGS.

BLACK BREED.

Boar, exceeding nine months old.—Prize, £3, W. Wheeler, Long Compton.

Sow in or with pigs.—Prize, £3, Major Peploe Peploe, Garnstone, Weobley.

WHITE BREED.

Boar not exceeding nine months old.—Prize, £3, W. Wheeler.

Sow in or with pigs.—Prize, W. Wheeler, Long Compton.

HORSES.

Agricultural stallion.—First prize, £15, H. Woodbridge, Chimney Farm, Bampton; second, £5, S. Davies, Woolashill, Pershore, Worcester (Drayman.)

Thoroughbred stallion.—First prize, £25, R. D. Green-Price, Nantygroes (Siderolite); second, £10, A. Over, Rugby (Thunderer).

Agricultural mare and foal.—First prize, £10, W. Hilles, Lower Court, Coheredge, Worcester (Virgin); second, £5, T. Lewis, Lower House, Kinnerton, Walton, Radnorshire (Stout).

Filly or gelding three years old.—First prize, £7, and Champion, R. Williams, Aberyskin Court, Brecon (Star); second, £3, J. Edwards, Bridge-street, Kington (Norman).

Class 56.—First prize, S. Davis, Pershore; second, — Turner.

Filly or colt, one year.—First prize, £7, J. R. Bach, Rough Acre, Saunton-on-Arrow; second, £3, E. Farr, Pilleth, Knighton, Radnor.

HUNTERS.

Mare and foal, not less than 15 hands.—First prize, £10, Lord Bateman, Shobdon Court, Montgomery; second, £3, J. Vaughan, Downfield Kington (De La Motte).

Mare or gelding up to 14 st.—First prize, £15, J. Hill, Fellhampton, Church Stretton (Gluepot); second, £5, R. Williams, Aberyskin Court, Brecon (Toby).

Mare or gelding up to 12 st.—First prize, £10, H. J. Bailey, Rosedale, Tenbury (Precocity); second, £5, S. Robinson, Lynhales, Kington (Satellite).

Filly or gelding foaled 1874.—First prize, £10, Major Peploe (Publican); second, £5, R. B. Mynors, Evancoyd, Kington (Mignonette).

Filly or gelding, foaled in 1874.—First prize, £10, and Champion, H. J. Bailey (The Witch); second, £5, W. Tudge (Federal).

Colt, foaled in 1876.—First prize, £7, and second, £3, W. H. Bull, Weobley.

Filly, two years old.—First prize, £7, H. J. Bailey (Crow); second, £3, Major Peploe (Princesses).

Colt or filly, one year old.—First prize, £7, Sir R. D. Green-Price, Nantygroes, Knighton; second, £3, H. J. Bailey (Truman).

ROADSTERS.

Mare or gelding, not under 14 hands nor exceeding 15 hands.—First prize, £7, J. H. Arkwright (Osman); second, £5, J. Hill, Fellhampton Court, Church Stretton (Princess).

Cob mare or gelding, not under 13 hands nor exceeding 14 hands.—First prize, £5, G. F. Dallas, Knill Court, Kington (Almeley); second, £3, Ford, Brinsop Court, Hereford.

Pony mare or gelding, under 13 hands.—First prize, £3, J. H. Arkwright (Robin); second, £2, A. Edwards, Leominster.

AGRICULTURAL.

Entire colt, two or three years old.—First prize, £15, W. Collins, Iron Cross, Leominster (Earl Derby); second, £5, D. Price, Llanelien Court, Talgarth (Farmer's Friend).

Filly or gelding, two years old.—First prize, £5, T. Lewis, Lower House, Kinnerton, Walton, Radnor; second, J. Stephens, Womaston, Kington.

Colt or filly, one year old.—First prize, £5, J. J. Powell, Kington; second, £3, H. Hammonds, Ilengoed, Kington.

NAGS.

Filly or gelding, two years.—First prize, £5, T. Lewis, The Woodhouse, Shobdon; second, £3, J. Edwards, Kington.

NORTH-EAST OF IRELAND.

The annual show of this Association was held recently at Belfast. There was an unusually good show of cattle, and a fair show of horses, sheep, and pigs.

LIST OF PRIZES.

JUDGES.—HORSES: R. Flynn, Co. Roscommon; Col. Ellis, Omagh; C. Osborne, Drogheda; A. Allan, Lanark; W. Findlay, Glasgow; T. Kerr, Sanquar. CATTLE.—SHORTHORNS: C. Howard, Bedford; J. Currie, Edinburgh; J. Byrne, Co. Cork. AYSHIRE: A. Allan, Lanark; W. Findlay, Glasgow; T. Kerr, Sanquar. KERRY, DEVON, POLLED, AND SHEEP AND SWINE: M. H. Franks, Queen's Co.; A. Darker, Dublin; R. McWilliam, Stranraer.

HORSES.

STALLIONS.

Thoroughbred stallion, for getting weight-carrying hunters.—First prize, T. Lindsay, Co. Down; second, H. Napier, Ardglass (Poor Pat).

Stallion calculated to get carriage, hack, or hunting horses.—First prize, T. Lindsay (Harkaway); second, D. Andrews, Ballygrainey (Young Pathfinder).

Entire colt, two years old, suitable for general purposes.—First prize, J. Russell, Mountnorris (Young Masanissa); second, J. Duff, Clunagh, Co. Down.

Stallion, three years old or upwards, suitable for agricultural purposes.—First prize and Cup No. 1, J. D. Paul, Dublin (Young Lord Haddo the Third); second, R. Pollock, Glasgow (Young Ivanhoe); third, W. Ralston-Wright, Enniskillen (Cock of the North).

Entire colt, two years old, suitable for agricultural purposes.—First prize, J. Wylie, Wigtownshire (None Such); second, J. Holmes, Islandmagee (Neptune).

BROOD MARES, GELDINGS, AND FILLIES SUITABLE FOR AGRICULTURAL PURPOSES.

Brood mare, with foal at her foot.—First prize, W. Holmes, (Jessy); second, S. Smith, Ballyclare (Nancy); third, J. McLeish (Lily).

Gelding or filly, three years old.—First prize, T. J. Dugan, Newtownards (Scrabo); second, J. Johnston, Lishurn (Albert); third, W. Gault, Doagh (Belle).

Colt, gelding, or filly, one year old.—First prize, J. McLeish (Nannie); second, J. Liken, Coleraine (Sally the Second); third, J. Greer, Templepatrick (Lily).

BROOD MARES, GELDINGS, AND FILLIES SUITABLE FOR GENERAL PURPOSES.

Best brood mare, with foal at her foot.—First prize, W. J. Lilley, Lisburn (Bessy); second, H. Gowan, Belfast (Queen).

Best gelding or filly, four years old.—First prize, W. Gregg, Belfast (Edith); second, W. Boyle, Carrickfergus (What's Wanted).

Gelding or filly, three years old.—First prize, R. White, Killyleagh (Arch); second, J. Bankin, Kilorkcubbin (Osman); third, G. Rowe, Moy (Countess).

Gelding or filly, two years old.—First prize, W. Brees, Killyleagh (Lizzie); second, W. J. Lilley (Nancy Pride of Erin); third, D. and J. Cleland (Eva).

Colt, gelding, or filly, one year old.—First prize, D. Andrews, Ballygrainey (Lady Godiva); second, J. Duff; third, A. D. Lemon, Belfast (Judy).

Pony of any age or breed, under 14 hands high.—First prize, D. Corbett, Belfast (Cushla); second, G. Clotworthy, Belfast (Castlereagh); third, W. Pentland, Belfast (Duchess).

CATTLE.

SHORTHORNS.

Bull, calved before 1st January, 1876.—First prize, F. and W. Smith, Coleraine (Jove); second, T. and J. M'Eldeery, Ballymoney (British Mantalini); third, F. and W. Smith, (Scotch Knight).

Bull, calved in 1876.—First prize, J. Mulholland, Ballywalter (Glancus); second, J. Vance, Lurgan (Chief of Lothian); third, J. Mulholland (Regal).

Bull, calved in 1877.—First prize, R. D. Harriou, Holywood (Prince Humbert); second, Viscount Bagor, Downpatrick (Lord Lorne); third, Lord Clermont, Dundalk (Royal Pat).

Cow in calf or in milk, of any age.—First prize, Lord Clermont (Marchioness); second, B. Dickson, Gilford (Countess of Lothian); third, S. Morrow, Killinichy (Marion).

Heifer, in calf or milk, calved in 1875.—First prize, W. C. S. Hill, Dunmurry (Lady Emily); second, J. A. M. Cope, Arinagh (Baroness of Raby); third, Lord Clermont (Matchless).

Heifer, calved in 1876.—First prize, H. Smith, Mount mellick (Queen of Castlebrack); second, G. Allen, Unicarville (Perfection).

Heifer, calved in 1877.—First prize, H. Smith (Victoria 4th); second, J. Mulholland (Princess Gwynne); third, B. Gibson (Heartsease).

AYRSHIRES.

Bull, calved before 1st January, 1876.—First prize, Mrs. Anne Adele Hope, Castleblaney (Bob).

Bull, calved in 1876.—First and Challenge Cup, Mrs. A. Adele Hope (Prince); second, J. Watson, Derry (Sandy); third, G. Raphael, Ballymea (Auldhouse).

Bull, calved in 1877.—First prize, Mrs. A. Adele Hope (Hero); second, J. Liken, Coleraine (Sandy); third, Lord Clermont.

Cow, in milk or in calf, of any age.—First prize, J. Watson, Londonderry (Beauty); second, D. and T. Patton, Glasslough (Maggie); third, J. Watson, Londonderry (Maggie).

Heifer, in calf or milk, calved in 1875.—First prize, D. and T. Patton (Violet); second, Mrs. Anne Adele Hope (Daisy); third, J. Liken (Maude).

Heifer, calved in 1876.—First prize, W. Buchanan, Larne and Glasgow (Lexy); second, D. and T. Patton (Primrose); third, Mrs. A. Adele Hope (Violet).

Heifer, calved in 1877.—First prize, Mrs. A. Adele Hope (Beauty); second, J. Watson.

KERRIES.

Bull, of any age.—First prize, J. Chaine, Belfast (Jack); second, S. T. Mercier, County Down (Young Busaco).

Cow, in calf or in milk, of any age.—First prize, J. Chaine (Mulberry); second, J. Sands, Magherafelt (Mary).

DEVON, POLLED, OR ANY DISTINCT BREED NOT INCLUDED IN THE FOREGOING CLASSES.

Bull of any age.—First prize, Mrs. S. Barbour, Belfast second, T. Mercier (The Emperor).

Cow, in calf or in milk, of any age.—First prize, Mrs. S. Barbour; second, D. Corbett, Belfast (Jeanette); third, Mrs. S. Barbour.

SHEEP.

LONG-WOOLLED OF ANY PURE BREED.

Ram of any age.—First prize, G. N. Callwell, Dunmurry; second, R. P. Maxwell, Downpatrick.

Two-shear ram.—First prize, E. J. Bristow, Dunmurry; second, G. N. Callwell.

Shearling ram.—First prize, T. Montgomery, Dunmurry; second, G. N. Callwell.

Pen of three ewes having had lambs in 1878.—First prize, G. N. Callwell; second, T. Montgomery.

Pen of three shearing ewes.—First prize, T. Montgomery; second, T. Montgomery.

Pen of three ewe lambs.—First prize, T. Montgomery; second, Viscount Bangor.

SHORT-WOOLLED OF ANY PURE BREED.

Ram of any age.—First prize, R. P. Maxwell; second, J. Chaine, Muckamore.

Two-shear ram.—First prize, J. Chaine; second, Messrs. Boyd, Bloomfield, Belfast.

Pen of three ewes, having had lambs in 1878.—First prize, and cup, T. Montgomery (Miss Rose); second, G. Allen, Comber.

Pen of three shearing ewes.—First prize, J. Bennett, Poyntzpass.

Pen of three ewe lambs.—First prize, Messrs. Boyd, Bloomfield.

PIGS.

COLOURED.

Boar, twelve months old.—First and second prizes, Lord Clermont, Newry.

Boar, over six and not exceeding twelve months old.—First and second prizes, Lord Clermont.

Breeding sow, in pig, or having had a litter within six months, over eighteen months old.—First prize, Lord Clermont; second, D. Glenn, Londonderry (Pride of Erin).

Breeding sow, not exceeding eighteen months old.—First and second prizes, Lord Clermont; third, D. Glenn (Sure to Win).

Pen of three breeding pigs, of same litter, under ten months old.—First prize, Lord Clermont; second, D. Glenn.

WHITE.

Boar over twelve months old.—First prize, A. Traill, Co. Antrim (Jupiter); and Ulster Cup, No. 4; second, T. H. Graham, Londonderry (Joey).

Boar, over six and not exceeding twelve months old.—First prize, A. Trail (Prince Charley); second, H. Graham (Charley).

Breeding sow, in pig, or having had a litter within six months, over eighteen months old.—First prize, A. Traill (Venus); and Ulster Cup, No. 7; second, D. Glenn (Duchess of York); third, T. Lindsay, Killyleagh.

Breeding sow, not exceeding eighteen months old.—First prize, W. G. Mulligan, Belfast (Popsy); second, A. Traill, Antrim (Auntie).

Pen of three breeding pigs of same litter, under ten months old.—First prize, D. Glenn; second, T. Lindsay, Killyleagh, of Yorkshire-breeding pigs; third, T. Lindsay.

FARMERS' CLASSES.

CATTLE—SHORTHORNS.

Cow, in-calf or in-milk, of any age.—First prize, W. Gray, Lisburn (Leoville); second, T. Lindsay, Killyleagh (Lady Audley); third, F. and W. Smith, Coleraine (Lady Rose).

Heifer, in-calf or in-milk, calved in 1875.—First prize, R. Bowden, Cotahill (Isabella); second, S. Smith, Ballyclare (Cherry); third, S. Smith (Ruby).

Best heifer, calved in 1876.—R. Bowden (Clarissa); second, J. Liken, Coleraine (Nelly); third, J. Stewart, Killyleagh (Maid of the Isle).

Heifer, calved in 1877.—D. Glenn (Beautiful Roan); second, J. H. Keenan, Downpatrick (Charmer); third, J. Vance, Lurgan (Rose).

Heifer, calved in 1877.—First prize, J. Russell (New Year's Gift).

CROSS, OR ANY BREED NOT BEING SHORTHORN.

To be competed for by farmers whose holdings exceed fifty statute acres.

Dairy cow, in-calf or in-milk, of any age.—First prize, G. Gibson (Belle); second, S. Smith (Pansy); third, same (Countess).

Heifer, in-calf or in-milk, calved in 1875.—First prize, G. Gibson (Snowdrop).

Heifer, calved in 1876.—First prize, G. Gibson (Newforge); second, J. Russell (Dolly Varden).

CROSS OR ANY BREED NOT BEING SHORTHORN.

To be competed for by farmers whose holdings do not exceed fifty statute acres.

Dairy cow, in-calf or in-milk, of any age.—First prize, J. Watson; second, J. McClure (Molly); third, D. Glenn.

Heifer, calved in 1876.—J. Stewart (Kate).

Heifer, calved in 1877.—T. and R. Stewart (Deborah Sprig); second, D. Glenn (third, J. McClure (Nannie).

Heifer, calved in 1877.—Prize, J. Russell (New Year's Gift).

RICCALL.

The sixteenth annual show of the Riccall Agricultural Society was held recently. A better show, either as to the number of exhibits or their quality, has not taken place at Riccall. The entries numbered 258, or about thirty in excess of last year; and the bulk of them were horses, for which the district is celebrated. There was a nice lot of brood mares for breeding hunters; and the nag, gelding, or mares of any age were an even lot and took considerable judging. In the classes for sheep and pigs there was not much excellence. The following are the awards of prizes:—

FOALS.—Colt for hunting purposes, W. Robinson, Wheldrake; 2, J. Nalton, Copmanthorpe. Filly for hunting purposes, J. H. Wormald, Cawood; 2, W. Beckett, Deighton. Colt for coaching purposes, J. Purdon, Spaldington; 2, R. Graves, Deighton. Filly for coaching purposes, J. Thompson, Whitmore; 2, P. Saintclair, Excleby. Nag colt, R. Martin, Scoreby; 2, W. M. Stather, North Cave. Nag filly, F. Nottingham, North Cave; J. Dunnington Jefferson, Thicket Priory. Colt for agricultural purposes, C. Watson, South Duffield; 2, L. Simpson, Stillingfleet. Filly for agricultural purposes, E. Jewitt, Barby; 2, G. Swinbank, Riccall.

YEARLINGS.—Colt or filly for hunting purposes, Mr. Brown, Wheldrake; 2, W. Smith, Newton Derwent. Colt or filly for coaching purposes, G. Varley, Temple Hirst; 2, W. Taylor, Oszodly. Nag colt or filly, W. Carr, Elvington; 2, J. Foster, Rose Villa, Fulford. Colt or filly for agricultural purposes, W. Jackson, Hemmingbrough; 2, J. Tomlinson.

TWO-YEAR-OLDS.—Gelding or filly for hunting purposes, T. W. Pratt, Riccall; 2, W. Wormley, Kelfield. Gelding or filly for coaching purposes, J. Sherburn, Warren House; 2, W. Wainwright, South Duffield. Nag gelding or filly, R. Martin, Scoreby; 2, D. Jackson, Turnhead. Gelding or filly for agricultural purposes, G. Crooks, Danby Wiske; 2, — Braithwaite, Brayton.

THREE-YEAR-OLDS.—Gelding or filly for coaching purposes, W. Beckett, Deighton; 2, H. R. W. Hart, Dunnington. Nag gelding or filly, H. Hetherington, Wheldrake; 2, R. Gardham, Melburn. Gelding or filly for agricultural purposes, H. Lawson, Sutton-on-Forest. Pair of agricultural horses or mares worked during this season, and to be the *bona fide* property of the exhibitor, G. Swinbank, Riccall; 2, D. Jackson, Turnhead.

SPECIAL PRIZES.—Agricultural stallion that travels in the neighbourhood (given by the Right Hon. Lord Wenlock), F. Griffin, South Duffield; 2, Lord Leonfield, Rowland Hall. Brood mare for breeding hunters, with foal at foot or stunted, to be the *bona fide* property of tenant farmers (given by the Hon. B. Lawley), J. Nalton, Copmanthorpe; 2, C. H. Hart, Dunnington. Three-years-old gelding or mare for hunting purposes (given by Mr. G. Whitehead), G. Whitehead, Deighton Grove; 2, H. Stourton, Holme Hall. Nag gelding or mare of any age, to be ridden in the presence of the judges, W. H. Cranswick, Thorneholme; 2, E. Griffin.

PONIES.—Pony not exceeding 14 hands 2 inches high, to be ridden in the presence of the judges, J. J. Dunnington Jefferson, Thicket Priory; 2, J. Barker, Sutton, Derwent.

SHEEP.—Five long-woolled ewes, which have suckled lambs this year, W. White, Haixy Grange. Five shearing gimmers, W. White; 2, E. Jewitt, Barby. Five shearing wethers, E. Jewitt. Shearing ram, — Woodward, York; 2, W. White.

PIGS.—Boar pig, middle breed, G. Sedgwick, York; 2, G. Shillito, Riccall. Pen of three store pigs, W. Watson, Barlow Grange; 2, G. Swinbank Riccall. Sow or gilt in pig or with a litter, 1 and 2, G. Sedgwick. Store pig, belonging to cottagers residing in Riccall, and occupying not more than one acre of land, such pigs having been in the possession of the exhibitor at least three months previous to the show, J. Slater, Riccall; 2, W. Tomlinson, Riccall.—Abridged from *The Leeds Mercury*.

ROYAL COUNTIES (HANTS AND BERKS)

The meeting of this Society at Southampton, which opened recently, has been a very successful one.

Southampton Common is a picturesque place for a show-yard, and the weather being brilliant, the show has been remarkably well attended. Perhaps visitors were the more anxious to attend this year from the fact that the Society did not hold a show last year, on account of the prevalence of cattle disease. At any rate over 2,500 persons paid for admission on Wednesday, the second half-crown day, and on Thursday there was apparently a still larger number present. The entries of live stock numbered 439, consisting of horses, 102; cattle, 195; sheep, 99; and pigs, 43. Of cart horses there were 55 entries, and these included several animals of high merit. In the old stallion class Messrs. E. and A. Stanford, of Ashhurst, Steyning, were first with the Baronet, a very fine Clydesdale, Mr. Joseph Stratton being second with Wanderer, and Major-General Sir F. Fitzwygram third. Her Majesty the Queen showed a horse, Prince Albert Victor of Wales, in this class, and took the reserve ticket. In the class for stallions foaled in 1876 Mr. G. Newland, of Micheldever was first, and Mr. T. Black second. Messrs. Stanford were again to the fore in a capital class of mares and foals, as well as first for a breeding mare with Damel. Earl Spencer's mare was second. There was a fair show of two-year-old geldings and fillies. Only nine hunters and twelve hacks were exhibited; but there were 22 Galloways, and these were a very good lot. Why there were only four ponies it would be difficult to explain. In the cattle classes Shorthorns were well represented with 45 entries. For bulls Mr. J. Pond, of Lynton, was first, and Mr. Stratton, of Alton Priors, second. Colonel Loyd Lindsay gained the first prize for bulls over one year and under two, Mr. Stratton being again second. The Rev. R. B. Kennard, of Marham, B'andford, took the prize for the best bull calf, Mr. Stratton being a third time in the second place. In the cow and heifer classes Colonel Loyd-Lindsay, Mr. Browning, and Mr. Walter, M.P., carried off the first prizes. The show of Longhorns was not a good one. Sir F. W. Fitzwygram took all the prizes. Her Majesty the Queen showed the only Hereford, a bull, which obtained the prize. The show of Devons was a small one, but there were two or three very good representatives, of the breed. Mr. John Kent, Mr. J. Walter, M.P., and Mr. Fryer were the prize-takers. The show of Sussex cattle was a fair one, though hardly so large as might have been expected so close to their own district. The honours were gained by Messrs. E. and A. Stanford, J. Braby, and B. Duke. By far the most remarkable of the cattle classes were those of the Channel Islands breed. Here there were no fewer than 103 entries, including many animals of great merit. For the honours awarded we must refer readers to the prize list.

Of sheep there was a good show. Of the 99 entries 55 consisted of Hampshire and West Country Towns, which, as might have been expected in the district, were particularly well represented. In the shearling ram class Mr. Alfred Morrison's ram, of which we reported in such strong terms of praise in our notice of the sheep at Oxford, was first here as he was at Oxford. Mr. R. Coles also took a first prize for a ram, and a second prize for another. Mr. James Read took a first prize for a pen of ewes, as he did at Oxford, where we particularly noticed them as a "capital lot," Mr. Moore being second. The South-downs, as at Oxford, were hardly so well represented as the other Downs, with the exception of the Oxfordshires, of which there were only six entries. Mr. Russell Swanwick of the Cirencester College Farm was successful with his admirable Coltswoolds, as he was at Paris.

The pigs were fewer than they might have been expected to muster, but there was a good lot of Berkshires. Amongst the prize-takers were Her Majesty the Queen,

Mr. J. Partridge, Mr. N. Benjafield, Lieut.-Col. Portal, Mr. H. Humfry, and the Rev. N. Neville.

There was a fair show of implements, and the great seedsmen, Messrs. Carter and Co., of London; and Sutton and Sons of Reading, made their usual tasteful displays of field and garden produce.

The mowing competitions were held at Whithedwood Park. Messrs. Harrison, McGregor, and Co., of the United States, were awarded the first prize; and Messrs. Samuelson and Co. of Banbury, the second; Messrs. Osborne and Waller A. Wood being respectively highly commended.

LIST OF PRIZES. SHEET.

HAMPSHIRE OR WEST COUNTRY DOWN.

Shearling ram.—First prize, £10, A. Morrison, Tisbury; second, £5, R. Coles, Warmminster.

Ram of any age.—First prize, £10, R. Coles; second, £5, F. R. Moore, Pewsey.

Five shearling ewes.—First prize, £10, J. Read, Salisbury; second, £5, F. R. Moore.

Five shearling ewes which have never been separated from the flock till one month before the day of exhibition, the ewes to be clean shorn, but not before the day of separation.—First prize, £10, J. Read; second, £5, H. Newton, Walingford.

Hampshire Down ram lamb.—First prize, £10, A. Morrison; second, £5, A. Budd, Overton; third, £3, W. F. Bennett.

Five ram lambs.—First prize, £10, A. Morrison; second, £5, W. F. Bennett; third, £3, F. R. Moore.

Five ewe lambs.—First prize, £10, A. Budd; second, £5, J. Barton.

SOUTHDOWN.

Shearling ram.—First prize, £10, and second, £5, H. Pentfold, Chichester.

Ram of any age.—First prize, £8, and second, £5, H. Pentfold.

Five shearling ewes.—Prize £10, Sir F. W. Fitzwigram, Havant.

OXFORD DOWN.

Shearling ram.—First prize, £8, and second £5, G. Adams, Faringdon.

Five shearling ewes.—First prize, £5, G. Adams; second, £3, G. Wallis, Bampton.

LONGWOOL.

Shearling ram.—First prize, £10, R. Swanwick, Cirencester; second, £5, T. and S. G. Gillett, Faringdon.

Ram of any age.—First prize, £8, R. Swanwick; second, £4, H. E. Raybird, Basingstoke.

Five shearling ewes.—Prize £5, T. and S. G. Gillett.

HORSES.

FOR AGRICULTURAL PURPOSES.

Cart stallion, foaled before the year 1876.—First prize, £10, E. and A. Stanford, Ashurst; second, £5, J. Stratton, Winchester; third, £3, Sir F. W. Fitzwigram.

Cart stallion, foaled in 1876.—First prize, £10, G. Newland, Micheldever; second, £5, T. Black, Southampton.

Gelding or filly, foaled in 1876.—First prize, £10, E. and A. Stanford; second, £5, and third, £3, J. S. Hodgson, Haslemere.

Entire cart colt, foaled in 1877.—First prize, £8, J. S. Hodgson; second, £5, Col. R. Loyd-Lindsay, Wantage.

Cart filly, foaled in 1877.—First prize, £8, Col. R. Loyd-Lindsay; second, £5, E. and A. Stanford.

Mare and foal.—First prize, £10, E. and A. Stanford; second, £5, J. S. Hodgson; third, £3, Earl of Northbrook, Hants.

Mare for breeding purposes.—First prize, £8, E. and A. Stanford; second, £5, Her Majesty the Queen.

HUNTERS.

Mare or gelding, of any age, jumping to be a point of merit.—First prize, £10, W. A. Bristow, Basingstoke; second, £5, J. W. Letheren, Cosham; third, £3, C. Parrott, Southampton.

HACKS.

Mare or gelding not exceeding 15½ hands, and calculated to carry 12 stone.—First prize, £10, G. S. Prior, Hants; second, £5, J. W. Letheren.

GALLOWAYS.

Mare or gelding not exceeding 14½ hands.—First prize, £6, Rev. A. G. Barker, Basingstoke; second, £3, J. W. Letheren.

Mare or gelding not exceeding 13½ hands.—First prize, £6, Rev. A. G. Barker; second, £3, F. Bailey.

PONIES.

Mare or gelding not exceeding 12 hands.—First prize, a piece of plate, value £5 5s., and second, £3, C. E. Hayward, Winchester.

CATTLE.

SHORTHORNS.

Bull.—First prize, £10, J. Prond, Lynton; second, £5, J. Stratton, Marlborough.

Bull, above one and not exceeding two years.—First prize, £10, Col. R. Loyd-Lindsay; second, £5, J. Stratton.

Bull calf.—First prize, £5, Rev. R. B. Kennard; second, £3, J. Stratton.

Cow in calf.—First prize, £10, Col. R. Loyd-Lindsay; second, £5, C. H. Dorrington, Otterbourne; third, £3, W. B. Ayling, Petersfield.

Heifer in milk or in calf, under three years.—First prize, £10, R. Browning, Old Alresford; second, £5, C. F. Part, Watford.

Heifer above one and not exceeding two years.—First prize, £10, Col. R. Loyd-Lindsay; second, £5, Rev. R. B. Kennard; third, £3, J. J. Ratcliff, Reading.

Cow calf.—First prize, £5, J. Walter; second, £3, R. Attenborough, Reading.

LONGHORNS.

Bull exceeding twelve months.—Prize £3, Sir F. W. Fitzwigram.

Cow in calf.—Prize £3, Sir F. W. Fitzwigram.

Heifer.—Prize £2 10s., Sir F. W. Fitzwigram.

HEREFORDS.

Bull.—Prize £5, Her Majesty the Queen.

DEVONS.

Bull of any age.—Prize £5, J. Kent, Bognor.

Bull above one and not exceeding three years.—Prize £5, J. Walter.

Cow in calf.—Prize £5, J. Walter.

Heifer under three years.—Prize £5, W. R. Fryer, Poole.

Heifer above one and not exceeding two years.—Prize £1, W. R. Fryer.

Heifer calf.—Prize £3, W. R. Fryer.

SUSSEX.

Bull of any age.—First prize, £5, and second, £3, E. and A. Stanford.

Bull above one and not exceeding three years.—First prize, £5, J. Braby, Rudgwick; second, B. Duke, Arundel.

Bull not exceeding twelve months.—First prize, £5, E. and A. Stanford; second, £3, J. Turvill, Alton.

Cow in calf.—Second prize, £3, J. Braby.

Heifer above two and not exceeding three years.—First prize, £5, B. Duke; second, £3, J. Braby.

Heifer above one and not exceeding two years.—First prize, £5, J. Braby; second, £3, E. and A. Stanford.

Heifer calf.—Prize £3, J. Turvill.

CHANNEL ISLANDS.

A special prize of £5, for two Jersey cows or heifers in calf or in milk.—Won by G. Simpson (the donor), but given to J. Cardus, the first prize-taker.

Jersey or Alderney bull of any age.—First prize, £10, J. Cardus; second, £3, T. Hepburn.

Jersey or Alderney bull above one and not exceeding two years.—First prize, £10, G. A. Fuller; second, £5, G. Simpson; third, T. Lister.

Jersey or Alderney bull calf, not exceeding twelve months.—First prize, £5, G. Simpson; second, J. E. Barrell.

Alderney or Jersey cow in calf or in milk.—First prize, £5, G. Simpson; second, £5, H. A. Rigg; third, fourth, and fifth, G. Simpson.

Jersey or Alderney heifer, above two and not exceeding three years.—First prize, £5, H. A. Rigg; second, £5, G. Simpson; third, G. A. Fuller.

Jersey or Alderney heifer, above one and not exceeding two years.—First prize, £5, G. Simpson; second, £3, H. A. Rigg; third, G. Simpson.

Jersey or Alderney heifer calf not over twelve months.—First prize £5, G. Simpson; second, £3, Her Majesty the Queen.

Guernsey bull of any age.—First prize, £10, A. G. Macleay; second, £3, G. H. Errington.

AYRSHIRE.

Bull exceeding twelve months.—Prize £3, A. J. Scott.

Bull above one and not exceeding two years.—Prize £2 10s., A. J. Scott.

A special prize for Ayrshire cow in calf or in milk.—Miss Mary Lyon.

A special prize for Ayrshire heifer, above one and not exceeding two years.—Prize £2 10s., A. J. Scott.

PIGS.

BERKSHIRE.

Boar over twelve months.—First prize, £5, H. Humfrey, Shrivensham; second, £3, C. Charlwood, Berks.

Boar under twelve months.—First prize, £5, A. Stewart, Gloucester; second, £3, H. Humfrey.

Breeding sow.—First prize, £5, N. Benjafield, Shaftesbury; second, £3, H. Humfrey.

Pair of sows under nine months.—First prize, £5, A. Stewart; second, £3, J. Walter.

SMALL BLACK BREED, NOT BERKSHIRE.

Boar over twelve months.—First prize, £3, J. Partridge, North Devon; second prize, £2, T. Chamberlayne, Witches-ter.

Boar under twelve months.—First prize, £3, J. Partridge; second, £2, J. Kent.

Breeding sow.—First prize, £3, J. Partridge; second, £2, J. Kent.

Pair of sows under nine months.—First prize, £3, J. Partridge; second, £2, A. J. Scott.

SMALL WHITE BREED, NOT BERKSHIRE.

Boar over twelve months.—First prize, £3, A. Ingram, Blandford; second, £2, C. Charlwood.

Breeding sow.—Prize £3, Lieut. Col. Portal, Michel-dever.

Pair of sows under nine months.—First prize, £3, Her Majesty the Queen; second, £2, Rev. N. Neville.

SUSSEX.

Boar.—Prize £3, E. and A. Stanford.

Sow.—Prize £3, J. Kent.

SUFFOLK.

MEETING AT IPSWICH.

It is seldom that so delightfully shady a place as Christchurch-park, Ipswich, can be obtained in the immediate vicinity of a large town, and visitors were most grateful for shade on Thursday and Friday, two scorching days. If it were not for the creditable show of Polled cattle, sheep, and pigs, we should be disposed to say that the contributions hardly did credit to so excellent a show-yard. The agricultural horses were certainly not a good lot. They were almost all Suffolks, a fact to be chiefly accounted for by the knowledge of exhibitions of other breeds, that there is very little chance of any but a Suffolk horse winning a prize at a Suffolk show. But a show of Suffolk horses only would be well worth seeing if the animals were, as a whole, sufficiently good representatives of the breed. This was not the case at Ipswich last week, and if Suffolk sent her best on that occasion there is some reason to fear that the breed is not improving. In the old stallion class there were two or three good horses. One of these, Captain Betts's Sir John Falstaff, was a Shire-bred, and his dismissal from the ring (although as we understand declared sound by the Veterinary Inspector) before the prizes were awarded was generally considered as bearing out the opinion that Suffolk prizes are for Suffolk horses. He is a little too short; but otherwise he is a powerful horse, of good bone and substance. Perhaps he is not so good a representative of a Shire-bred as Mr. Manfred Biddell's Ben is of a Suffolk; but if not the best horse in the ring, he was certainly the second best. On what ground the second prize was given to Mr. Richard Garrett's Cup-bearer 3rd it is difficult to say. This horse was placed before Ben last year, and, indeed, had gained the "Catch-

pole" Challenge Cup, valued at 100 guineas, two years in succession. He is now decidedly lame, besides having badly-cupped hocks, and most judges would have disqualified him; but he was not declared unsound, and so he took the second prize. Ben took the "Catchpole" Challenge Cup, and the Saxmundham Challenge Cup offered for the best stallion which had served not less than 20 mares in the county in 1878. In the three-year-old class Mr. Biddell was again successful with Dandy, Mr. Lewis being second with Young Champion. The two-year-old colts were not a good lot; Mr. Grout won the first prize with a chesnut, light in frame as in colour, beating Mr. Sewell's Shire-bred Cambridge Tom, which was first at Dunmow, a horse which would make nearly two of him. It was the general opinion of those round the ring that Cambridge Tom should have had the first prize or none at all; for if his turned-in fore-feet disqualified him for the first place, they should have disqualified him for the second also, and in all other respects he was far superior to any of his competitors. Another award to which objection may be taken was that of the special prize for the best mare, which went to Mr. Catchpole's Duchess, a grand mare, but with less bone than is possessed by Mr. Green's almost perfect Bonny, which won at the Essex Show. The filly classes were rather weak ones. There were three capital pairs of plough-horses, the prize being taken by the Duke of Hamilton and Brandon. The riding and coaching horses do not call for any special remark.

Of the show of cattle the most remarkable feature was a very creditable show of polled bulls of the Suffolk and Norfolk breed. Both Mr. Palmer's first and Mr. Taylor's second prize animals were admirable, and there were two or three promising young ones in the other classes, giving evidence of the improvement which is taking place in the breeding of this valuable variety of cattle. The cow and heifer classes were not so well filled; but Mr. Loft showed a grand cow, and Mr. Colman a very nice heifer, which took the special prize as the best female in the polled classes. There were a few other very creditable representatives of the breed, to which want of space forbids particular reference. There were only three Shorthorn bulls over two years. The Marquis of Exeter was first with Telemachus 6th, and Mr. D. A. Green second with a bull by Heydon Duke 2nd. Of bulls under two years there was only one entry, and but two calves. The female classes were also small ones, and the most remarkable animal was Mr. Green's beautiful heifer, by Young Telemachus, which was first in her class, and took the special prize as the best of the females. Of Channel Islands cattle there were only twelve entries. For further reference to the cattle classes the reader may be commended to "Vigil's" "Live Stock Notes."

Suffolk sheep were well represented, and the sheep as a whole were a very good lot for a county show. There was an excellent show of pigs, Messrs. Sanders Spencer and Sexton and Lord Rendelsham taking most of the prizes. The implement show was rather a large one. Wood's self-binding reaper was at work in a field of rye

LIST OF PRIZES.

AGRICULTURAL HORSES.

STALLIONS.

Stallions having served not less than 20 mares in the county in 1878.—First prize, £20, M. Biddell, Playford (Ben); second, £10, R. Garrett (Crown Prince).

Three year old entire colts, foaled in 1875.—First prize, £15, M. Biddell (Dandy); second, £10, J. Lewis, Foxhall (Young Champion).

Two year old entire colts, foaled in 1876.—First prize, £15 15s., J. Grout, Woodbridge (Chieftain); second £7, D. Sewell, Colchester (Cambridge Tom).

One year old entire colts, foaled in 1877.—First prize £10 10s., H. Wolton, (Diadem); second, £5, W. Kerr (Napoleon).

Special prize No. 1, value £26 5s., for the best Suffolk Stallion in Classes 1, 2, and 3, M. Biddell's Ben.

Special prize No. 2, value 100gs., the Saxmundham Challenge Cup, best animal in Classes 1, 2, and 3, such animals to have served not less than 20 mares in the county at a fee not exceeding 3 gs., in 1878. The cup to become the property of the exhibitor winning it three times with the same animal, or with other animals bred by himself, M. Biddell's Ben.

Special prize No. 3, the Catchpole Challenge Prize, value £100, for the best stallion with two foals (his produce) all eligible for the Suffolk Stud-book. To be won two years by the same owner, R. Garrett's Cupbearer III., and chestnut foals, exhibited by R. Garrett and W. Wilson, Baylham Hall.

MARES AND FOALS.

Mares with foals at foot.—First prize, £15, W. Catchpole, Bramford (Duchess); second, £7, R. Garrett (Scott).

Foals foaled in 1878.—First prize, £8, M. Biddell; second, £4, T. R. Green, Stowlangtoft.

MARES.

Gasst mares.—First prize, £10, D. A. Green, Colechester (Bonny); second, £5, the Duke of Hamilton (Belle of the Ball).

Three year old fillies, foaled in 1875.—First prize, £10, R. Capon (Matchett II.); second, £5, J. G. G. G. (Smart).

Two year old fillies, foaled in 1876.—First prize, £10, W. Byford, Glemsford; second, £10, P. H. Page, Woolpit (May).

Special prize No. 4, value £10, for best animal in Classes 5, 7, 8, and 9, N. Catchpole's Duchess.

One year old fillies, foaled in 1877.—First prize £10, R. E. Lofft; second, £5, the Duke of Hamilton (Yellow Diamond).

Special prize No. 5, value £10 10s., pairs of plough horses, mares, or geldings, or mixed, not to be drawn from other classes.—Prize, the Duke of Hamilton (Diamond and Bright Diamond).

RIDING AND COACHING HORSES.

Thorough bred stallions adapted for getting hunters having served not less than ten mares in the county in 1878.—First prize, £20, the Duke of Hamilton (Barbillion); second, £10, the Duke of Hamilton (Beadle).

Roadster stallions, having served not less than ten mares in the county in 1878.—First prize, £10, J. G. G. G. (Lampighter); second, £5, T. Harper, Bury St. Edmund's (Maguate).

MARES AND FOALS.

Hunting mares with foals at foot.—First prize, £7, R. E. Lofft (Batlement); second, £3, Colonel F. Barlow, Hasketon (Wild Rose).

Hackney mares with foals at foot.—First prize, £7, Duke of Hamilton (Sewell); second, £3, R. Allen, Sudbury (Gipsy).

Hunting foals, bred in the country or by exhibitor.—Prize, £5, Colonel F. Barlow.

Roadster foals, bred in the country or by the exhibitor.—Prize, £5, Duke of Hamilton.

HUNTERS.

Weight-carrying hunting mares or geldings, not less than five years old, equal to carrying not less than 14 stone.—First prize, £10, Duke of Hamilton (Barton); second, £5, Colonel F. Barlow (Doneraile).

Four-year-old weight-carrying hunting mares or geldings, having been bred in the country or by the exhibitor, and equal to carrying not less than 14 stone.—First prize, £10, R. C. Cooke (Livermere); second, £5, P. G. Barthropp, Ipswich (The Times).

Weight-carrying hunting mares or geldings, two or three years old, having been bred in the county or by the exhibitor, and equal to carrying not less than 14 stone.—First prize, £7, R. Garrett; second, £3, H. Wolton.

Special prize, No. 6, value £10 10s., light-weight hunting mares or geldings (not to be drawn from other classes), Col. F. Barlow.

Special prize, No. 7, value £10 10s., for the best hunter in the yard.—The Duke of Hamilton's Barton.

RIDERS AND HACKNEYS.

Riding mares or geldings, not under 15 hands high.—First

prize, £10, P. M. Browne, Bury St. Edmund's (Ethel); second, £5, R. C. Cooke.

Hackney mares or geldings, not under 14 hands high, and not exceeding 15 hands.—First prize, £10, R. Capon; second, £5, J. G. G. G. (Lady Hayton).

Two and three year old hackney mares or geldings, having been bred in the county or by the exhibitor.—First prize, £7, C. A. Kersey, Monewden (Violet); second, £3, J. R. Wood.

PONIES.

Ponies 13 hands high, and not exceeding 14 hands.—Prize, £5, J. G. G. G. (Lively).

Ponies under 13 hands high.—Prize, £5, E. B. Teuen, Wickham Market (Veloxy).

Special prize No. 8, value £10 10s., for the best pair of matched ponies under 12½ hands high, to be shown and driven in double harness, Margaret Ogilvie, Leiston.

Special prize No. 22, £7, for hackney mares or geldings of not less than 14 hands high, to be exhibited and driven in single harness, Duke of Hamilton's Banks.

Special prize No. 23, £5, for the best pony under 11 hands high, to be exhibited and driven in single harness, J. G. G. G. (Lively).

Special prizes Nos. 9 and 10, for farmer's hunters making the best jump the first day of the show.—First prize, £10, J. Hempsy's Shaughran; second, £5, W. Jex's Eurotas.

SUFFOLK AND NORFOLK RED POLLED BULLS.

Suffolk or Norfolk red polled bulls, not under two years old.—First prize, £10, J. F. Palmer, Wilby, Attleboro' (Davysion III.); second, £5, A. Taylor, Harleston (King Charles).

Suffolk or Norfolk red polled bulls, under two years old.—First prize £10, G. Gooderham, Monewden (Proston II.); second, £5, J. J. Colman (Osman).

Suffolk or Norfolk red polled bull calves, not exceeding 12 months old.—Prize £5, the Duke of Hamilton (Wild Tom).

Special prize No. 13, value £10, for best Suffolk or Norfolk red polled bull in the yard.—J. F. Palmer's Davysion III.

SUFFOLK AND NORFOLK RED POLLED COWS AND HEIFERS.

Suffolk red polled cows, in milk or in calf.—First prize, £10, R. E. Lofft (Minnie III.); second, £5, J. Hammond, Dereham (Davy VII).

Under three years old Suffolk or Norfolk red polled heifers, in milk or in calf.—First prize, £10, J. J. Colman (Panciful); second, J. Hammond (Davy XVIII).

Under two year old Suffolk or Norfolk red polled heifers.—First prize, £7, R. E. Lofft (Handsome VI.); second, £3, A. Taylor (Flirt).

Special prize No. 14, value £10, for the best Suffolk or Norfolk red polled cow or heifer in Classes 29, 30, and 31, R. E. Lofft (Minnie III).

Special prize No. 15, value £10, for the best collection of Suffolk or Norfolk red polled cattle, Mr. Colman.

SHORTHORNS.

Bull, not under two years old.—First prize, £10, Marquis of Exeter, Burghley House, Stamford (Telemachus VI.); second, £5, D. A. Green.

Bulls, under two years old.—Prize £10, J. Upton, Rivenhall, Witham (Obadiah).

Bull calves, not exceeding one year old.—Prize £5, N. Catchpole, Bramford.

Special prize No. 16, value £10 10s., for best Shorthorn bull in the yard, Marquis of Exeter (Telemachus VI.).

COWS AND HEIFERS.

Cows, in milk or in calf.—First prize, £10, Marquis of Exeter; second, £5, J. J. Sharp, Kettering (Julia XI).

Heifers, under three-years-old, in milk or in calf.—First prize, £10, D. A. Green; second, £5, N. Catchpole (Laura).

Heifers, under two-years-old.—First prize, £7, N. Catchpole; second, N. Catchpole.

Best animal in Classes 35, 36, and 37, bred in Suffolk or Essex.—Special prize, value £10, D. A. Green.

OTHER BREEDS.

Bulls of any pure breed, not being red polled, Suffolk or Norfolk or Shorthorn.—Prize, £10, Sir R. Wallace, Bart. (Heurteuse).

Cows or heifers of the Channel Islands bred, over three-years-old, in milk or in calf.—Prize, £10, Marquis of Bristol (Jersey cow).

Milch cows in milk, not eligible to compete in the foregoing classes.—Prize, £10, A. F. Nicolson, Ipswich.

SHEEP.

SUFFOLKS.

Tups of any age.—Prize, £7, J. M. Green, Stradishal.
Shearling tups.—First prize, £7, J. M. Green; second, £3, J. M. Green.

Lamb tups.—First prize, £5, J. M. Green; second, £2, W. Gardon, Manningtree.

Pen of five shearling ewes.—First prize, £7, J. Smith; second, £3, J. M. Green.

SOUTHDOWNS.

Tups of any age.—Prize, £7, J. J. Colman, M.P.
Shearling tups.—Prize, £7, J. J. Colman.
Pen of five shearling ewes.—Prize, £7, J. J. Colman.

SHORT OR MEDIUM-WOOLLED OF ANY PURE BREED (NOT SUFFOLK OR SOUTHDOWN).

Tups of any age.—Prize, £7, H. Lambert, Camb. (Hampshire Down ram).

Shearling tups.—Prize, £7, H. Lambert (Hampshire Down ram).

Pen of five shearling ewes.—Prize, £7, H. Lambert (Hampshire Down ram).

Best ram in the yard.—Special prize, value £10 10s., J. J. Colman.

ANY BREED.

Pen of ten ewes of any age or breed, which have had lambs this year.—Prize, £6, J. A. Hempton.

Pen of ten shearling ewes of any breed.—Prize, £6, Marquis of Bristol.

Pen of ten ewe lambs of any breed.—Prize, £6, J. Smith.

Pen of five sheep, closely shorn, of any breed, bred by the exhibitor in Suffolk or adjoining counties; a sample of the wool from the sheep exhibited to be shown with the pen.—Special prize, value £10, H. Lambert.

PIGS.

BLACK BREED.

Boars of black breed, not under one-year-old.—First prize, £8, Lord Rendlesham (Shamrock); second, £4, W. Thompson, Thorpe.

Boars, under one-year-old.—First prize, £5, G. M. Sexton, Wberstead Hall; second, £3, G. M. Sexton.

Sows and pigs (the pigs not exceeding ten weeks old).—Prize, £8, J. A. Smith.

Breeding sows.—First prize, £8, G. M. Sexton; second, £4, Lord Rendlesham.

Pens of three young sows, pigged since November 1st.—First prize, £5, G. M. Sexton; second, £3, Lord Rendlesham.

WHITE BREED.

Boars, not under one-year-old.—First prize, £8, S. Spencer, St. Ives; second, £4, S. Spencer.

Boars, under one-year-old.—First prize, £5, S. Spencer; second, £3, Lord Moreton.

Sows and pigs (the pigs not exceeding ten weeks old).—Prize, £8, S. Spencer.

Breeding sows.—First prize, £8, S. Spencer; second, £4, Lord Moreton.

Pens of three young sows, pigged since November 1st.—Prize, £5, S. Spencer.

Best boar in the yard.—Special prize, £5, Lord Rendlesham (Shamrock).

Best sow in Classes 58, 59, 63, and 64, bred in Suffolk.—Special prize, £5, G. M. Sexton (Pilgrimage).

LIVE STOCK NOTES.

It was a most delicious day at Ipswich on Thursday, soft fresh air tempering the outside tropical heat beneath the wide-spreading branches of the noble oak under which the ring for cattle-judging was set out. What a difference there is to-day in the character of the Red Polled cattle from the select few with which Mr. Barthropp swept the boards about thirty years since, then sighing for new worlds to conquer and entering the Shorthorn arena, whilst the blood-red ones were passed over to Lord Sondes, Mr. Badham, &c. Still, there were other breeders as well at that day, and now the number of native cattle has so accumulated that Mr. Herman Biddell, who doesn't show here, has over a hundred head in his own hands. His aim in breeding is the correct one. He goes for milk as much as he can get, taking all conjunctive accumulation of veal and beef thankfully. That's quite right assuredly. The battle of the tides begins when the crops are made to widen, and the proportions of the milk-bag to diminish. But here to-day generally meat is the distinctive feature, and there were some animals as well packed as the champions of Warlabey and Towneley in old days could be. The old bulls, to begin with, were a fine lot. Eight entered the ring, but there was no getting away from Mr. Palmer's Davyson III., bred by Mr. J. Hammond, whose own entry, another Davyson, is unnoticed. The winner is a very noble animal. He is moreover sire of the second prize bull, a good growing youngster, and so shows that his excellence is prepotent and reproductive. One could linger over this beautiful class for a long hour if one might, but the lists are full, and the respective merits of other competitors must be sifted. Mr. Goodenham has a capital youngster in his yearling bull Troston 2nd. Amongst the bull calves the Duke of Hamilton wins easily with a remarkably good one, Mr. J. Colman's second prize competitor showing much promise, and a son of Davyson III. coming next. In this lot we have a sample of soft, heavy hair floating

over the sleek-laid under-coat, which, in Shorthorns at least, is looked on with so much approval. They will doubtless continue to cultivate it. The old cows included a grand old specimen, evidently a deep milker, and showing much quality throughout her mien. Her head and front were especially winning. As she stood she looked somewhat sunk in the loin, but she has seven years of hard work to show, and has been a regular breeder. She was bred by the late Lord Sondes. She is level as she walks. The two year old heifers in milk were only four, the prize going to a well-fattened and very mellow one of Mr. Colman's, and a daughter of Davyson III., handling sweetly, coming second. The yearling class of nine seemed at once easy of solution, Mr. Taylor's Flirt going first and his Needful second. As they made their circuit of the ring they looked an admirable lot, but when the handling began several shapely ones had to recede, having thick hides tightly glued on a bony framework, without flesh at all between. Mr. Taylor's pair were wonderfully got up. She is thick and deep and round, and just gives one the idea of what the "alloy" cross in Shorthorns was, which is considered to have compactly closed together the somewhat loosely built frames of the earlier "Improved Shorthorn." After much consideration the judges put first Mr. Loft's Handsome VI., a long and taking heifer, but not forced as her competitor and having a thick mellow hide. Her hue is not quite so blood-red as the orthodox desire, but has a taint of yellow in it. This decision is much canvassed, as the prize cow was passed over at Norfolk. The Duke of Hamilton's Easton Gem is very good, especially in the spring of the first rib, a most important point. She is not quite as evenly built, however, as the two first winners, but this Easton Park herd is full of fine promise, and is capable of sweeping high honours yet. There is talk of sending a strong contingent of this Red-Polled breed to London next year. I sincerely hope they may. They will certainly have effect, only let pains be taken to eliminate the

weak. "The day is coming when men will breed little animals," a great breeder observed to me to-day; "what we want is sweet joints for the smaller household, where would be a single rib of a huge cow on such a table, or half a leg of big mutton?" He is a distinguished exhibitor, of all sorts, thoughtful, and of much repute. The observation, therefore, is recorded. *The production of meat, he asserts, is in direct ratio to the size of the animal, and he condemns as a popular fallacy the idea that large stock eat no more than the little ones.*

Thus far I had written when there was opportunity for a second review. On measurement the prize yearling heifer is fully two inches longer in the quarter, whilst as broad exactly across the pin bones as the popular favourite. This additional length in the most valuable region for meat makes her comparatively narrow at first sight alongside her vanquished competitor. The carriage of the winner is unquestionably the gayest. So we adhere comfortably to our decision. "Oh! that's just the old style of head" one critic remarks; and why not stick by it, we ask, if good? The Shorthorns were few and uneven. Telemachus 6th was unquestionably first despite his papery skin, but his competitors had little merit. Mr. Catchpole's Royal Cambridge was taking about head and front, but showed too much light under him, and is undoubtedly weak behind. Mr. Green's bull was more meaty, but wants Shorthorn character, especially about the head. Mr. Catchpole shows a nice white calf by his Royal Cambridge. In the Shorthorn cows there was no getting away from Mr. Sharp's red and Lord Exeter's roan. The front of each was beautiful, and to the hips they were very fine and symmetrical. Beyond they were the one very patchy, the other rather so, and both very weak. Mr. Catchpole's pair were solid and good, but their heads show a decided want of true Shorthorn character, which was all the more apparent alongside the two winners. His old bull, however, got the nice white calf out of the one, and is well calculated to give a more satisfactory style to the next generation. The younger heifers of Mr. Catchpole's are also of an improved character. The Channel Islanders were disappointing after the display at Oxford. The milk vessels were uneven and small, and the frames failed to accord with the requisitions of a Jersey judge. As milk cows two Herefords and a mongrel Suffolk were exhibited. The Herefords having large bags are acknowledged by their owners to yield well for *about three months!* What's the use of that?

Amongst the sheep classes were some nice Southdowns, Mr. Colman's aged ram being especially good. There were some nice pens of ewes in ordinary store condition, well grown and sorty. The pigs in Suffolk are simply bound to be good. Amongst the horses Mr. M. Biddell's aged and three-year-old stallions won our heart. They are active, good coloured, strong in limb, and yet very evenly turned all over. As a rule the Suffolk horses' "pins" are light for his carcass. The first prize cart mare of Mr. Walton's, the prize gait mare, and the Duke of Hamilton's pair all took our fancy. A dark chestnut of Mr. Maw's was very strong and handsome, but had more the character of a gelding than mare. The Duke of Hamilton's old brood hackney mare is wonderfully choice—low, and long, and clever, and had such an udder! She is twenty-five years of age, and yet her foal wins the prize also. Colonel Barlow is to the front with a smart, light hunter, not unlike Cornishman of old. Both are descended from Exmoor ponies.

The grounds in which the show took place are undulating and beautiful and the official arrangements excellent. As far as the judges are concerned it is only fair to state that throughout they are treated with the greatest hospitality and attention.

To change the subject, next week will see some capital Shorthorn sales. Mr. Blundell, of Luton, who breeds carefully on principle, sells on Tuesday a good number of knightley cattle, a sort which is fast raising its head from an undeserved and temporary depression. Mr. Hulford then disperses a choice and valuable collection brought together at high figures. On the Friday there will be a large company, we anticipate, to greet Mr. Fox and canvass his large Red Rose consignment. It is satisfactory to read that an Australian port is open at last. There will be a rum, we anticipate, on all good females, for in that colony they are not quite cramped by home ideas of fashion; all good established tribes sell when individual personal excellence testifies to the blood which the catalogue states to flow in their veins—on this point we cannot be too particular, Mr. Blundell sells also some of the very fashionable Gwynnes and Sarmises.

VIGIL, July 1.

THE WORKING MAN IN CANADA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I see in *The Mail* of this town a piece from your grate paper on the frauds of Canadian immigration. You are quite right. The man who believes the agents and comes out here is a big fool. For one man in work at poor wages there is ten out of work. The "bosses" are masters in Canada. All through the spring and the summer the Government and Scotch goods importers bring in poor chaps (at the public expens) who can find nothink to do unless they will work for two shillins a day and keep themselves thru the long winter. We have just had grate food riots in Quebec, and the soldiers have killed many poor fellows, and all over Canada things are as bad. For every man wanting a job there is 50 fellows seekin a bit of work. We used to look to the grate *London Times*, but it is now no good. We have lots of us sent letters, but they do not go in. Writing to *The Times* is now of no use. We used to think *The Times* was open to all Englishmen anywhare, but it has changed. It has a correspondent here, but he is in *The Globe*, and does not tell the people in England things as they is. Wages has now gone down to 50 sents a day, and we can't live on that in six months winter. O, I wish the English papers would onely send out a good man like Mr. Doyle, and then the swindles would be "busted up." It is all one great cheat. The *Toronto Tribune* a few days ago said, "In England the workin man is strong; but in the States he has to accept bred and water, an live on dollar a day and be thank'ull." This will do far more for Canada. Here he has to take 50 cents or wot the bosses give, and if he don't take it he may just starve. In this town me an my maits av applied for a bit of a job on sum works now goen on for a big cattle show, but they wil not look at us: they sa "lots of men," and clap too the gates, and do not care wot becums of us and our deare children, and they keep on crowdin in hemmigras every ship comin in. And *The Globe* sez every one who rites to any English paper is a "libeller" and a liar. We do all hope you will not leave off showing up the cheats of the hemigrashun agents. We do not kuo who "One who knoes" is, but if we did we would say to him "You are all rite," and thank him. And we wish you will not mind *The Globe*, but sho people at home how things are. I may tel you *The Globe* wil sa enything. Here follow some further remarks somewhat of a personal character, which we suppress. If we wos to write you column we could not tel you half of the cheats of the immaigrashun agents, and we sa to al workin men,

especially to farm labourers, "do not run to Canada."—I res, hoping you will put this in,

SEVERAL WORKING MEN IN CANADA.

Toronto, June 14th.

The above letter we have printed verbatim, with the exception of the suppressed passage. The writer sent his name; but as he appended another signature to his letter we presume it was not intended for publication. —ED.]

SALE OF THE STUD COMPANY'S YEARLINGS.

The yearling sale of this company was recently held at Cobham. Sixty-one lots were entered for sale, and the general opinion appeared to be that they were hardly on a par with those brought forward by the company last year. The sensational yearling of the afternoon was a brown colt by Carnival—Curacoa, a great resemblance of his sire, whom the Stud Company had the misfortune to lose so recently as last week. After a strong competition he was knocked down to Captain Machell for 2,500 guineas, the highest price ever paid for one of the Cobham yearlings. The total realised was 22,015 guineas, producing an average of rather less than 361 guineas. Appended are the prices:—

Bay filly, by Cook of the Walk—Stockhausen, by Stockwell; April 27 (Mr. J. Martin).—25 gs.
Brown filly, by George Frederick—Brisbane, by West Australian; April 19 (Mr. Rudkin).—40 gs.
Bay colt, by Wild Oats—Valcreuse, by Dollar; April 28 (Captain Machell).—45 gs.
Bay filly, by George Frederick—Lady Salisbury, by Lord of the Isles; February 30 (Mr. J. Porter).—60 gs.
Bay filly, by Blair Athol—Truetit, by Wild Huntsman; April 11 (Mr. Woodiford).—105 gs.
Bay filly, by See Saw—Violet, by Thunderbolt; April 21 (Mr. J. Bowler).—160 gs.
British Lion, b.c. by Lord Lyon—Worthy, by Knowsley April 5 (Lord St. Vincent).—90 gs.
Bay filly, by Albert Victor—Nellie Moore, by Voltigeur; April 12 (Mr. Rudkin).—45 gs.
Chesnut filly, by Grimston—Mary Ambree, by Buccaneer; April 11 (Mr. Billingham).—40 gs.
Chesnut filly, by Cook of the Walk—Mascherina, by Macaroni or Carnival; May 6 (Mr. Garvey).—90 gs.
Constantinople, b.f. by Lord Lyon—Curiosity, by Lord Clifden Feb. 23 (Mr. Oldaker).—200 gs.
Chesnut filly, by Blair Athol—Catherine, by Macaroni; Jan. 28 (Mr. Oldaker).—260 gs.
Bay filly, by Blair Athol—Martinique, by Macaroni; Feb. 22 (Captain Machell).—270 gs.
Bay filly, by Wild Oats—Lady Fly, by Chanticleer; Feb. 28 (Mr. F. Davis).—360 gs.
Bay colt, by Blair Athol—Polias, by Weatherbit; May 1 (Mr. Bowler).—410 gs.
Bay colt, by Blair Athol—Maid of Perth, by Scottish Chief; April 17 (Mr. J. T. Mackenzie).—750 gs.
Chesnut filly, by Blair Athol—Jocosa, by Fitz-Roland; Feb. 12 (Mr. Beddington).—550 gs.
Brown filly, by Carnival—Molly Carew, by Wild Dayrell; March 22 (Mr. R. Peck).—820 gs.
Chesnut colt, by Blair Athol—Armada, by Buccaneer; Feb. 21 (Mr. R. C. Naylor).—1,050 gs.
Bay colt, by Carnival—Juanita, by St. Albans; Feb. 22 (Mr. Bowler).—1,160 gs.
Chesnut filly, by George Frederick—Madame Eglantine, by Cowl; March 15 (Mr. J. Porter).—550 gs.
Bay filly, by Blair Athol—Coimbra, by Kingston; Jan. 11 (Mr. Bowler).—800 gs.
Chesnut filly, by Doncaster—Circe, by Dundee; Feb. 3 (Mr. Bowler).—250 gs.
Chesnut filly, by Blair Athol—Masquerade, by Lambourne; March 21 (Duke of Westminster).—850 gs.
Brown colt, by Carnival—Curacoa, by The Cure; Feb. 5 (Captain Machell).—2,500 gs.

Bay filly, by Blair Athol—Margery Daw, by Brocket; April 10 (Mr. Bowler).—800 gs.
Chesnut filly, by Blair Athol—Crinou, by Newminster; Feb. 2 (Mr. C. Jousiffe).—640 gs.
Chesnut filly, by Wild Oats—Eva, by Breadalbane; March 15 (Mr. R. Peck).—1,300 gs.
Bay colt, by Blair Athol—Ladylike, by Newminster; March 12 (Mr. J. Potter).—220 gs.
Bay filly, by Carnival—Merlette, by The Baron; March 4 (Duke of Westminster).—260 gs.
Bay filly, by Blair Athol—Lovelace, by Sweetmeat; Feb. 28 (Mr. Beddington).—400 gs.
Chesnut filly, by George Frederick—Alcestis, by Touchstone; Feb. 7 (Mr. John Nightingall).—250 gs.
Bay filly, by Carnival—Fricandean, by Caterer; March 6 (Mr. R. Peck).—300 gs.
Bay colt, by Paul Jones—Vagary, by Musjid; February 13 (Mr. Bowler).—200 gs.
Eseuteheon, br. c. by Lord Lyon—The Plum, by Scandal; Feb. 26 (Mr. R. Peck).—250 gs.
Chesnut colt, by George Frederick—Couleur de Rose, by West Australian; Feb. 16 (Mr. R. Peck).—600 gs.
Chesnut colt, by Blair Athol—Indian Princess, by Marsyas; April 30 (Mr. Bowler).—410 gs.
Bay filly, by Blair Athol—Miss Ida, by Newminster; March 14 (Mr. Addison).—200 gs.
Chesnut filly, by Doncaster—Fairy Queen, by Orest; March 6 (Mr. Billingham).—65 gs.
Bay filly, by King of the Forest—Miss Croft, by Prime Minister; Feb. 2 (Mr. Oldaker).—210 gs.
Chesnut colt, by Carnival—Papoose, by Newminster; Feb. 6 (Mr. Bowler).—155 gs.
Bay colt, by Wild Oats—Reginella, by King Tom; April 4 (Mr. R. Peck).—740 gs.
Bay filly, by Galopin—Invicta, by Blair Athol; April 28 (Mr. F. Gretton).—540 gs.
Bay filly, by Blair Athol—Trickish, by Prime Minister; April 20 (Mr. Garvey).—120 gs.
Bay filly, by Wild Oats—Nukuhava, by Neasham; April 5 (Mr. Bowler).—105 gs.
Bay colt, by The Palmer—Lady Sophie, by Romulus; March 23 (Mr. F. Gretton).—620 gs.
Chesnut colt, by Favonius—So Glad, by Gladiateur; March 13 (Captain Machell).—210 gs.
Bay filly, by Blair Athol—Lucy Bertram, by Newminster; Feb. 10 (Mr. Bowler).—115 gs.
Bay filly, by George Frederick—Cestus, by Newminster; April 16 (Mr. Oldaker).—105 gs.
Bay filly, by George Frederick—Queen of the Chase, by Blair Athol; Feb. 2 (Mr. Goddard).—120 gs.
Bay filly, by Wild Oats—Alva, by Blair Athol; Feb. 11 (Mr. Bowler).—210 gs.
Chesnut filly, by Blair Athol—Ortolan, by Saunterer; March 27 (Mr. Bowler).—165 gs.
Chesnut colt, by Lord Lyon—Nutbeam, by Lord of the Isles April 25 (Mr. Oldaker).—150 gs.
Irish Lion, b. c. by Lord Lyon—Woodbine, by Solon; Feb. 30 (Mr. Addison).—50 gs.
Chesnut colt, by George Frederick—Fairyland, by Orlando; Feb. 15 (Mr. Bowler).—200 gs.
Brown filly, by Blair Athol—Black Rose, by Neasham; Jan. 6 (Mr. Bowler).—190 gs.
Bay filly, by Lord Lyon—Minna Troil, by Buccaneer; March 14 (Mr. Humphreys).—320 gs.
Bay filly, by Favonius—Meteorite, by De Clare; Feb. 18 (Mr. Oldaker).—150 gs.
Bay filly, by King of the Forest—Mrs. Naggleton, by Prime Minister; March 11 (Mr. Van Hansbergen).—90 gs.
Bay filly, by Carnival—Lady Bonifant, by Rataplan; Feb. 3 (Colonel Chaplin).—230 gs.
Bay filly, by Wild Oats—Y. Desdemona, by Thormaaby; May 2 (Mr. Addison).—25 gs.

Total 22,015 gs.

The following yearlings, the property of the Countess of Lovelace:—

Chestnut filly, by Lord Lyon—Benefactress, by Lord Albemarle; April 25 (Mr. Gervais).—25 gs.

Bay filly, by Wild Oats—Beeswing, by Promised Land; April 5 (Mr. Reeves).—60 gs.

Bay colt, by Kingcraft—Benares, by Brahma; April 3 (Captain Machell).—160 gs.

Chestnut filly, by D'Estourmel—Lady Highfield, by St. Albans; March 21 (Mr. Bowler).—65 gs.

D A I R Y F A R M I N G.

At the last meeting of the Midland Farmers' Club, Professor Sheldon, of Cirencester College, read the following paper on the above subject.

Dairy farming may be fairly said to have had less special attention devoted to it, and to have made consequently less general progress in this country, than most other branches of agriculture—at all events, before the year 1870. The breeding of all kinds of farm-stock, the manufacture of all kinds of agricultural machines and implements, the application of scientific research to the cultivation of the soil, the improvement of all kinds of seeds and cereals and their methods of cultivation, and the manufacture and employment of various kinds of artificial manures and fertilisers, have each and all made very striking advances in the past thirty years; and it is only by taking a look at the state these matters were in at the other end of this period, that we can realise the transformation which has taken place. Somewhat or other, dairy farming, cheese and butter-making, seemed to be left out in the cold, whilst improvements were being rapidly made in the departments I have mentioned; and this branch of rural industry seemed to stand still whilst the others were advancing—yet its turn was sure to come.

It may be broadly stated that American has greatly influenced English dairying. Fifteen years ago the quantity of American cheese imported into this country was insignificant when compared with what is now sent to us; and at that period the quality of American cheese was very inferior to what it is now. Fifteen years ago English dairy farmers little suspected how great a rival America would soon become; they fancied themselves secure in their position, and but few of them, comparatively speaking, made any great effort to improve either the efficiency of their stock and farms, or the quality of their productions. The great bulk of English cheese and butter, especially the cheese, was of an inferior kind; but it was none the less superior to American goods at that time. But, as the Americans, who are a very shrewd and practical people, began to increase their production of cheese and butter, they saw it was necessary to improve their quality if they were to make headway in the English markets; and when the Americans have once found it to be necessary or even expedient to do a given thing, they are not long before they do it. In the matter of improvements, our American cousins do not allow the grass to grow under their feet.

So it fell out that American cheese began to improve each successive year, and the area of its popularity in this country was correspondingly increased. Then it came to pass that the eyes of English dairy farmers began to be opened, and they saw that they must either improve the quality of their goods, or submit to be beaten by America in our own markets. To Derbyshire belongs the credit of having first tried the American system of making cheese in factories, and the attempt in most cases has been fairly successful. Some of the factories, however, have not of late years done so well as they did at first, and it is difficult to put one's finger on the reason for this. It is not in all cases the incompetence or carelessness of the managers that is to blame; for in some instances the same manager has failed to make in the same factory, one year with another, cheese of uniform quality, though he has taken equal pains each year alike. There have been many conjectures as to the cause of these fluctuations of quality, but at present it is not known with anything like certainty whether any one of them is correct. But I think we may safely say that great mischief has been done in some cases by the carelessness of the milk suppliers themselves—they have not been careful enough in keeping perfectly clean their milking-cans and pails, and all the vessels which come in contact with the milk; and where this precaution is neglected it is useless to expect any one to produce fine cheese and butter from the milk.

This question of cleanliness in connection with milk has not had the amount of attention devoted to it that it deserves, and it is indeed, far more important than the majority of people think. In fact, I may go so far as to say it is absolutely indispensable if we are to secure the best results. Milk is a very peculiar product, and exceedingly delicate. If it is not taken proper care of, it very quickly becomes worthless, except as food for pigs. It is singularly susceptible of being injured if it is placed in a room the atmosphere of which is tainted by any strong odour; it has the property of absorbing such odour, after which cheese or butter made from it will be more or less injured by the odour which the milk has previously absorbed. Hence it follows that all rooms in which milk is placed ought to be free from vitiated air, and far enough away from the cowsheds themselves, from piggeries, and the like; and the room itself, the floor, the walls, and all the vessels, should be kept scrupulously clean. Milk is frequently much injured by milkers' dirty hands, and by cows' unclean udders. I have seen milkers dip their dirty fingers into the milk in the pail, and then go on milking, the drops of dirty milk oozing between the fingers, and returning to the pail from which they were taken. This practice cannot be too strongly reprobated, though it is done with the idea of giving ease in milking. The idea, let me say, is a false one.

Milking should be always done quietly, regularly, and thoroughly, though at the same time quickly. Really good milkers are not over plentiful. Twice a day, generally speaking, is often enough to milk a cow, and this should be done as nearly as may be at the same hour, morning and evening alike. Milking should be done quietly, without any scolding or beating of the cow—though I admit some cows are very provoking—and with as little talking and noise as possible. It should be done regularly; for cows give their milk freely, and they soon learn regularity themselves if they are treated with regularity and system. It should be done thoroughly, because a cow will soon fail in her flow of milk if she is not milked clean each time; to ensure that the cows are well milked it is advisable to go round and "after" them all, as it is termed. And it should be done quickly, for cows appreciate despatch, providing you do not hurt them, and because a good milker is almost invariably a quick milker. Cows should never be driven hurriedly from the pastures to the milking sheds, especially in hot weather; not alone because it is cruel to drive a cow quickly when her udder is full of milk, but also because the milk itself, being heated by quick driving of the cow, soon goes sour after it is drawn from the udder, and it is impossible to make the best cheese and butter from milk of this kind—is spoilt before it is milked. I am glad to notice that the Royal Agricultural Society offers this year a prize of £50 for an efficient milking machine, for this is the one implement of which dairy farmers at the present time stand most in need. A milking machine is, however, one of the knottiest problems, which inventive genius has yet to solve. The difficulty is to combine motive power with the adaptability of the machine to all kinds of teats and udders; and a machine to be really valuable and practical must enable a man to take the cows before him and milk at least twelve of them within the hour, with comparative ease to himself—milk them cleanly and thoroughly, and without injury to the udder or teat of the cow.

For, at all events, cheese-making purposes, it is expedient that cows should be timed to calve in the latest winter and the earliest spring months, so that they may still be in the flush of milk when the grasses in the pastures and other green crops are most plentiful, nutritious, and luxuriant; because the finest quality cheese and butter are made from the middle of May to the middle of July; because early spring is the time of the year which nature has chosen for parturition

amongst animals; and because nothing is gained by having the cows calve earlier than February, except that the calves stand a better chance of being well reared.

But the character of dairy farming in this country is rapidly changing, and is already very different from what it was twenty years ago. The rapid increase of our urban population has led to a greatly increased demand for fresh milk in our towns and cities; and the passing of the Adulteration Act, by means of which the people can now obtain an article which deserves the name of milk, has caused an enormous increase in consumption by all classes of our citizens. Formerly it was next to impossible to procure pure milk, except in country places; and the inhabitants of our larger cities were so regularly and shamelessly imposed upon by one kind or another of adulteration in the milk that was supplied to them, that they used as little as possible of the deceitful mixture, and the consumption of milk, other than in the forms of cheese and butter, was reduced to a very low ebb. But now all this is changed. Milk of a more or less satisfactory degree of purity and quality is now plentifully sold everywhere; and it cannot but tend to an increase of vigour and health in our people, for which reasons the sale of pure milk ought to be encouraged by all possible means.

It is this enormously increased demand for fresh milk, coupled with the facility of railway transit, that is so rapidly changing the character of dairy farming; and it is well for the dairy farmer that it should be so, for it is far more profitable and satisfactory in many ways that he should sell his milk *as milk*, and not convert it into cheese and butter—as much of it, that is, as he can arrange to sell in that manner. This system, however, is making us as a nation more and more dependent, each successive year, on foreign cheese and butter, and it is more than probable that we shall soon become almost wholly dependent on them for these most useful and valuable articles of food. Owing to the greatly increased consumption of milk, the production of cheese and butter in this country is annually decreasing; and this is also the reason, the chief if not the only reason, why cheese factories have not gone on multiplying in number in the midland counties.

Milk is a most curious and interesting liquid—it is the only single article of food which will sustain life for any lengthened period—it is the only article of food that contains in itself all the elements which are necessary to the support of the body—it is at the same time one of the most delicate and beautiful of nature's products, and, as such, it needs great care in treatment. The composition of milk, pure from the cow, in the month of say July or August is as follows:—

Water	87.25
Butter, pure fat	3.86
Casein (containing nitrogen .52)	3.28
Milk-sugar	4.89
Mineral matters .....	.72
	<hr/>
	100.00

These proportions vary, not only in different breeds of cattle, in different animals of the same breed, in different periods of the year, according to the length of time which has elapsed since the cow calved, but also they vary with the quality and quantity of food.

The Channel Islands cattle are generally admitted to give the richest milk—if not in curd, yet in butter the richest. A friend of mine had a Guernsey cow last November, some of whose milk he tested in a cream gauge; I saw this sample of milk after it had been in the test tube some eighteen hours of so, and the gauge showed the very high proportion of 25 per cent. of cream! Ayrshires are supposed to give milk next in richness to that of the Channel Islanders; then the Short-horns, Longhorns, and so on.

The percentage of cream in milk was tested by another friend of mine, two years ago, in the six months commencing with June and ending with November, and the average each month was found to be as follows:—June, 8½; July, 8½; August, 10¾; September, 11¼; October, 11¼; November, 12½; the average percentage for the six months being 10¾. The milk from which these averages were obtained was produced by ordinary dairy cows with no special pretensions to breed.

The same friend made a record in the same year (1876) of the quantity of curd produced from 1,000 lbs. of un-kimmed milk in the same six months, with the months of April and

May added. This is the record:—April 90 lb.; May 94 lb.; June 96 lb.; July 99 lb.; August 102 lb.; September 109 lb.; October 112 lb.; November 116 lb. The average for the eight months was 102½ lb. of curd per 1,000 lb. of milk.

In another instance the average weight per month of milk which has gone to produce 1 lb. of curd has been found to be as follows:—April 10.36; May 9.45; June 9.69; July 9.95; August 9.88; September 9.64; October 8.29; November 7.30. The average for the season was 9.32 lb.

The time which Nature has chosen as the best for cows to calve is in the spring of the year; and in obedience to this natural law dairy farmers—not those who go in for the milk trade—commonly arrange to have their cows calving from the middle of February to the end of April; and in these cases the quantity of milk required to make a pound of cheese is generally greatest at the commencement, and goes on diminishing until the end of the cheese-making system. Under ordinary conditions milk will consist of about 87 per cent. of water and 13 per cent. of solids; but these proportions will vary according to the kind of food given to the cows; and in very hot and dry weather the proportion of solids in the milk will be diminished, because the cattle require to drink a larger quantity of water than when the weather is cold and damp. The “thinnest” milk is produced by succulent food, such as young grass on highly farmed pasture land, clover, vetches, brewers' grains, and the like; and the richest milk when the cows are eating good hay, supplemented by cake and various kinds of corn. The extremest points in quality yet ascertained are 9½ and 1½ per cent. of solids respectively.

The quality of really pure milk being found to vary so very much, and according to such a variety of causes, it will be seen how very difficult it is to determine with fairness whether or not it has been adulterated with water; but if it is found to contain over 10 per cent. of cream it may be reasonably set down as being of average quality. There are various methods of testing the quality of milk; but most of them have the serious disadvantage of requiring either considerable time or skill, or both these, in their determination. The test by analysis is the most exact; but this can only be done by a clever practical analyst, and it is necessarily a tedious and expensive process. The quickest test is made by the lactometer; but the fatal objection to this is, that it is easy to cheat it. The cheating may be done by simply taking a portion of the cream from the milk, and putting in some water in the place of it. Cream and water being each somewhat lighter than milk, it follows that the specific gravity of the milk is easily maintained by a substitution of water for cream. The simplest test is the common graduated glass cream gauge; but the objection against this test is that it takes at least twelve hours in demonstration, yet it is sufficiently accurate for all practical purposes. There is yet another method; I saw it tried at the International Dairy Show in Hamburg in the spring of last year. The milk is put into a glass tube similar to a cream gauge, and the tube is then corked up and placed securely in a socket in a wheel, which is afterwards caused to revolve at a great speed; the rapid revolution causes all the cream to collect at one end of the tube—the outer end—and the creamless milk at the other. It is a simple contrivance, speedy and satisfactory in action, the whole operation being completed in about ten minutes, or less.

Dairy farming in England seems to be in a transitional state. In many districts it is rapidly changing in character, whilst in others the change has already taken place. Mr. Sheldon, of Duffield, writes me to this effect:—“When we first sent milk to London, in 1870, there was no milk sent from Duffield but ours, and now there is not a dairy hardly for many miles round Derby that makes the cheese at home.” Dairy farming may be said to be of three kinds: First, the farms that are devoted to the production of a maximum quantity of milk for consumption in our towns and cities—farms on which the milk trade is made speciality to the virtual exclusion of other productions; second, farms which in part are devoted to dairying, in part to the raising of young stock, in part to grazing, and in part to providing a supply of “cross-bred” or “autumn calvers,” which are disposed of to the first-mentioned; and, third, farms which are devoted mainly to cheese and butter-making, though raising enough young stock for their own replenishment, and carrying also other kinds of stock, as sheep, though to a limited extent. The first mentioned of these depend for their maintenance of the dairy herd

almost wholly on cows which are purchased "on note," and they are commonly situated near to a railway or town.

So recently as ten years ago our great towns and cities depended for their milk supply on herds of dairy cows which were kept in many instances within the boundaries of such towns and cities, supplemented by others which were kept within an easy distance outside. The facility of railway transit has changed all this, and milk is now sent long distances by rail. In the instance I have mentioned, it is sent 130 miles, at a charge of one penny per gallon, the empty cans being returned free of charge. The enormously increased demand for fresh milk by all classes of our urban populations, which has been stimulated and mainly caused by the Adulteration Acts, has effected a marked modification in the methods on which dairy farming is conducted; and it has provided a new outlet for the energy of the dairy farmer; and, when properly attended to, the milk trade is the most profitable and satisfactory system to which he can devote himself. It will require very skilful management to enable a farmer to realise by cheese-making more than 6½d. per gallon of his milk; but there is usually a good demand, even through the summer, in the milk trade, for milk at 7½d. to 8d. per gallon, and this leaves a very substantial profit to the milk salesmen in the towns, for they charge their customers generally 3d. or 4d. per quart in summer and 5d. in winter; but, of this, however, they have commonly a farthing per quart to pay the railway companies as carriage. I cannot help thinking that the farmer hardly gets his fair share in the profits derived from the milk trade; the disparity between the price he receives and the price the public have to pay for milk is altogether too great, unless he is wholly relieved from the fear of loss by bad debts. Whether milk is intended for the milk trade or for cheese or butter making—especially when it is sent a distance to a cheese factory and by railway to a city, and in all cases in hot weather—it is of greater moment than many people think that it should first of all be well cooled and aerated. Cooling quickly after milking tends to cause the milk to remain sweet a much longer time than if cooling is neglected, because it removes the warmth, which is a rapidly acting decay agent; and aerating at the time of cooling is also a very important matter, because it removes the "animal odour," the "cowey smell," which, equally with warmth, hastens the natural decay of milk. The two operations are very efficiently performed at the same time by using Lawrence's refrigerato—one of the simplest and at the same time most valuable implements which a dairy farmer can use, in summer time. Cooling alone is not enough, nor is aerating but if both are carefully done, milk will bear conveyance quite safely for a long distance in the hottest weather. If possible, the milk should be reduced to a temperature of 55 deg. to 60 deg. Fahr.

Having considered milk in various aspects in connection with the purposes to which it is devoted, we may now proceed to consider the bearings of the question of the production of milk. The largest possible yield of milk is what most farmers aim at producing from their cows; but the opinions of practical men, as to the most effectual and economical manner of accomplishing this largest possible yield, differ considerably. The winter production of milk is in all cases followed out on one general principle, viz., shed feeding; but the summer production admits of the employment of two distinct methods, viz., shed feeding and roaming at large on the pastures. Hitherto dairy farming has been mainly confined to grass-land districts; and where the speciality is cheese and butter, and not the milk trade, it is almost invariably the custom to allow the cows out on the pastures for quite six months of the year. There is, of course, the least possible expense and trouble in this system, but not the largest returns; and yet, in essentially grass-land districts it is a custom which will probably never die out. But in districts and on soils which are equally well adapted to arable cultivation as to permanent pasture, it is more than questionable whether it would not be profitable to, at all events in part, adopt the shed-feeding and soiling system in summer time. This will necessarily be governed in a large measure by the climate and soil; but, if both these are suitable, the system of shed-feeding will admit of high-pressure farming and large returns all round; and it cannot be doubted that if these were general it would be better for the country at large than the at present too common hand-to-mouth system of farming. Yet, how can we expect tenant farmers to go in for high-

pressure farming until they have adequate legal security for the capital they would necessarily bury in the soil under this system? It strikes me very forcibly that the landlords of England stand woefully in their own light in withholding this security from their tenantry—but this aside.

Let us suppose, by way of illustration, the case of a farmer who has a farm that is equally well adapted for permanent pasture and for arable cultivation. The farm is situated within easy distance of a railway, by means of which the milk can be expeditiously despatched to some town or city, and the farmer intends to devote himself to producing a maximum quantity of milk for the supply of milk salesmen. We will assume that he has ample building accommodation, and a capital of £15 or £20 per acre to work with. It seems to me that he would make the most money by having two-thirds or three-fourths of his land under arable cultivation, and the rest partly in pasture and in meadow. His object in this would be to grow a quantity of corn, the straw of which would be useful in winter for chaffing; but he would also go in largely for green crops of various kinds for soiling in spring, summer, and autumn; amongst these he would grow vetches, clovers, rye-grass, trifolium for spring and summer, cabbage, and a few turnips for autumn and winter, and mangels for spring consumption. These various crops, properly arranged, would occupy his arable land; and part of his permanent grass he would devote to a crop of hay, and the rest of it to pasture for young stock, cows on note, and other purposes.

This system would admit of the largest possible number of cows being kept, and it would naturally lead to a large employment of purchased feeding stuffs, the use of which would rapidly increase the fertility of the farm, by means of which more and more stock would be annually kept. In the months during which the cows were receiving a large quantity of green-crop food, rice-meal and undecorticated cotton cake would be the best kinds of corn to use, because the one is cooling and the other counteracts the too relaxing tendency of the green food. In winter a greater variety of feeding stuffs would be employed; to wit—brewers' grains, bean and pea and palm nut and rice meal, maize, bran, decorticated cotton cake, along with roots and cabbages, and chaffed straw and hay. This would be the general principle of feeding, modified according to circumstances.

It is a mistake to over-stock a farm, greater, perhaps, than to under-stock it. There is a familiar proverb in Derbyshire, to this effect:—"You had better be over-rented than over-stocked." The proverb applies, however, to pasturing cattle rather than to stall-feeding them, for in the latter it is easier to supplement the food which the farm produces, by various purchased feeding-stuffs. But, where the farmer depends largely on these auxiliaries, it is expedient that he should know something about the laws of animal nutrition, or he may innocently enough waste considerable money in improper feeding. It may be taken for granted that good, succulent pasture grass produces the best and healthiest milk, though perhaps not the most of it. Where soiling is practised, lucerne is an excellent forage plant for any purpose; it grows well on deep, rich, light, loamy soils, and, as it strikes its roots deep into the ground, it is but little affected by a dry summer. For earliest spring soiling winter vetches, and *Trifolium incarnatum* where it answers well to cultivation, are perhaps the best and earliest crops; later on the lucerne, clovers, and rye-grass would come in; and later still spring-sown vetches, early turnips, cabbage, and the like. Where artificial and forcing feeding is practised it is necessary to remember that one kind of food having a definite composition produces flesh, and restores the waste of it that is continually going on in the animal system; the elements in this kind of food are known under the names of albumen, fibrin, caseine, gluten, &c., and are generally termed albuminoids. Another kind of food supplies the materials which produce heat in the animal system, and in this the elements are fats and oils, starch, gum, sugar, &c. And besides these two kinds of food, water and certain minerals enter into the composition of animals' bodies; these minerals are soda, lime, phosphorus, iron, &c., and they are present in all kinds of vegetable matter, generally in sufficient quantity.

It is necessary in artificial feeding of cattle to remember that the flesh-producing and the heat-producing elements should be made to bear a given relationship to each other according to the season of the year. If a cow is not in milk she may not need any more albuminoids in cold than in warm

weather; but she will need more heat-producing food. In summer she will require three pounds of heat-producing for every pound of flesh-forming food she uses, and in winter five or six; and she will live well on food in such proportions if she is doing nothing more than merely living. Twenty-five pounds of good hay per day would supply her with two pounds of flesh-forming and ten or eleven of heat-producing elements, and on this she would do well enough, along with the water *ad lib.* But when she is in milk she requires a much larger proportion of albuminoids, say two to five; so to keep up the flow of milk she must receive those kinds of food in which albuminoids bear a large proportion, as compared with heat-producing materials; these kinds of food would be meal of various kinds and corn generally, bran, oilcake, cotton-cake, and hay cut a little under ripe. The following table shows the proportions of these different elements in various kinds of food, and a careful study of it will enable a farmer to give his cows such a ration as will admit of the least waste and loss of money:—

	Albuminoids.	Starch, Sugar, Gum, &c.	Fat.	Manu- factured Value per Ton in Shillings.
Linseed Cake	28.3	41.3	10.0	76
Decorticated Cotton Cake	41.0	57.0	—	105
Undecorticated	24.0	46.9	—	58
Bean Meal	25.5	45.5	2.0	62
Pea "	22.4	52.3	2.5	62
Rye "	11.0	69.2	2.0	30
Rice	6.9	77.0	—	25
Palm Nut Meal	14.0	76.0	—	28
Wheat Bran	14.0	50.0	3.8	55
Oats	12.0	60.9	6.0	23
Barley	9.5	66.6	2.5	25
Malt	9.0	76.0	—	26
Malt Coombs	26.0	60.0	4.0	71
Alsike Clover in blossom	15.3	29.2	3.3	2
White "	14.9	34.3	3.5	2
Red "	13.4	29.9	3.2	2
Lucerne "	14.4	22.5	2.5	2
Common Meadow Hay	8.2	41.3	2.0	15
Pea Straw	6.5	35.2	2.0	8
Oat "	2.5	38.2	2.0	8
Barley "	3.0	32.7	1.4	8
Wheat "	2.0	30.2	1.5	8
Potatoes	2.0	21.0	0.3	7
Carrots	1.5	7.0	0.2	4
Turnips	1.1	5.1	0.1	4
Mangels	2.0	8.0	—	5

In using the foregoing substances, or any of them, the farmer will naturally be guided to some extent by the market prices of those of them that he has to buy. At present prices decorticated cotton cake is decidedly the cheapest and best article that a farmer can buy for milk-cows, especially in winter. In summer, when the cows are receiving a large quantity of green food of one kind or another, which is always more or less relaxing in its action on the bowels, it will generally be found advisable to use undecorticated cotton cake, which is an astrigent and counteracts any undue relaxation of the bowels caused by green food; it will also be expedient to use rice meal and any other of the meals mentioned in the foregoing list. Palm-nut meal is offered on the market at a reasonable price, and from its composition it can hardly fail to be a valuable article of food. Malt coombs are excellent milk producers; but as they are singularly forcing in their action, and have the property of swelling out into a large bulk when soaked in water, it is advisable to use them with discretion.

By keeping the cows in-doors all the year round, and soiling them in the summer time with various kinds of green food along with which he would use various kinds of purchased feeding stuffs, there is no doubt that the dairy farmer would produce the highest possible quantity of milk, whilst the system would tend rapidly to increase the fertility of the farm. It may be said that it is quite unnatural for cows to be kept in-doors all the year round, and consequently enervated. True enough this; but in clean and well-ventilated sheds there is

far less cruelty in keeping cattle under cover in fine weather than there is in exposing them in the foul; and many farmers only too commonly allow their dairy cows to be too long exposed to the cold blasts and dripping rains of early winter before they finally tie them up.

The system I have hurriedly sketched means high farming; it means a large income and a correspondingly large outlay; but is the only true system—it is the only way of getting rich by milk selling. And yet we cannot expect many farmers to follow it until Parliament has done two things for them. These two things are—immunity from imported contagious diseases, and due recompense for unexhausted improvement.

MR. M'COMBIE AT TILLYFOUR.

From Aberdeen, with its dull granite streets enlivened by the whistling of a sea-wind—Aberdeen, at which the northward-bound traveller says farewell to anything like speedy locomotion—it is an hour's journey, spun out wearily by a crawling pace and random stoppages, to Kintore Junction. Here the solemn-paced North train lands one on the platform to the unmusical note of a red-nosed porter's "Paa-sen-jairs fur Aalford change kare-ages." It is not Alford, however, which happens to be our destination, but the next station to it, Whitehouse; and by the time our rusty old engine, with many gruntings and groanings, has carried us over a country bleak and bare in spring dreariness the Scottish cold has eaten through Ulster and wrap to the very bones. In the carriage in which we happen to be, a couple of red-faced loud-voiced farmers have been talking for the last half-hour of "sweet nowt and gey coys," till our Southron brains have grown dizzy under the ponderous Doric, and we begin to realise that we are at the Home of the Polls. It is Whitehouse, and here is Jamie Glass and his big wagonette waiting us. Mr. M'Combie, the tenant-farmer, as he persists in ranking himself, in spite of his lordship, has always despised liveries and trappings, and Jamie Glass's honest soul has been vexed with neither. The horses are no too showy park steppers, but stong-boned blacks, without much beauty about them, who whisk the heavy carriage up the steep hills and woods of Tough as if it were a doll's phaeton, and who, Jamie whispers to us confidentially, as we seat ourselves beside him, can do their mile in 2.30; "at least the pouy can," pointing to the off-side, "and the horse is na muckle ahiu."

As we sweep up the short steep avenue Tillyfour raises itself above us, amongst its quaint old elms, which the crows make murmurous with a prodigious cawing, bold and stiff against the dark mountains on the south. It is a big, bare, patchy, yet not uncomfortable-looking house. Mr. M'Combie is a gentleman of the old school, and believes in old-fashioned hospitality. With his snow-white beard and hair fluttering in the wind, he meets us at his door with hearty welcome and genial face. The interior of Tillyfour is not more pretentious than its exterior. In the plain oblong hall are a score or so handsome royals, a few illustrated mementoes of showyard triumphs, and a half dozen old swords of the '15 and '45; for "the Grazier King" has, despite himself, Highland ancestors in sufficient number and of sufficient antiquity to put to shame many a new gilt coronet. Preceded by our host we enter the dining-room, a spacious chamber, hung from floor to ceiling with paintings of bygone champions. Here over the massive sideboard the International Poissy Champion; beside him stands the only alien in the room, a handsome fawn greyhound, winner and divider of the old Elgin Stakes, for Mr. M'Combie, in his youth, loved a horse and a dog and a gun as heartily as any; over the mantelshelf "Black Prince," in the place of honour, looms majestically down on us; on his right his own huge black head frowns on his visitors; and on his left "Old Charlotte," grandqueen of the Tillyfour herd, fixes her wrinkled old head to the wall. All round are pictures of famous polls, black and glossy in paint and gilt; and in the fawn, and one or two more, we notice the firm touch of the now famous Cassie. It is thus and here that Mr. M'Combie takes his meals, surrounded by his famous blacks, each picture telling him its tale of hope and fear, toil and triumphs. His cups and medals have yet to be seen, and we proceeded upstairs to the drawing-room, where they are laid out for inspection.

On the stairs are more bovine heads, drawn from Europe,

America, and Africa by Mr. McCombie's nephews. Here is a huge South African bullalo's horns mingling with those of an American elk, and finding a general home amongst the polls. The drawing room is large and many-windowed. It is empty now, but in summer-time curious visitors of all ranks and countries leave it seldom silent. Ranged on a strong table are cups and medals galore; they are usually transported below and set forth in due order for the inspection of visitors, but here they look in their confusion a Golconda of silver and gold. About twenty pages of Mr. McCombie's interesting *Cattle and Cattle-breeders* are devoted to the bare enumeration of the prizes he has gained in local, national, and international showyards, and this is the chamber in which the chief of them are massed as on a silver-shop's counter. In the centre Prince Albert's *prix d'honneur* of the Poissy show, massive and beautifully designed; around, some thirty other cups and pieces of plate, and over two hundred gold and silver medals. Here too are mementoes of her Majesty's visit in '72 in two magnificent portraits of herself and Prince Albert subsequently sent from Windsor. Mr. McCombie tells us that the Queen, having surveyed the stock and herd, and taken a cup of tea just where we are sitting, requested to be shown the great head down-stairs, at which we were looking, and which she had seen in the full bloom of his triumph during his Windsor visit. It is evident the flavour of "Black Prince's year" lingers with our host yet. He tells us, with probably as much pathos as he is ever likely to show, how the firm to whom he sold its carcass refused to return its head, according to their agreement; and now, when they were compelled to relinquish it, they frankly confessed that it was their intention to stuff the hide for a show, and, after making their fortunes by it, present it to the Emperor of the French. On the same floor we find "the master's" own sanctum. Here from daybreak he is hard at work, writing or dictating, in an old dressing-gown, big slippers, and silver snuff box. Here, too, every evening he gathers his household in rigid Presbyterian worship, simple readings, and rough earnest prayer. Up every morning earlier than his earliest housemaid, his correspondence and breakfast of porridge and milk are finished by nine; then the blacks come to the door, and he drives away to his outlying farms or distant market. Probably his Inverness cloak and white pony may be seen in the evening riding over the home-farm.

Presently we put on our hats and walk up to the "steading," where Mr. McCombie transfers us to James Whyte, his old and trusty "grieve," or bailiff, and whirls away with the blacks to some local meeting. The steading and farm-buildings consist of a large hollow square, in which long byres, large open courts and boxes, and a powerful water-mill and barn run into and intersect each other in a regular and simple plan. On the south side of the square there is a recently erected row of courts, half-built over, and flanked at either end by the grieve's house and bothy. In these courts we find half-a-dozen bovine mammoths in training for next Smithfield and Birmingham Exhibitions. Last year Tillyfour was unfortunate in its fat stock, two of the best having been poisoned by accident or design. Indeed, showing, James Whyte tells us, is "terrible work," and costs much more, even to the most fortunate, than it can gain. An average show-beast in proper training, he remarks, costs at least nearly £1 per week, and in a large establishment the expense is enormous. Now that her Majesty and the Prince condescend to be competitors, cattle-showing is becoming so fashionable, difficult, and expensive that with the best luck it can scarcely be a profitable speculation. In the courts of the main building we find the ordinary yearling and two-year-olds of the herd *tout a fait noirs*, as befits Tillyfour. "Black, all black," is the motto here; and bitterly does Whyte lament a shapely heifer of the genuine "Pride" blood who has cried back to the original Angus red; she is an outcast, a pariah, and treated as such despite her breeding.

In the long lines of enclosed byres we find the breeding cows tied up, where in autumn the huge hecatombs that astonish the London Christmas market with their deep flesh and high prices are carefully "ripened" on turnip and cake. Scattered through them and in the boxes are the celebrities of last year—here the championess of the "Highland and Agricultural;" there the cup cow of "the Northern;" and here again we come upon half a dozen carefully tended beasts proud and glossy in their spotless black. It is these which have since so triumphantly maintained the Tillyfour prestige at Paris.

Two International Cattle Shows have been held in France; once Tillyfour carried the blue ribbon to Scotland, and once it was torn from its grasp by the casting vote of the president. The days are short and we have had scant time to view the farm when James Gless once more appears at the door for us. On the home-farm itself of Tillyfour Mr. McCombie's own property, there are about six to seven hundred acres; and on "Bridgend," which he rents from his cousin of Easterkene, another patron of the blacks, there are about another three hundred. The mountain soil is cold and late, and needs all the skill and science—the fame of which attracts students from all countries to his farms—Mr. McCombie can command to yield the great crops of turnips and corn which nourish Tillyfour bees.—*The World*.

LAND SHARKS IN MANITOBA.

Under the heading of "Facts for Intending Emigrants" *The Collingwood (Ontario) Messenger* of May 31st has a long article enlightening intending emigrants on the many dodges now going on to get people to emigrate to the "Prairie Province." Its information it guarantees to be trustworthy, having been obtained from a gentleman who has spent nineteen years in the North West, and who knows the country from the Red River to the Rocky Mountains. Nearly all the land fit for settlement is in the hands of speculators, who bought it for about fifty cents per acre, and are now trying to sell it to emigrants for enormous sums. The greater part of these land sharks are described as entirely unprincipled "men, who, if they could, would cheat their own grand father!" In parts the climate is too cold for farming. The majority of settlers in Manitoba are men who do not intend to remain permanently, but only until they have sufficient settlement duties to entitle them to hold their lands on speculation. There are enormous drawbacks, not forgetting the pests, and the ivory heavy rains. The land-sharks have an "organized system of misrepresentation," in order to induce people to forsake comfortable homes for the hardships and uncertainties of the North West. Very little of the wheat exported is grown in Manitoba, but is bought in Minnesota, and shipped to the East to delude the credulous and unwary. The speculators are making vast sums by deceiving emigrants, foolish enough to believe their exaggerated statements. All the grain sowed in April this year was destroyed by the heavy rains, and unless the grain sowed since does better there will be no crops, and Government will again have to step in and save the settlers from starvation; not five in a hundred farmers, previously assisted, have yet redeemed the mortgages given to Government during the locust famine. The reports of heavy shipments of grain to the East are purely the lying off-spring of land-sharks. The chief portion of the wheat sold in the East as "Manitoba wheat" was grown in Minnesota. Thousands of men in Winnipeg are without work, and utterly destitute. Many are selling their spare clothing to get funds to leave the Province. Any person, we are told, who will leave a comfortable home for a farm in Manitoba, will make a mistake he will sorely regret. "Manitoba" in short, is not the "land of promise" which it is painted, and half the glowing accounts originate from land speculators.

WATER FOR SHEEP.—What an unprofitable mistake it is to suppose that sheep do not require water. We invariably give them the opportunity of settling that question for themselves, and it is surprising to see how much they drink, especially milk-giving ewes, and also all sheep when eating cake, meal, &c., in addition to their green food. I attribute my trifling loss in sheep and lambs to their having constant access to water by means of an iron tank watercart (Croskill's) which I have used for thirty odd years.—J. J. MECHT.

SUNSTROKE.—Dr. D. G. F. Macdonald writes to *The Times*:—"The heat is so intense that great care should be taken to prevent sunstroke. We have already had early warnings. If out-door labours would put fern or cabbage leaves inside their hats, or wind bands of rushes, vetches, or green herbage of some sort around them, there would be no cases of sunstroke. By this means the heat is strained through herbaceous substances and is much less oppressive."

ROYAL AGRICULTURAL SOCIETY OF ENGLAND. MEETING AT BRISTOL.

(From *The Mark Lane Express* of July 15.)

The show on Durdham Down which comes to an end this evening is one of the most successful ever held by the Royal Agricultural Society. We gave last week the number of the entries of live stock, compared with the entries of six previous years, which showed that only at Bedford in 1874 and at Birmingham in 1876 have more animals been present in the showyard. The show of implements has been greater than at any previous meeting excepting that of Liverpool last year. The weather has been favourable on the whole, and the attendance has been sufficient to ensure financial success. On Wednesday, the first day on which the whole showyard was open the visitors numbered 2,119, a great falling off from the attendance on the corresponding days at Birmingham, with 6,891 and at Liverpool with 6,778. On Thursday 19,102 persons entered the showyard, a number on the first half-crown day only exceeded at Liverpool, where 25,074 entered. For the corresponding day at Birmingham the number was 18,889. On Friday the visitors numbered 22,404, as compared with those at Liverpool, 22,981, and at Birmingham 17,124. On Saturday, the first shilling day, 48,214 persons paid for admission, against 51,313 at Liverpool, and 58,313 at Birmingham on the corresponding day of the show. A good attendance is expected to-day, the last of the show.

The Prince of Wales visited the show on Friday, and Bristol was elaborately decorated in honour of his Royal Highness. A report of the visit appears in another column. A fatal accident occurred in the Showyard on Wednesday, when an attendant to Lord Ellesmere's horses was kicked by a mare which he was leading, and died shortly afterwards. A liberal sum has been collected for the benefit of the poor fellow's family.

THE HORSES.

Hydrophobia is unknown in some despotic countries where dogs run free; therefore we may conclude it is through being tied up and brooding that so many go mad in a land of liberty. In fact we must all have our fun and outings let whoever may pay the piper, or this island would soon be one great lunatic asylum. During the Cochin China poultry mania, a bird that was to supersede all the feathered breeds of the farm-yard, happy was that man thought to be who possessed the largest Cochin China cock and two hens in his county, while those who had the selling of them did not forget to noise about the fabulous sums given by those who expected golden eggs, a mania which far exceeded that of the individual who, after witnessing the performance of Punch and Judy, bought the *Ugnum-vite Roscius* for five pounds, and on getting home and finding, in his hands, Punch had nothing to say, declared he was a very silly fellow—Punch or his purchaser, which ever you please, reader. When people were first startled on reading of the thousands given for thoroughbred yearlings, we soon after saw several agricultural friends on ground they had never trod before and expressing surprise on seeing one, he asked, "Do you know of a nice thoroughbred mare for sale? we must go with the swim you know." And on our telling him we did know of a friend, in his own line, that had thirty, and several others who had spent fortunes in breeding thoroughbreds, and though some had turned out winners the breeders did not get the fee paid for the services of

the stallion, and that the long prices they read of were, with few exceptions, obtained by breeders of note in the swim, he thanked us and did not go with the swim. Now where there is a chance of winning a race worth in stakes and forfeits between six and seven thousand pounds every year, and a hundred thousand in bets, there is some excuse for giving two or three thousand for a "promising-looking" yearling, but on the turf, after "judging from appearances" and the judges have backed their opinions, by buying them, then comes the proof, and after that the reckoning, when some that fetched their thousands at the hammer turn out to be not worth as many shillings, and the little thought of worth all the money; but we go on year after year judging by appearances without any proof that we are right or wrong, excepting that it occasionally ekes out the largest and those which fetch the most money, like the Cochin China fowls, are not always the best. What is this but blind hookey, and going in for fabulous prices but gambling, and as for tricks on the turf, are not some of us who have taken farms without a lease up to the "confidence trick"? Therefore we should not leave an old track for every Eldorado we hear of, or be too ready to turn our backs on a good, tried, useful sort for every whim of ever-changing fashion, and when some enormous sum, out of all reason or belief, said to be given for an animal astonishes us and makes our mouths water to get one of the sort, we should think of the individual who tore the immortal Punch from the arms of his loving Judy, and that we may squeak long before the wheel of fortune brings us such a customer, and that in our hurry to buy the goose which is to lay the golden eggs we may prove the geese that lay them. We have said this about high prices as we have continually whispered in our ears that such a horse was sold for so much, which has nothing at all to do with his value, but depends on the length of the fancier's purse, and some will have what they fancy. In George the Fourth's reign a noble youth fancied the form and action of the Columbine of the day, and asked a brother swell if he should marry her. "Marry Columbine!" exclaimed he; "I would just as soon think of walking arm and arm down Bond-street with Harlequin." "Then," said the smitten one, "I will marry her to-morrow." The owners of agricultural horses represent three parties—the English, Clydesdale, and Suffolk—and some are quite as much infatuated with their sort as the noble youth was with his Columbine. Scot swears by Scot, Shire by Shire, and Suffolk by Suffolk, and who, like the Conservatives, Liberals, and Whigs, we can trust to their probity but not to their prejudices. Therefore the Royal Society, instead of maintaining three distinct parties in power, make up one party of the three—Mr. Plowright to watch over the interests of the Shire men, Mr. Crisp for the Suffolk, and Mr. Montgomery for the Clydesdales, who in the sequel proved he came too far north for the other two, by persuading them to agree to a verdict which was received with cries of shame, when the winning colours were placed on the head of about one of the commonest looking animals that has been awarded a prize in a showyard, while good looking nags like Mr. Miller's Princess Dagmar, Lord Ellesmere's Empress, Miss Muir, and Topsy, Mr. Slatter's Bonny, Mr. Robinson's Ginger Brandy, and others stood in the ring. She is a bay of no character, and in top like a narrow donkey, but a neck and shoulders

that would disfigure an ass, and quarters set on as if they wished to dissolve partnership with the trunk. The only things good about her are her head, and a set of big limbs, which she cannot use. Esop tells us it is the belly that carries the legs, and she has no middle. It was in the mixed two-year-old class for fillies, and she figures in the catalogue with this pedigree: *sire Topsyman, breeder unknown*, which makes us think that she must be an Irish Clydesdale, and that it was a sympathetic verdict and nothing more. It is a pity Mr. Plowright and Mr. Crisp were not shown the list of judges before they entered the ring, as at the end of Mr. Montgomery's address they would have seen N.B. (nota bene). They were an unpardonable long time in coming to a verdict, and when the nags were run up for the last time, one of Lord Ellesmere's men held his filly rather long by the halter, she kicked out like a cow, and caught him just below the ribs, and he fell on his back with his head against a post—his hands went up and anyone could see that he was in agony for a minute or two, when he swooned. He was taken to the infirmary, and in a hour after the telegraph was at work to inform a mother of five children that she was a widow. He was a man, Captain Heaton and others told us, that was liked by everybody, and very fond and kind to animals—a really good fellow; in fact one of Nature's aristocracy, a man with the innate feelings of a gentleman, that would not wilfully hurt the feelings of another, and is to be found alike at the plough tail as on a throne. And it is in collar and at plough, and not out of collar and playing the gentleman in a showyard before three judges of form and action, who cannot judge of the heart, that we can fairly tell whether a cart horse will throw his whole weight into his collar from morn till night; if he will we may rely on the man with the "innate feelings of a gentleman," seeing that his collar does not gall. Therefore, if fortune smiles and enables us to start a team, let it be power, wisdom, and goodness; for the former, without the other two, is an unruly, tyrannical brute. We think all societies which give prizes to improve the breed of agricultural horses—as they differ as much as the soil, some light and some heavy—should pick out men who know the requirements of the district, and not as we have seen men from rich heavy soils with luxuriant pastures to teach those who farm light land, the sort of horse they ought but cannot breed. Have a separate class for dray horses by all means, but do not, as some of the shire men would have it, give prizes to nothing but drayhorses, as if all the world was a brewery, because they fetch the highest price in the London market: for if any one will stand on one of the bridges they will see that the great massive dray horses and men to match, looking as if they were stuffed with grains and beer, are very few and far between when compared with the numbers of smaller draught horses which rattle along in heavily laden vans, some four in hand. On a run through the Society's boxes and stabling, 138 in a row under the same roof, and looking at everything connected with the horse department, we can say with Mr. Misty in his after-dinner speech, that it is a society of which society may be proud, as well as the managers of the society; and if any society can benefit society that society is this society. (Hear, hear.) There were three hundred and fifty horses entered, and a very few absentees, the strength of the show being the riding classes, as the agricultural nags in the flesh were under a hundred, there being about a score of the Clydesdales and a dozen Suffolks. The Shire horses made a fair show, but not so grand as at Liverpool and some other meetings, the agricultural stallions foaled in the year 1876 (not qualified to compete as Clydesdale or Suffolk), being represented by an entry of twenty-one, of which sixteen came into the ring, the absentees being Noble Tom, of Surrey;

Young le Bon, of King's Lynn; Admiral, of Worsley Hall; the Wonder, of the West Norfolk Cart Horse Company, and Waxwork, of Downham Market. Young Prince of the Isle, by Prince of the Isle, dam by Honest Tom, a very taking colt, deep, and nicely formed, with quick firm action, but a trifle light below the knee, was first at Bath and West of England meeting at Oxford, and here also, beating Grand Duke, by Wark's grey horse, dam by Nix's Captain, and we are very glad that Mr. Wark had a grey horse that could get so promising a colt as Grand Duke and such a mover. Young Drayman, by Dayman, dam by Lincolnshire Lad, is a useful, lathy horse of fair form, but rather shelly in his quarters, and high on the legs at present. Then Mr. Taylor's black Wonder, by Master's England; Wonder is a good-looking colt of nice size and quality, compact, powerful, and active, though a trifle light in bone below the knee. Then bone differs in quality. Mr. D. H. Thomas's Queen's Own, by Prince Arthur, dam Blossom, is a useful, lengthy, agricultural colt on a short leg. Mr. E. Barbidge's Protector, by Pretender, out of Rose, very nice looking with good loins, ends, and limbs, and Mr. D. Ashcroft's Disraeli, by Honest Tom, dam by Blaze, Mr. Hawkin's Young Nobleman, by Sampson, and T. Matty's R. S. O. were very fair colts. The agricultural stallions foaled before January 1st, 1876 (not qualified to compete as Clydesdale or Suffolks), were a good class, the judges giving first honours to S. Davis's General, a five-year-old roan by Captain, dam by Pleasant, and a very well made, nice stamp of horse; he distinguished himself at the Bath and West of England, when held at Hereford, and is well known at the Royal. The second was King of the Vale by King of the Valley, of which we said, when he won a week or two ago at Oxford, that he was a grand-topped horse, but wanted power in his second thighs, and was small at the knees; then his legs do not look like wearing ones. Pride of the Shires by Young England's Glory, dam by Owen's Honest Tom, a thickset, powerful horse, with drooping quarters, was third; while Nonpareil, the first at Birmingham and second at Liverpool, long, low, and grand, with four good limbs, and Statter's Champion, were left out of it, the latter on account of a slight tenderness in his feet, which never were the best, with Captain Betts's Sir John Falstaff by Wiseman's Wonder, dam England's Glory, a very handsome mottled grey with a sweet head and neck, deep rib, and compactly built on short legs, and looking smaller than he is, he being sixteen hands three inches high. Mr. J. Braddick's Shropshire Friend by Farmer's Friend is a neat handsome horse, and G. Seymour's Lord Nelson by Lord Lion light and neat. Sir J. H. G. Smith's Prince Imperial by Young Napoleon is of good form, wide, and on a short leg. Then there were the short, thick Young Champion from the Blackmoor Vale, Mr. Hubbard's The Sultan, Mr. Cox's Lord Canning, and some others in a class of eighteen, three not being on the ground. The Clydesdales foaled in the year 1876 were not grand, Scotland Yet by young Sir Walter, dam by Kate, is a raw, big-boned short, thick-thighed laddie, more useful than ornamental, and with "grub" likely to grow into something very powerful. Prince Charlie by Paragon Tom, dam Guess by Young Clyde, a nice sized horse for a light soil, and Waverley by Lochburnie Crown Prince, is a handsome, lengthy short legged little horse with a slack back, still very useful for the farm, while Cash Box by Topsyman, we think it would have paid its owner to have drowned rather than bring such a poor, narrow, lanky, slack-backed creature into a show as a specimen of Topsyman's stock. This was the lot. Those foaled before January the 1st, 1876, were a nice little class of six including the well-known Topsyman by Wonderful, dam by Sanson, which is a grand horse and a cheerful mover, the second being

the Duke of Beaufort's neat stamp of Clydesdale Paragon Tom by Tom of Lincoln, and the third Baronet, by Messrs. E. and A. Stanford's The Duke, out of their old mare Venture, a very useful, well made, handsome horse with good limbs, and taking after his sire, the well known winner of several second Royal prizes. Lord Fitzhardinge's Prince of Clydesdale, by Prince Christian's dam, by Darlin, a mealy bay with a goose rump is a strong built useful horse. Mr. G. M. Oliver's Bobby Barus, by Old Bobby Burns, is a nice horse but pu-toed. One more made up the class. The two Suffolk two year old stallions, Farmer's Glory and Reliance, were fair specimens of the chesnuts, and in the aged class of five entries, Major Garretts (two being absentees), Mr. Walton's Royalty by Magnum Bonum, a second at Liverpool, is a really beautiful horse and made the other two look small indeed. There was a very good lot of agricultural mares (not qualified to compete as Clydesdale or Suffolks), Countess by Lofty, being a grand mare with a capital middle, on good short limbs, the second being the well known Dainty, the eup mare at Oxford and the third a nice dapple grey mare, Queen of Tramps, by Al, the highly commended being the deep ribbed mare, Diamond. The others were Mr. Miller's Princess, Mr. William's alle, Mr. Thomas's Darby, Mr. Howard's Pink, and Mr. Haydock's grey, some well known in the ring, and others not wanting in form and good looks. Mr. Beart's Lioness was not on the ground. Then came the Clydesdale mares in foal or with foal at foot, a nice class of nine; Jean by Loch Fergus Champion being a very good mare with capital limbs, as was Mr. Loder's Jess by Lucks' All the reserve number, the second being the lengthy Mrs Muir; now in her thirteenth year and the winner of five first Royals and one second; another from the same stable was the very powerful compactly built Lady, and the third a handsome mare of form and action called the Dandy, a very good name for a mare as there is something effeminate about a Dandy. Then Jessie, a very neat pretty mare from Ashurst Steyning, did not stand much chance with the bigger ones. Colonel Loyd Lindsay's Isabella is of good form, and L. Drew's Young Rosie light and neat with character. There were four fair looking Suffolk mares, the Duke of Hamilton winning with a lengthy fine one by a son of May Duke, dam by Hero, the second was the small but neat Belle of the Ballet by Warrior. Mr. Byford's Doughty and Mr. Franklin's Brag were the others. The two year old agricultural fillies of any breed we have noticed, some objected to mixing the breeds—we should not if there were prizes for heavy and light horses, and the judges were to judge by time so that they should not keep people half the day waiting for the verdict while each stuck out for his sort. Four three year old fillies competed in a mixed class, the first going to the Shire bred Miss Linton, rather a nice filly, the second being a Bristol Countess but not up to much, nor was Mr. Drews N.B. breeder unknown, while one gentleman observed that "Fat Emma," a mare of Mr. H. Miller's, ought to have had a place.

We now quit the thoroughbred cart-horses for the thoroughbred stallions, and find Mr. Digby Collins, whose name, we think, we have seen as the author of a book on the horse—we may be wrong, but cannot be far out in wishing that we had as many guineas as there have been books written on that noble animal—telling us how to crop him, castrate and dock him, figg, blister, and fire him, physic, thrash, and dig the spurs into him, and, above all, full directions how to sit him—which is easier said than done. Mr. Thomas Pain, whose ringing voice is so well known at Tattersalls, and Mr. Thomas Parrington, the late model Secretary and manager of

the Great Yorkshire Show, all lovers of fox-hunting. There were twelve thoroughbred stallions entered, Lad-broke being an absentee, comprising the following well-known in the ring:—Citadel, by Stockwell, out of Sortie by Melbourne, which is well known as a first Royal; Red Cloud, by Maccaroni, out of Potomac by Newminster, a very useful country stallion, that can move when in the humour, as we saw him step well when on parade at Bath; Claudius, by Caractacus, out of Lady Peel by Orlando, is no hunting stallion, as he has no withers; and Preakness is a Cleveland to look at, and showed like one. He is by Lexington, out of Bay Leaf by Yorkshire, and bred in the State of Kentucky. He could gallop, which shows that horses go in all forms. The verdict was not unanimous, as we heard one of the judges say that he hoped they would not saddle him with giving such a brate a prize! Barbillion, by Pretty Boy, out of Sozone by Ionian, bred in France, was more to our mind, and a nice lathy, elegant horse, with capital shoulders and clean limbs, which he knows how to use, for on his leading-rein breaking he galloped down the ring in a beautiful easy style, but, trying to stop himself on getting near the folding-gates, he slipped up on his side and went dashing through the gates, to the great danger of the crowd. Thunderer, by Thunderbolt, out of Homily by Surplice, has plenty of bone and looks hardy, but we are not in love with him, although a useful horse for country purposes. Master Richard has gone off wonderfully since Oxford, and appears shrunk and more leggy. He is by Teddington, out of Energy, by Weatherbit, a slashing looking horse, but bad to meet. The others we have not met in the ring were the grand, lengthy-topped Holdenby, by Lord Clifden, out of Blauche. He is a dark chesnut, and does not take after the handsome Lord Clifden, and has small arms and knees, but very short, thick thighs. There is too much of him, we think. Elton, by Ivanhoff, out of Hopbine, we have seen before, we think, who reminds us more of a hunter fit to go than a stallion. His sire is not unknown to the ring, having taken several prizes. Crown Prince, by Newminster, out of Princess Royal by Bay Middleton, takes after the latter, and has a middle like a crooked gun-barrel, and a very little bigger. Trictorin is a light, wiry-varmint looking horse, with groggy legs, and "a bay 8 years old, breeder unknown," therefore no pedigree, and no more right in the ring than a donkey.

There were three absentees out of twelve in the roadster stallions, and only three in the contest, as the others were very moderate. The fight was between the three Yorkshire horses. Star of the East, a grand roadster, with flat legs and capital action, which has always beaten the second, and in size is like a florin to a shilling; still a nice well-made horse is Charlie Merrylegs, and a lively goer, and nothing to find fault with, excepting that he stands a little back at the knee. Sir George Wombwell is not so compact, and coarser than the other two, but a nice roadster, and as well known in the ring as the others. The reserve was Star of the West, by Paul Clifford, out of Gatheby by Jack in the Green, Paul and Jack being thoroughbred—in fact the horse shows breed, and the worst part about him is his shoulders, which his leader pointed out to us as beautiful!

Mr. Wilson had all his own way in the pony stallions, the veteran Sir George being, as he has for these many years, in his usual place, Lord Derby, by Perfection, being second, and Sir Douglas, by Sir George, third. The other three were useful. Mr. Wilson again accomplished the same feat in the next class with a four-year-old, a three-year-old, and a yearling—all by Sir George. We heard that he had sold four for a thousand guineas! Give

up farming, reader, and breed ponies, when you come into ten thousand a year and a park!

There was a good class of hunting brood mares with foal at foot, headed by the elegant blood-like and hunting-like Snowflake, so well known as a prize-taker in Yorkshire, beating another well-known mare across country, but lighter, and not of the grand hunting character of an old black, wiry mare, Cassiowary, from Tredegar Park. The third (Hoyden) is a deep-ribbed mare, and has been a good performer across country. The Earl of Coventry's Queen of May, Captain Croker's Nelly, Mr. H. Miller's Belle, Mr. Sargent's Duchess, and the Duke of Hamilton's Flirt were not wanting in hunting character. In a class of fifteen Colonel Barlow's Wild Rose did not appear; and Mr. Freeman's Flirt, the champion mare at Bath in 1877, was not noticed. The Duke of Hamilton was to the fore in the hackney brood mares with Spotted Mare, a roan of a rare stamp, and nice quality and action, which he bought in France (age and breeder unknown), Lady Mayoress, a neat, cobby mare, playing second, and a lengthy, clean-made mare, with knees and hocks near the ground, of Mr. Howard's, third. Mr. Hutton's Alice, and Mr. Robinson's Corisande, were both clever-looking hackneys. We could not see much merit in the long, straggling Surprise. Sewell is a nice, lengthy, cobby mare of breed; and Judey neat, but small. Mr. Wilson was again first and second in pony brood mares with Lady Polo, a nice cobby mare, and The Pet, a clever chesnut, with a good head. Blackdown (the third prize) and the reserve number, Polly, were ordinary animals. There was a middling class of two-year-old hunting fillies and geldings, the Colonel being of nice form, and showy. The second, a bay by Empire, that was first at Oxford, we are not in love with, though a fair animal; and Trinder was moderate. Joker, from Easton Park, was bought at York after winning a yearling hunting prize, and is a neat, short horse, but has not improved since we saw him this time last year. There was a roan or two by Rapid Rhone, strapping colts, and one in colour like the old horse, but queer-looking forelegs. It is hard to say what the Badminton roan, by Cock Robin, may grow into; there is plenty of him. Lady Jane, the Oxford cup mare, as the best animal in the yard, headed the three-year-old hunter mares or geldings. Birds Eye, a neat brown, of hunting form and action, which we have seen before at Skipton or York, was second, and Andover, a light back-ribbed one, third. The reserve, a Birdhill filly, shows breed, and Mr. Thomas's Charlie was the best of the others to look at. In a class of thirty-one four-year-old hunters there were several very nice ones, the contest at last being between the Gentleman (with Mr. Goodwin up), which looks like crossing a country, and shows plenty of breed, with nice form, excepting a little slackness in the loin; while in all his paces there was plenty of liberty—at least as much as we can expect in a double rein—and “we all know what that means,” as the young lady observed when her mamma closed the door and left her with her lover, for “a young man married is a young man marr'd.” Look Sharp, a stout hunting gelding, and first four-year-old at Oxford, was second; Boynton, the well-known prize three-year-old of last year, has thickened and dropped to his leg, of which he has four white ones, beating Lambkin, a merry mover of Major Barlows, that was highly commended, which does not pay travelling expenses. Mr. Deacon's Snapdragon, Mr. Carver's Chance, Mr. Bevan's Widgeon, Mr. Trist's Exminster, and Mr. Keevill's Barmaid were some of the best movers which caught our eye. Post Haste, by Make Haste, the sire of Lady Jane, was very neat and a goer, but not quite of hunting character. We now get on to the five-year-olds and upwards—no we don't—and hope that the judges are not going to turn

horse-breakers, as we have often said ride one ride all, as it is unfair to the others to ride one and say “He goes so oily, and well under you.” Then man and horse do not understand one another until they have had time to get acquainted, and we have heard it said of a very good horseman when judging, with plenty of room to gallop in, “He may be able to pick out the best, but he did not know when he had a good one himself,” which is an old story; for a horse that will perform brilliantly over a country under one man, in the hands of another, equally as good a horseman, often cuts but a sorry figure. Thus it is that many a high-spirited youngster, impatient of control, whose lot it is to fall into the hands of those who do not know how to manage him, gets ill-used and a bad name, and so the horse which in proper hands would have made a gallant gentleman is condemned to years of the worst drudgery. The class reminded us of the world we live in, for there were some very good, some very middling, and some very bad, and some that had no business in the ring at all. Rosalind by Laughing Stock is neatness personified, and a sweet mare—“sweetest nut, sourest riad”—but not as a hunter, as she lacks that squareness which gives grandeur, and we think her place is in Rotten Row, with the pride of the park on her back, the fair Lady Elizabeth Mug, and that Goldsmith had more hunting character, and Mr. Battam's black gelding by Gemma de Vergey. We had almost overlooked the third prize, a good-looking chesnut, Primrose, from Frenze Hall. Mrs. Edwards's Bob was of nice hunting character, and some of the best of the others were Mrs. Crew's Dora, Mr. Young's mare by Gemma de Vergey, Mr. Green's Surveyor, Mr. Hill's Donablanc, Mr. Hill's Paris, Mr. Midward's rather leggy chesnut, Mr. Harper's Jack, Mr. Young's bay mare, and Mr. Osborne's The Confessor. Lord Tredegar's Cross Stitch, a horse we noticed at Islington, though in the catalogue, we did not see. Winder scored his third Royal, as a weight-carrying hunter, and the Duke does not intend exhibiting him again, we were told, Brown Stout being second—a horse that has been going the round of the shows for some time. We don't like Stout. The third was Doneraile, by St. Leger, a useful horse, that wants another year. There was something good about the old-fashioned screwdriver, and Mr. W. Balthway's Bridesmaid, and Mr. Cooper's slack-backed Crown Prince, which can gallop. This brings us to the hackneys, up to not less than 12 stone, the first colours going to a neat light hack, Yorkshire Lass, the second to a pretty grey, Comet, and the third to the very clever Actress, Mr. Symond's Prince Charlie and Mr. Arkwright's Osman, the first and second in a fair class at Oxford, being out of the hunt. Osman, as neat a hack as one would wish to see, was drafted with the discarded. Little Lady, the reserve number, is very clever. Miss Confidence, from Manchester, was vulgar and dished. The Dean, the champion of a small class of heavy-weights, is a deep, clever, sharp-stepping hack, and was placed before Expectation, a very grand fashionable goer, and well known in the rings. The reserve Tommy Dodd is a thick cob. About the worst specimen of a horse shown was in this class Mr. Farrant's Hero, by Eclipse, a cross between a greyhound and a Suffolk—a man should not send such an animal to show, especially where foreigners are allowed to stop in the ring from morn to night and impede our view. Let one in let all, never mind the breed, a noble lord complained bitterly. We felt quite sorry for him. Bosco, that miniature of a weight-carrying hunter, again scored a first among a few clever ones. Then came the small ones, Aaron being a very knowing little fellow, about eleven hands, and so was Tally, a white trimmed Polo fashion. And thus ended a fearfully long day's judging.

THE CATTLE.

The aged bulls' class contained nineteen entries, and sixteen of the animals were in their places. As usual, this was the first class to come into the ring, and, after a walk round, the judges proceeded to smart business by drawing them up in line and immediately sending a few of them to that end of the ring from which proceedeth but little hope. Amongst these unfortunates—and yet they got all they deserved, which is real fortune after all—were Mr. Fox Beaven's Hudibras, a very particularly bad one according to our notion, and, being white, his extraordinary unevenness stood out in relief; yet this bull has good quarters—bad indeed must be the animal which cannot boast of one redeeming feature. Then came another white bull, Mr. Charles Chapman's Minstrel Boy, a plain, hollow-backed, uneven animal, with very little style or quality, as we have remarked of him on former occasions; then another specimen of mediocrity in white, in the shape of Mr. Edward Paget's Lord Normanby, and, sad to relate, one more white sacrifice—Snowstorm! This last-mentioned bull, bred and exhibited by the Duke of Northumberland, was first last year at Liverpool in the next younger class. It is almost unnecessary to say that he has not improved; but, more than that, he has sadly altered both to the eye and the hand, and gives one the impression that in trying to reduce his over-developed loin the process has resulted in the demoralisation of the animal. So far things looked very bad for whites, and as a matter of fact things *did* go badly for white Shorthorns at the Bristol meeting. However, no fault could be found except in one instance, perhaps two, which will be noted farther on. Mr. St. John Ackers' Clovis of course was sent to join the awkward squad, and his Crowned Victor stood no chance at all. This animal is rather unfortunately named, being too narrow in his girth, and too bare of flesh in the most useful places to be crowned a victor—except in a very weak class. Having got rid of these the real business began, which, after all, was in a very narrow compass, namely, the question of the relative positions of Mr. Linton's Sir Arthur Ingram and the Earl of Ellesmere's Attractive Lord, and without much hesitation the Oxford decision was reversed, and the old bull lost. This, we think, was sound judgment, and our readers will remember that we strongly objected to the Oxford award at the time. Of course Sir Arthur Ingram is now getting an old bull, and independently of that his long showyard career begins to tell upon him; whereas Attractive Lord is two years and three months younger. Nevertheless, we do not base our criticism on such circumstances, but on the opinion we have more than once expressed that despite the style, scale, and character of Sir Arthur Ingram, he has, and has always had, certain defects which we consider to be of vital importance, and which mere style—and even scale—will not atone for. There is one thing in respect to this animal which must in fairness be recorded, and that is his stock are, to our mind, better than himself. This, at least, is as it should be. The remaining prizes were soon disposed of. Mr. Bland's General Fuzee—fourth last year at Liverpool and reserve number last month at Oxford—an animal of which we have spoken highly as likely to serve the interests of ordinary stockbreeders rather than please the whims of "the fancy," was placed third, and Mr. Jabez Cruse's Oxford Duke 10th was fourth; this is a good handling bull, as we have previously remarked of him, and we noticed after the judging was over that no animal was placed for honours unless it was satisfactory under the hand. This we take to be the very first principle of good judgment and of sound judging; these gentlemen went for quality, and possibly a little for colour, but quality they would have, and their awards were made from a different standpoint to that apparently taken at Oxford, where

the Shorthorn judges' decisions were, in some instances, little to our mind. The reserve number and a high commendation were given to Mr. W. Handley's Royal Irwin, which we think has nothing much but his quality to recommend him, having no hair to speak of, is hollow behind his shoulders, and rather too high on his legs; but he handles well. Then come three more high commendations, namely: Mr. Browne's Pioneer—a white bull, whose quality we admired and noted last year at Liverpool where he was commended; another white bull—a big one and a good handler—Duke of Howl John, bred by Mr. Vickers; and Gallant Gay, a very big and rather coarse bull, bred by Mr. Bult. With Mr. McClintock Banbury's very level and stylish roan bull, Anchor, which was commended, the honours came to an end. Mr. Atkinson's Sergeant Irwin—third last year at Liverpool—was not noticed; and certainly he has not improved, for although he has a mellow hide he has lost the touch he had last year, and he is getting uneven, as old bulls will. It remains to be noted that two out of the three absentees were animals of repute, namely Telemachus 6th and Rear Admiral, both of which we should liked to have seen in their places, because it would have been interesting to see how matters would have stood between the former and Sir Arthur Ingram, and also to see what would have happened to Rear Admiral, whose owner, we think, was wise not to send him. As the old bulls walked out of the ring we were very pleased to record of the class that it was decidedly better than at Oxford, and although it contained some animals whose owners would greatly add to the *prestige* of the Shorthorn breed if they could be persuaded to keep their stock out of a showyard, there was merit enough in the majority to have constituted a very excellent class of itself. In noticing this class at comparatively greater length than other classes we are actuated by a desire to give such of our readers who may not be able to attend these yearly meetings of our two great Agricultural Associations a trustworthy account of the *status quo* of the animals whose blood is now circulating in the veins of our younger breeding stock, on which will greatly depend the quality, not only of our herds but of those in the colonies, and indeed all over the world; and while we cannot overlook any defect which we consider likely to be inherited, we do not lose sight of the fact that in every branch of the breeders' industry it must be held a cardinal maxim that the most valuable animal is the one which gets the best stock.

The younger bulls in the next class were eleven in number out of sixteen entries. We were pleased to see Mr. Tennant's Kalamazoo take first honours, and that the opinion we formed of him at Liverpool has been proved to be correct so far as the best year of his prime is concerned. This bull is by Sir Arthur Ingram, and is an instance of what we have observed respecting the stock of that animal being better than himself: his tail is still high, and his rumps a little uneven, like his sire, but his fine masculine character, stylish forehead, well set-on head, and fine quality mark him as a Shorthorn of the very first water, while his greater depth and greater wealth of flesh with which he has furnished himself during the year have added to his appearance and general effect. Mr. Stratton's Pearl Diver came second, a red, stylish, very particularly level and altogether excellent bull, with remarkably neat set-on of tail and straight rump; but he has not the wealth of flesh which characterises Kalamazoo, and his hide, though soft, is rather too thin. It may be taken for granted that none of the animals decorated by these judges have anything like a harsh coat and a hard hide; they simply would *not* look at them twice, to our intense satisfaction. The third place was assigned to Mr. John Elwell for his Bainsse Windsor, which was second

at Oxford, his soft mellow hide and excellent coat making sure of a good place at Bristol. The fourth prize was awarded to the Stand Stud Company for Favourite, a bull we did not admire, nor do we see that he was clearly entitled to the award; he has a plain forehead, a coarse head, has no character about him, and is, withal, a yellow-reddish-brown-smul colour, but handles fairly well—that did it, no doubt. Mr. George Gibbons took the reserve number and a high commendation for Huntley, a very level, pretty, and taking roan bull, not built on a large scale, but little and good—and here the honours end. Now, be it duly noted that Mr. Torr's white bull Fitz William is not noticed—not considered even worth a commendation—and yet he was first in his class at Liverpool last year, where he was thought to deserve his place above Kalamazoo (which was placed second to him); we said at the time that he might perhaps improve in his handling, and that he had a tendency to grow patchy-rumped, as he has done. His age was rather unfair to the rest of the class last year, and he naturally carried more flesh and was altogether better furnished than Kalamazoo then was; but at Bristol he had not that advantage, and there cannot be a doubt of his having failed to answer the expectations of those who thought he would turn out better than he has done. He has grown uneven, and although he is thick-fleshed he is not at all improved to the touch, which, with perhaps the fact of his being white, was quite enough to condemn him at Bristol. We mention this to show the true nature of the Bristol awards. There was a rather taking and stylish roan bull, very long, but with flat ribs, and on referring to the catalogue we find he was by the famous Duke of Connaught (36670), of fabulous value, but he was lame, and not at all in show form. Mr. St. John Ackers' Sir Roland has some little style, but very little character about him, and he is very light in his carcase. Flag of France stood no chance for notice, although he took the reserve number at Oxford; but General Flirt will be sure to attract attention—either to his head or his tail! There was nothing of note among the absentees; and the class, as a class, was not equal to that of the old bulls. The yearlings (under two years old) were a class of fifteen entries, four being absent. Mr. Willis's Vice Admiral, which was first at Oxford, was also first at Bristol. As we then remarked, we like him far better than his brother, Rear Admiral; but although he is well covered with flesh and has good ribs and plenty of thickness through his heart—just exactly what Shorthorns usually have *not* got—yet we don't like his character, nor his long legs, nor his stright barrel, although it is so well covered. Col. Lloyd Lindsay's Churchill was second, as also at Oxford. He is a promising young bull not by any means perfect, but with a soft mellow hide covered with plenty of good hair, and may be heard of another day. Colonel Kingscote's third prize roan bull, Cowslip Boy, is stylish and of nice quality, but his light forehead and badly opening ribs are against his making a first-class animal. The fourth prize was awarded to Lord Mayor, a very slight, and very leggy roan, bred and exhibited by the Duke of Northumberland; but here again there was quality, though very little style and no character. The reserve number and high commendation was awarded to Lord St. Vincent, a very pretty white bull, with a good and well set-on head, and plenty of style, character, and quality, but flat sided. What a pity it is so many of these pedigree Shorthorns have that complaint so badly! and it appears to be incurable. Mr. Bland's commended bull, General Favourite, we did not admire, and two bovine aristocrats, named respectively Grand Duke 27th (with an appalling pedigree), and Marquis 3rd, were about as plain a pair as could well be found. Altogether the class was not a very good one.

Of nineteen calves thirteen put in an appearance, and here we experienced considerable disappointment at seeing the Rev. Bruce Kennard's white calf Prince Victor decorated with the blue rosette instead of the red, which was lauded to Mr. T. Tregaskis's Masterman, a red and white calf one month older than Prince Victor. To our judgment this calf is not so level, nor so stylish, nor of equal quality, nor as thick-fleshed as the white one, nor has it as good a bull's hide nor as good a coat. In fact, we like Prince Victor decidedly the better of the two, and think the judges were hard on the white one, which was the smaller. It is worthy of notice that Prince Victor has a few black marks on his nose, a circumstance which escaped our observation at Oxford, and which one would not expect to find in such a calf from such a dam. However, there they are, and it is possible the judges attached great importance to the blenish; no doubt there are a variety of elements in Shorthorn blood—even the bluest of it—and black is one of them, but the nose is an unfortunate place for it to make its appearance, certainly. We protest notwithstanding against the award. Mr. Garfit's Southern Butterfly 2nd takes third prize, and Mr. Wilson's Wild Oxonian the fourth; this last named youngster has a good hide, good hair, a nice touch, and appears to be cut out for a big one. There was nothing else calling for special mention, and the class was not a very good one, although there were several good calves in it.

Shorthorn cows, the next class, were, as a class, far before the corresponding one in Oxford; in fact no comparison can well be made, except that Mr. St. John Ackers' second prize cow at Oxford, Princess Georgie, here only obtained the reserve number and a high commendation, which her nice quality undoubtedly obtained for her. Rugia Nihlett, a cow bred by Mr. G. Garne and exhibited by Lord Fitzhardinge, was placed first, and an undoubtedly good cow she is. Moonshine, the second winner, bred by Mr. J. T. Robinson and exhibited by Mr. T. Atkinson, a handsome roan, the third prize, Carnation 4th, bred and exhibited by Messrs. Hosken and Son, and Mr. Hutchinson's Grateful, which was placed fourth, were all three roans and all three very creditable animals; the first prize, however, chanced to fall to a red. Minstrel 4th, a very handsome white cow with the abnormal development of fat on the rump which so many old cows acquire, was highly commended and awarded the reserve number: Lord Fitzhardinge may not be well satisfied, but such was the course of events. There was but one of the usual plain and mediocre type, and that was Sir Philip Miles's Countess. There was very little fault to be found with the Shorthorn cows this time. Seven heifers in-milk or in-calf entered the ring, and Mr. Marsh's Diana won as easily as she did at Oxford: the Earl of Ellesmere was second with Lady, as also at Oxford; Mr. Bult and the Stand Stud Company were third and fourth respectively; and Mr. G. A. Ashby's Innocence took the reserve number over the head of Mr. Ackers' Lady Carew 2nd, which held it at Oxford—the positions of the two animals being reversed with the exception that Innocence was not noticed at all at Oxford. Although the heifers were every one of them honoured, the class could scarcely be put as high as that of the cows—if the first prize heifer were accepted.

The yearlings, a very capital class, were headed, as at Oxford, by Mr. Brassey's Jemima 4th; then came Honey 60th, a red and white heifer of good scale and quality, not free from faults, but very taking; third on the list was a roan heifer, Lady Jane, bred and exhibited by the Duke of Northumberland, long and level, but not so pleasant to the touch as some of the rest. Mrs. S. J.

Pery's Lady Violet, another nice heifer, was fourth, and then, be it carefully noted, was the Rev. Bruce Kennard's Lady Marhull 4th with the reserve number and a high commendation, whereas at Oxford she stood in a corner with no eye to pity her—inside the ring at least. Mr. Ackers secured a high commendation for Lady Carew 3rd, which was not awarded him at Oxford. Then came five commendations, for which reference can be made to the prize list, eleven out of the seventeen heifers exhibited receiving honours from the judges; the class was strong without the six absentees, and of a character throughout which was more in accordance with one's ideas of what the breed should be able to produce in a Royal showyard, for of late there has been, to use a familiar phrase, much cry but little wool. The heifer calves were another strong and good class, eighteen out of twenty-three putting in an appearance. Lord Fitzhardinge wins fairly with Kirklevington Empress 3rd, a ten months old roan, full of quality, and with the nicest possible hair and hide; a very pretty, stylish, and taking heifer. For the rest see prize list. The honours did not tell quite as high as those in the class preceding; but the low standard which characterised some of the Oxford exhibits was not discernible at Bristol. Last of all in the Shorthorn division came the class for cows with not less than two of their offspring, in which six families competed, five of them being honoured by the judges. The first-prize family at Liverpool last year was that of the Ringlets, exhibited by Mr. T. Horrocks Miller, and this family was placed third on the list at Bristol, and consisted of an old cow, and two fairly good cows her offspring, with a plain bull and a very nice heifer. Mr. J. Stratton obtained both the second and fourth prizes; in the latter case the dam was only 5 years old, and in the former, May Rose 2nd, 11 years old, and her roan family of five—all of fine quality but no great substance. The first prize was given to Colonel Lloyd Lindsay for a family of reds—four very useful cows out of Burlesque, 9 years and 6 months old. This class is a trying one, and ought to be better supported by our Agricultural Societies; it is a real test of merit.

In closing our notice of the Shorthorn classes we have only to say that this division of the Show was far before Oxford, and as a rule the prizes were awarded with what appeared to us to be sound judgment. One noticeable feature in respect to this Show was that by far the greater part of the prize-winning Shorthorns were reds; whilst some of the plainest animals were white.

The Herefords were scarcely as good as they were at Oxford; the tone of the division was somewhat lower, and the classes were not well filled, many good entries not putting in an appearance. In the class for old bulls only two animals competed, Mr. Taylor's Thoughtful, and Mr. Thomas's Horace 2nd, which were awarded first and second honours. This was virtually the same as at Oxford. Mr. A. Roger's Grateful, the winner of the first prize and Champion prize there not being entered or shown at Bristol. It is worth noting that Thoughtful keeps the lead now that he is shown in the same class as Horace 2nd, who was second at Liverpool in the old bull class last year (and not in the next younger class, as was by verbal error made to appear in our Oxford report), being proof that he wears as well as or a trifle better than his rival. In the next younger class Telescope, bred by Mr. Taylor and exhibited by Messrs. Lewis and Powell, was placed first, Mr. Edwards' Durable second, and Mr. P. Turner's Corsair third; this judging was on the same lines as at Oxford, Telescope not being there. It will be remembered that this bull, a particularly nice quality animal, was second at Liverpool last year, being defeated by Mrs. Sarah Edwards' Victor,

who has not turned up this year. The above mentioned bulls were the only animals in the class. The yearling bulls were a class of seven, in which Mr. Price's Arthur, a rich quality and altogether first-class animal, won easily; then came Mr. Carwardine's Anxiety, also second at Oxford, who has not improved since he won as a calf at Liverpool last year; next Mr. H. N. Edwards' Comfort, an excellent handler; and Mr. Thomas's Horace was awarded the reserve, being in the same position as last year. This bull is a little hard to the touch. Tragedy, a bull of Mr. Taylor's breeding, is of very nice quality and very promising, but did not get noticed. There were seven bull calves in competition, Mr. Hungerford Arkwright's Conjurer, and Mr. Carwardine's Lord Oxford being placed first and second, exactly as they were at Oxford. Mrs. Sarah Edwards' remarkably pretty Master Butterfly was awarded a third prize, which was equivalent to the reserve at Oxford, where there were no third prizes. So the judges' awards were the same at the Royal and at the Bath and West of England in respect to the Hereford bull calves, which is evidence that the animals stand about as they merit: we shall see how another year will find them. Mr. Tudge's King of the Roses was the reserve number, and a promising calf he is. The cows were a small class—three present and three absent. The late Mr. Warren Evans's Lady Blanche was first as at Oxford, and a cow of Mr. Tudge's breeding (exhibited by the Earl of Coventry) was second. The heifers in-milk or in-calf were only four in number three of them being the Oxford exhibits, and placed in the same position. If there had been a champion prize for the best female in the yard Mrs. Sarah Edwards' Leonora must have won again, for she is one of the most perfect and beautiful animals ever exhibited. The yearling heifers were many of them absent, thereby greatly weakening the Hereford division, for they usually add greatly to the beauty and interest of a showyard. Mr. Morris's Empress was first and Mrs. Sarah Edwards' Spangle 3rd second, which was exactly the reverse of the Oxford decision, which we rather prefer. Then in the heifer calves Mr. H. Arkwright's Gayless 4th and Mr. Taylor's Empress were placed first and second as at Oxford. The class for cows with not less than two of her offspring, was a tolerably good one, making a very pretty show of white faces.

The Devons were in very much smaller numerical force than might reasonably have been expected from the locality in which the show was held. There appear to be just a certain few who show Devons: when the showyard is too far from home they don't send, and when it is near there are no others who care to exhibit. It may not be fair to judge from showyards, but the evidence they give is to the effect that the breed is not making progress. They are essentially local, not being bred to any great extent outside the county: although there are Somerset Devons and Cornish Devons, still there are not so many Devon steers sent up the country as there used to be, which warrants us in thinking the breed is getting into still narrower limits. The class for old bulls consisted of five, Viscount Falmouth winning with Sirloin, as he did at Oxford with Romancy Rye; Mr. G. Turner's Volunteer being second in both places. In the rest of the bull classes Mr. Walter Farthing, Viscount Falmouth, and Major Buller take the prizes; and in the female classes Mr. Walter Farthing and Mrs. Maria Langdon are the names which constantly appear, as they generally do appear in every exhibition of Devons. There is a sameness in this which even the addition of Mr. Rolles Fryer's name does not vary very much. If a breed is to prosper, or even to maintain its existence, it must be in more hands than the Devons are now. We must not, however, pass over this division without

mentioning the class for heifer calves, which contained eight very superior animals indeed, everyone of them being honoured by the judges.

Of Sussex cattle there were 39 entries against 44 Devons which, considering the position of the showyard in respect to these two local breeds, is about equivalent to their being twice as many Sussex as Devons in case of the showyard being situated at an equal distance from the counties of Devon and Sussex. We have on several occasions had to remark the progress which is being made by the Sussex breed, and especially so at the Smithfield Club Show, where the Sussex breeders have sent for the last two years a capital lot of useful butchers' animals, not the fine quality of the Devons, but good, useful, thick-fleshed bullocks, of a sort to add materially to our food supply. That being so, and especially as the next meeting of the Royal is to be held in London—so near and easy of access to the home of the breed—it would be worth the consideration of the Council of the Society as to whether the Sussex breed should not be put on the same footing as the Shorthorns, Herefords, and Devons, in respect to the prize list, as it has been by the Bath and West of England Society. This would only be fair in all south or west of England Shows, while for the London meeting, it appears to us, to be a necessary act of justice. We are able to state, from personal knowledge, that the Sussex breeders are anxious for this change, and that they think their cattle, if afforded a fair field, will be able to take a much more prominent position amongst our native breeds. It is quite evident from the entries at Bristol that there is much more enterprise just now amongst Sussex breeders than amongst the Devon men, and we have every reason to believe that there is not even a trace of the "fancy" element amongst the dark-reds, the only object being to breed the best beef with the smallest bone in the quickest time. We wish them every success and the assistance they require from the Royal Agricultural Society, which has ever been ready to reward merit wherever it can be found. As far as the showyard is concerned, the Sussex breed is represented by as few names as the Devon breed, and our only object in comparing the two is simply to call attention to the fact of the Sussex men being inclined just now to do more than the Devon men in that particular direction, which is beyond doubt a subject for the consideration of the Society. The quality of this breed is steadily and surely improving, and some of the exhibits would push the Devons very hard. Of course, we do not expect or even wish to find a Sussex animal built after the model of Mr. Walter Farthing's Devon cow, Prettyface (which won in her class and will be likely to win as long as she is exhibited), because the scale of the two breeds is so different; still there is room for improvement, which we doubt not will be filled up in time. The prize-takers were the Messrs Heasman, the Messrs. Stanford, Mr. Agate, Mr. Braby, and Mr. C. Whitehead, the Messrs. J. and A. Heasman securing five first prizes, and we notice that they are the breeders of the yearling heifer with which Mr. Braby wins in that class. At this rate we shall become as familiar with the names of the Messrs. Heasman and Mr. Alfred Agate, as we are with those of Mr. Walter Farthing and Mrs. Maria Laugdon amongst the Devon breeders.

The Longhorns did not particularly interest us, as we are unable to see that they will be able to force themselves again into notice; no doubt they have merits which are duly recognised in the few localities where they are still to be found, but, we think, they have had their day and served their purpose. They are usually bad handlers, and particularly flat-sided and badly ribbed; they are out of date, and being also "out of fashion" they may as well be allowed to die a quiet and peaceful natural death. The

Jersey and Guernsey cattle were even more numerous than at Oxford, the entries being 115 as against 132; but we do not know whether the actual number of exhibits was greater or not, nor whether the quality was the same. All we can say of them is that they looked very nice, very pretty, very fine quality, and, in short, very elegant milking machines. The two classes of dairy cows were poorly represented; in fact, they were most of them such as would not fetch the top price in a market or fair, by a long way. There were two pedigree Shorthorn cows exhibited by Mr. H. J. Mirehouse which would be a disgrace to any local show, and their appearance at the Royal was, to our judgment, simply ridiculous.

Last, but certainly not least, was the show of Welsh Blacks, which were in strong force, the entries numbering forty-four, without many absentees we believe. This division of the show we regarded with great interest, as showing, by the uniformity of style and character, and we may say the uniformity of quality as well, that there exists a pure local breed in Wales which very few people know anything at all about. There is nothing coarse about them, and the waste of their carcass must be very little indeed. We do not see as many runts in English graziers' hands as formerly, and no doubt they manage things a little differently than they used to do; but this display of Blacks at Bristol was a credit to the Welsh breeders, who have now shown the world that they are not a whit behind England, Scotland, or Ireland in respect of the improvement of their native breeds, and moving with the times. When the Shorthorn men can breed bullocks with as little waste to them as to a runt, then—well, then the animals will be worth more money per stone.

THE SHEEP.

The Southdowns were better at Bristol than at Oxford. In the strong class of shearing rams—numbering 38 entries, with a few absentees—we found Lord Walsingham to the front as usual, for the Merton flock is settling down to an apparently invincible position. Both first and second prizes were awarded to these sheep, but the dark polled one which was second at Oxford was thrown out here, as far as our recollection of the sheep will allow us to say so; and the third went to Mr. Hugh Gorringe. Then came Mr. Rigden's sheep, which was passed over at Oxford, the judges awarding him the reserve number and a high commendation in spite of his weak neck, for in other respects he is a capital sheep. Another high commendation was given to Mr. Rigden, one to Lord Walsingham, and one to Mr. Chapman; also a commendation to Mr. R. Neville Greuville and to the Duke of Richmond. Two of Messrs. Heasman's sheep were very useful, but the Sandringham flock was again poorly represented in this class; one of the exhibits was rather throaty, and the other was plain, with very little behind his shoulders. Altogether the class was a good one, and of about average status for a Royal Show. With the old rams Lord Walsingham had it all his own way, being first, second, and third, the third prize sheep being very like the one which took second at Oxford, which we liked best then and now; he is smaller than the others, but his form, handling, and wool are excellent. Mr. Hugh Gorringe obtained the reserve and two honours for three out of his four exhibits; the rest had no chance. The pens of five ewes were a thoroughly good class, very far before the Oxford exhibits. Here again Lord Walsingham was first, and beautiful ewes they were; Sir W. Throckmorton second; and the Prince of Wales third—which was an encouragement to both those breeders. Mr. Chapman, Mr. Rigden, and Mr. Gorringe were highly commended, and the whole class commended, which we believe did not occur in respect of any other of the sheep classes. The Hampshire Downs

were another capital division, the shearing rams being led by Mr. A. Morrison's Oxford champion sheep. The first prize old ram was from the same flock. Mr. James Read's first prize pen of ewes were very beautiful sheep, nicely matched, and the quality excellent. The Shropshires were exceedingly well represented, there being no less than 52 entries of shearing rams, and among them some very capital animals. Mr. H. Townshend took first prize with a ram that looked a trifle too Southdowny to be strictly according to rule; however, he was of undeniable quality, great thickness, and short on his legs. Mr. Graham's second prize sheep was also very handsome and full of mutton. Mr. Mansell's third prize we thought of fine character as were also some of the other entries from the same flock. Mr. T. Nock's reserve number was a good Shropshire, and altogether there were nine honours besides the prizes awarded. To our mind Mr. H. J. Sheldon's sheep were worthy of honourable mention, for they handled capitally; but their weak necks and Southdown appearance deprived them of true Shropshire character. Lord Chesham's rams were quite mediocre. Many of the entries in this class appeared to have been sent to Bristol to get a sort of *prestige* for subsequent sale, and some of them were anything but first rate. Mr. Henry Townshend was also awarded the first prize in the old ram class. For ewes Lord Chesham was first with a pen of sheep which were quite of the old sort—very neat, very uniform, and got up to perfection. Mr. Charles Byrd's second prize pen were not all alike, but of good substance, good style, and good wool. Mr. Nock's third prize pen had excellent Shropshire character and were very useful sheep. In the Oxfordshire Down classes we admired Mr. C. Howard's first prize shearing ram very much. Mr. J. Treadwell's winner in the older class is an immense sheep, and the pens of ewes were a very excellent class, Mr. Brassey being the winner. Mr. Street, Mr. Odams and Mr. Hobbs were also successful exhibitors. The shortwooled sheep, altogether, were very well shown.

Longwooled sheep were very well represented in the Lincoln classes, where Mr. Smith secures both firsts for rams, and Mr. C. Sell wins with shearing ewes. In the Cotswold classes Mr. John Gillett and Mr. Russell Swanwick did exactly the same as at Oxford, Mr. Russell Swanwick's ram taking the champion prize of £25 for the best Cotswold ram. The Leicesters were very little to our mind, and we believe the breed is declining; they are very different at all events to what they used to be. There were a good number of entries of Devon longwools, also of Dorset rams, Dartmoors, and Exmoors, which are of no interest out of their respective localities, except the Dorsets, which come up the country to be fed out with a crop of cross-bred lambs. Altogether there was a good show of sheep.

THE PIGS.

We cannot account for it, but the pig classes invariably attract a very considerable amount of ladies' attention. Whether it is sheer curiosity, or a liking for monstrosities we do not know, but in the hottest weather ladies will go to the pigs. For our own part we should not visit that division of the show from choice, and must confess to the duty being rather irksome. Anything outrageously fat, and all big pigs, we usually pass by as wasted meal, misapplied industry, and cruelty to animals. The taste in this country is now for small pork and small bacon and to meet that we found at Bristol as at other large shows both black breeds and white breeds admirably adapted for the purpose, bred by the Earl of Ellesmere, Mr. G. M. Sexton, Mr. Duckering, and others, whose names will be found mentioned in the prize list. Small bone, small scale, fine quality, and plenty of hair is what

we like to see but do not always find, although the Earl of Ellesmere's small pigs are generally well coated. One thing in connection with the pig classes at Bristol attracted our attention as being out of character for a strictly breeding show, namely, the "Other Breeds" not eligible to compete in any of the other classes. Now, in respect of cattle and sheep the "Other Breeds" are distinct breeds, though of mere local interest; but with pigs—judging from the exhibits at Bristol—the term appears to be applied to culls and mongrels. Thus we find well-known names, breeders of white pigs, entering "white" or "white with spots," and what we want to know is whether there is a recognised breed of pigs which are white but have more or less of black spots on them. If so, and the Society think it is of sufficient merit to offer prizes for it, well and good; if not, and if these pigs are tainted or merely flukes or reversions, then we think the stock of the country will not be benefited by decorating such with the honours of the Royal Agricultural Society. It is a matter which might be inquired into with advantage.

LIST OF JUDGES.

HORSES.

AGRICULTURAL.

A. W. Crisp, Orford, Wickham Market.
A. Montgomery, Boreland, Castle Douglas, N.B.
T. Plowright, junr., Pinchbeck, Spalding.

THOROUGHBREDS, HUNTERS, PONIES, &c.

D. Collins, Newton Ferrers, St. Mellion, Cornwall.
T. Pain, The Grove, Basingstoke.
T. Parrington, Helmsley, York.

CATTLE.

SHORTHORNS.

C. Howard, Biddenham, Bedford.
J. Lynn, Church Farm, Stroton, Grantham.
G. Mann, Seawsby, Doncaster.

HEREFORDS.

G. W. Baker, Park Farm, Luton Hoo, Luton, Beds.
J. Crane, Benthall, Ford, Shrewsbury.
J. Walker, Knightwick, Worcester.

DEVONS AND SUSSEX.

H. Overman, Weasenham, Brandon.
J. Pitcher, Hailsham, Sussex.
T. Pope, Horningsham, Warminster.

LONGHORNS AND DAIRY CATTLE.

W. T. Carrington, Croxden Abbey, Uttoxeter.
R. H. Chapman, St. Asaph, North Wales.
J. Denchfield, Burston House, Aylesbury.

JERSEYS AND GUERNSEYS.

W. Gilbey, Elsenham Hall, Bishop Stortford.
C. Stephenson, Woburn, Beds.

WELSH CATTLE.

J. Evans, Alltycadno, Kidwelly, Carmarthenshire.
J. Williams, Gwernhefin, Bala, N. Wales.

SHEEP.

LEICESTERS.

J. S. Jordan, North Dalton, Hull.
W. Sanday, Radcliffe-on-Trent, Notts.

COTSWOLDS.

W. T. Garne, Aldsworth, Northleach.
T. Porter, Baunton, Cirencester.

LINCOLNS.

W. Collingwood, Fribeck, Spalding.
C. Williams, Salisbury.

OXFORDSHIRE DOWNS.

G. Hitchman, Long Ashton, Bristol.
R. J. Newton, Campsfield Farm, Woodstock.

SOUTH-DOWNS AND HAMPSHIRE.

F. Budd, The Cedars, Basingstoke.
H. Fookes, Whitechurch, Blandford.
F. M. Jonas, Chrishall Grange, Salfrou Walden.

SHROPSHIRE.

J. Coxon, Freeford Farm, Lichfield.
R. H. Masfen, Pendeford, Wolverhampton.
C. Randell, Chadbury, Evesham.

DEVON LONGWOOLS.

A. Tremaine, Polsue, Grampond.
T. Willis, junr., Manor House, Carperby, Bedale.

SOMERSET AND DORSET HORNED, PARTMOORS, AND ENMOORS.

W. B. Hebditch, Yeabridge Farm, Stratton, Hminster.
W. Poole, Henley Farm, Crewkerne.

PIGS.

J. Fisher, Carhead, Cross Hills, Yorks.
E. Little, Lanhill, Chippenham.
M. Walker, Chaddesden, Derby.

CHEESE.

R. P. Edwards, Clau Villa, Bath.
J. Hughes, Wood Lawn, Oxford.

BUTTER.

J. Matthews, 8, Mary-le-port, Street, Bristol.
W. Tifley, Abbey Gate, Bath.

FARM JUDGES.

F. Beard, Horton, Canterbury.
T. F. Jackson, Tattenhall Hall, Chester.
T. Willis, Manor House, Carperby, Bedale.

IMPLEMENTS.

SHEAF-BINDERS AND MISCELLANEOUS.

Henry Cantrell, Berry Farm, Stoke, Slough.
John Coleman, Riecall Hall, York.
J. W. Kimber, Fyfield Wick, Abingdon.

DAIRY IMPLEMENTS.

G. M. Allender, St. Petersburg-place, Bayswater, W.
Gilbert Murray, Estate-office, Evaston Castle, Derby.
Thomas Rigby, Daruhall Mill Farm, Winsford, Cheshire.

PRIZE LIST.

HORSES.

Agricultural stallion foaled in the year 1876 (not qualified to compete as Clydesdale or Suffolk).—First prize, £25, Earl of Ellesmere, Worsley Hall (Young Prince of the Isle); second, £15, F. Street, Somersham Park, St. Ives, Hunts (Grand Duke); third, £5, Earl of Ellesmere (Young Drayman.)

Agricultural stallion foaled before Jan. 1, 1876 (not qualified to compete as Clydesdale or Suffolk).—First prize, £50, S. Davis, Pershore, Worcestershire (General); second, £20, G. H. Morrell, Headington Hill Hall, Oxford (King of the Vale); third, £10, Earl of Ellesmere (Pride of the Shires). Reserve, J. Hibbard, sen., Chippenham, Wilts (The Sultan).

Clydesdale stallion foaled in the year 1876.—First prize, £20, R. Loder, Whittlebury, Towcester, Northamptonshire (Scotland Yet); second, £10, Duke of Beaufort, K.G., Badminton, Chippenham, Wilts (Prince Charlie); third, £5, V. P. Calmady, Teteott, Holsworth, Devonshire (Waverley).

Clydesdale stallion foaled before 1st January, 1876.—First prize, £25, J. E. Crowther, Knowl Grove, Mirfield, Yorkshire (Topsman); second, £15, Duke of Beaufort, K.G. (Paragon Tom); third, £5, E. and A. Stanford, Eatons, Ashurst, Steyning, Sussex (The Baronet). Reserve, Lord Fitzhardinge Berkeley Castle, Gloucestershire (Prince of Clydesdale).

Suffolk stallion foaled in the year 1876.—First prize, £20, W. Byford, Glenstord, Suffolk (Reliance); second, £10, W. Wilson, Baylhamstall, Ipswich, Suffolk (Farmer's Glory).

Suffolk stallion foaled before the 1st January, 1876.—First prize, £25, H. Wolton, Woodbridge, Suffolk (Royalty); second, £15, G. E. Elliott, Pinhoe, Exeter, Devon (Iron Duke); third, W. Byford, Glenstord, Suffolk (Enterprise).

Thoroughbred stallion suitable for getting hunters.—First prize, £50, Duke of Hamilton and Brandon, Wickham Market,

Suffolk (Breakneck); second, £20, T. Gee (Citadel); third, £10, H. W. Freeman, Newbridge Hill Stud Farm (Caudius). Reserve, Duke of Hamilton, Exton Park (Barbillon).

Stallion suitable for getting hackneys.—First prize, £20, J. F. Crowther, Mirfield, Yorkshire (Charley Merrylegs); second, £10, Stand Stud Company, Whitefield, near Manchester (Star of the East); third, £5, H. Roundell, Oley, Yorkshire (Sir George Woulwell). Reserve, T. K. Bickell, Tavistock, Devonshire (Star of the West).

Pony stallion above thirteen hands two inches, and not exceeding fourteen hands two inches.—First prize, £20, C. W. Wilson, High Park (Sir George); second, £10, C. W. Wilson, Kendal, Westmoreland (Lord Derby); third, £5, C. W. Wilson (Sir Douglas). Reserve, J. Williams, Cowbridge, Glamorganshire (Young Comet).

Pony stallion, not exceeding thirteen hands two inches high.—First prize, £15, C. W. Wilson (George 2nd); second, £10, C. W. Wilson (Sir Dudley); third, £5, C. W. Wilson (Sir Garnet Wolsley). Reserve, L. Jones, Cardiff, Glamorganshire (Young Trotting Lion).

Agricultural mare, in foal, or with foal at foot (not qualified to compete as Clydesdale or Suffolk).—First prize, £30, L. Drew, Hamilton, Lanarkshire (Countess); second, £15, Earl of Ellesmere (Dainty); third, £5, W. Wynn, Stratford-on-Avon (Queen of Trumps). Reserve, J. Hibbard, jun., Chippenham, Wilts (Diamond).

Clydesdale mare, in foal, or with foal at foot.—First prize, £20, R. Loder, Whittlebury (Jean); second, £10, C. W. Wilson (Mrs. Muir); third, £5, R. Loder (Dandy); commended L. Drew (Young Rosie). Reserve, R. Loder (Jess).

Suffolk mare, in foal, or with foal at foot.—First prize, £20, Duke of Hamilton and Brandon (Belle of the Ball); second, £10, H. Wolton, Woodbridge, Suffolk (Duchess of Newbourne); third, £5, W. Byford, Glenstord, Suffolk (Doughty).

Mare, in foal, or with foal at foot, suitable for breeding hunters.—First prize, £25, G. Leighton, Scarborough (Snowflake); second, £15, G. F. Statter, Whitefield, Manchester (Lady Jane); third, £5, Lieut.-Colonel J. S. Ballard, Cowbridge (Hoyden). Reserve, Duke of Hamilton (Flirt).

Mare, in foal, or with foal at foot, suitable for breeding hackneys.—First prize, £20, Duke of Hamilton and Brandon (Spotted Mare); second, £10, T. David, Cowbridge (Lady Mayoress); third, £5, J. Howard, Bedford (Countess). Reserve, J. Hutson (Alice).

Pony mare in foal, or with foal at foot, above thirteen hands two inches, and not exceeding fourteen hands two inches.—First prize, £15, W. Tyler, Birmingham (Surprise); second, £10, Duke of Hamilton and Brandon (Sawell). Reserve, J. Hutson, Highbridge, Somersetshire (Judy).

Pony mare in foal, or with foal at foot, not exceeding thirteen hands two inches.—First prize, £15, C. W. Wilson (Lady Polo); second, £10, C. W. Wilson (The Pet); third, £5, G. Edwards, Wrington, Somerset (Black Down). Reserve, R. Porch, jun., Badminton, Somerset (Lolly).

Agricultural filly (including Clydesdale and Suffolk), two years old.—First prize, £20, L. Drew, Meryton, Hamilton (Topsman); second, £10, T. H. Miller, Poulton-le-Fyde, Lancashire (Princess Dagmar); third, £5, Earl of Ellesmere (Empress). Reserve, W. Byford, Glenstord, Suffolk (chessnut).

Agricultural filly (including Clydesdale and Suffolk), three years old.—First prize, £20, Earl of Ellesmere, Worsley Hall (Miss Linton); second, £10, Joseph Hennessy, 35, Richmond-terrace, Clifton, Bristol (Countess); third, £5, L. Drew, Meryton, Hamilton, N.B. (brown). Reserve, Mrs. M. Pearce, New Passage, Bristol (Diamond).

Hunter filly or gelding two years old.—First prize, £20, R. Exley, Horsforth, Yorkshire (Colonel); second, £10, R. Swauwick, Royal Agricultural College Farm, Cirencester (bay gelding); third, £5, T. Trinder, Great Matravers, Herefordshire (Adler). Reserve, T. Mortimer, Kenu, Devon (Matchless).

Hunter mare or gelding three years old.—First prize, £20, G. B. Battams, Tavistock, Devon (Lady Jane); second, £10, Duke of Hamilton and Brandon (Bird's Eye); third, £5, H. B. Festing, Bath (Osman Pacha). Reserve, Duke of Beaufort, Badminton (chessnut gelding).

Hunter mare or gelding four years old.—First prize, £25, J. Goodwin, Cheltenham (Gentleman); second, £15, G. B. Battams (Look Sharp); third, £10, Duke of Hamilton

and Brandon (Boynton). Reserve and highly commended, Col. F. Barlow, Woodbridge, Suffolk (Lambkin).

Hunter mare or gelding five years old and upwards, up to not less than twelve stone.—First prize, £30, Stand Stud Company (Rosalind); second, £20, J. Goodwin (Goldsmith); third, £10, Cap. W. H. Betts Diss, Norfolk (Primrose). Reserve, J. Kevell, Melksham, Wiltshire (Councilor).

Hunter mare or gelding five years old and upwards, up to not less than fifteen stone.—First prize, £30, Duke of Hamilton and Brandon (Winder); second, G. B. Battans (Brown Stout); third, £10, Col. F. Barlow (Doneraile). Reserve, Miss C. C. Ireland, Sandford Place, Cheltenham (Cash-box).

Hackney mare or gelding up to not less than twelve stone.—First prize, £20, H. Villar, Cheltenham, Gloucestershire (Yorkshire Lass); second, £10, T. E. Simpkins, Amesbury, Wiltshire (Comet); third, £5, J. and T. Irish, Totnes, Devon (Actress). Reserve, A. E. Gould, Poltimore, Exeter (Little Lady).

Hackney (mare or gelding), up to not less than fifteen stone.—First prize, £20, Sir P. Fryse, Gogerddan, Cardiganshire (The Dean); second, £10, Stand Stud Company (Expectation). Reserve, J. Davis, Clapton, Bristol (Tommy Dodd).

Pony (mare or gelding), above thirteen hands two inches and not exceeding fourteen hands two inches.—First prize, £15, Duke of Hamilton and Brandon (Bosco); second, £10, J. E. Crowther, Mirfield, Yorkshire (Lady Clarissa); third, £5, Miss M. Thomas, Redland, Bristol (Ruby).

Pony (mare or gelding), not exceeding thirteen hands two inches.—First prize, £15, T. Yelverton, Ottery St. Mary, Devon (Aaron); second, £10, F. F. Bladon, Exeter, Devon (Taffy); third, £5, W. A. Pillers, Wincanton, Somersetshire (General Joe). Reserve, N. Leigh, Westbury-on-Trym, Gloucestershire (Dartmoor).

CATTLE.

SHORTHORNS.

Bull, above three years old.—First prize, £30, Earl of Ellesmere (Attractive Lord); second, £20, W. Linton, York (Sir Arthur Ingram); third, £15, T. H. Bland, Market Harborough (General Fusee); fourth, £10, J. Cruse, Braudis-corner, North Devon (Oxford Duke 10th). Reserve and highly commended, W. Handley, Westmoreland (Royal Irwin). Highly commended, A. H. Browne, Alnwick, Northumberland (Pioneer); J. Vickers, Crook, Durham, (Duke of How John); Duke of Northumberland (Snowstorm). Commended, T. K. Mc. Bunbury, Tallow, Co. Carlow (Anchor).

Bull, above two and not exceeding three years.—First prize, £25, W. Tennant, Selby, Yorkshire (Kalamazoo); second, £15, R. Stratton, Newport, Monmouthshire (Pearl Diver); third, £10, J. Elwell, Bromwich, Warwickshire (Baines Windor); fourth, £5, Stand Stud Company (Favourite). Reserve and highly commended, G. Gibbons, Bath (Hantley).

Yearling bull, above one and not exceeding two years old.—First prize, £25, T. Willis, jun., Carperby, Bedale, Yorkshire (Vice-Admiral); second, £15, Col. R. L. Lindsay, V.C., M.P., Lockinge Park, Wantage, Berks (Churchill); third, £10, Col. R. N. F. Kingscote, C.B., M.P., Kingscote, Wotton-under-Edge, Gloucestershire (Cowslip Boy); fourth, £5, Duke of Northumberland (Lord Mayor). Reserve and highly commended, W. Handley, Milnthorpe, Westmoreland (Lord St. Vincent). Commended, T. H. Bland, Market Harborough (General Favourite).

Bull calf, above six and not exceeding twelve months old.—First prize, £20, S. T. Tregaskis, St. Issey, Cornwall (Masterman); second, £15, Rev. R. B. Kennard, Blandford, Dorset (Prince Victor); third, £10, A. Garfit, Scothern, Lincoln (Southern Butterfly 2nd); fourth, £5, T. Wilson, Shotley Hall, Northumberland (Wild Oxonian). Highly commended and reserve, R. Stratton, Newport, Monmouthshire (Autumn). Commended, Col. R. Loyd-Lindsay, V.C., M.P., Wantage, Berkshire (Don Cossack); A. H. Browne, Alnwick, Northumberland (Northern Hero).

Cow, above three years old.—First prize, £20, Lord Fitzhardinge, Berkeley Castle, Gloucestershire (Rugia Niblett); second, £15, T. Atkinson, Unsworth, Manchester (Moonshine); third, £10, W. Hosken and Son, Hayle, Cornwall (Carnation 4th); fourth, £5, T. H. Hutchinson, Catterick Yorkshire (Grateful). Reserve and highly commended, B. S. John Ackers, Prinknash Park, Painswick, Gloucestershire (Princess Georgie). Reserve, Lord Fitzhardinge (Minstrel 4th).

Heifer in milk or in calf, not exceeding three years old.—First prize, £20, R. Marsh, Hitchen, Hertfordshire (Diana); second, £15, Earl of Ellesmere (The Lady); third, £10, J. S. Bult, Kingston, Taunton (Bertha 3rd); fourth, £5, Grand Stud Company (Blooming Bridesmaid). Reserve and highly commended, G. A. Ashby, Rugby (Innocence). Highly commended, B. St. John Ackers (Lady Carew 2nd). Commended, Earl of Dunmore, Stirling, N.B. (Red Rose of Virginia).

Yearling heifer, above one and not exceeding two years old. First prize, £20, A. Brasse, Chipping Norton, Oxon (Jemima 4th); second, £15, Col. R. N. F. Kingscote, C.B., M.P. (Honey 6th); third, £10, Duke of Northumberland (Lady Jane); fourth, £5, Mrs. S. J. Pery, Foxford, Co Mayo (Lady Violet). Reserve and highly commended, Rev R. B. Kennard (Lady Marohull 4th). Highly commended B. St. John Ackers (Lady Carew 3rd). Commended, F. J. S. Poljumble, M.P., Workson, Notts (Azucena); Col. R. Loy Lindsay, V.C., M.P. (Dunra); D. Pugh, Llandilo, Carmarthenshire (Czarina 12th); commended, G. Ashby Ashby (Dorothy).

Heifer calf, above six and not exceeding twelve month old.—First prize, £20, Lord Fitzhardinge, Gloucestershire (Kirklevington Empress 3rd); second, £15, W. Hosken and Son, Hayle, Cornwall (Rose of Oxford 3rd); third, £10, Earl of Ellesmere (Melody); fourth, £5, A. Garfit, Scothern, Lincolnshire (Blanche Rosette 4th). Reserve and highly commended, Earl of Suffolk and Berkshire, Malmesbury, Wilts (Lady Agnes). Highly commended, E. Bowly (Gazelle 36th); S. T. Tregaskis, St. Issey, Cornwall (Faith). Commended, T. Wilson, Northumberland (Winsome Oxonia); T. Atkinson, Unsworth, Manchester (Miss Bright); Sir J. H. Greville Smyth, Bart., Bristol (Lady Ashton 3rd).

Cow, and not less than two of her offspring.—First prize, £30, Col. R. Lloyd Lindsay, V.C., M.P., (Barlesque); second, £20, J. Stratton, Marlborough, Wilts (May Rose 2nd); third, £10, T. H. Miller, Poulton-le-Fylde, Lancashire (Ringlet 2nd). Reserve and highly commended, J. Stratton (Peephone). Commended, Sir J. H. Greville Smyth, Bart. (Lady Penrhyn).

HEREFORDS.

Bull, above three years old.—First prize, £25, W. Taylor, Ledbury, Herefordshire (Thoughtful); second, £15, T. Thomas (Horace 2nd).

Bull, above two and not exceeding three years old.—First prize, £25, J. Lewis and E. Powell, Breinton, Herefordshire (Telescope); second, £15, H. N. Edwards, Leominster, Herefordshire (Durable); third, £5, P. Turner, Pembridge, Herefordshire (Corsair).

Yearling bull, above one and not exceeding two years old.—First prize, £25, J. Price, Pembridge, Herefordshire (Arthur); second, £15, T. J. Caradine, Leominster (Anxiety); third, £5, H. N. Edwards, Leominster (Compact). Reserve and commended, T. Thomas (Horace).

Bull calf, above six and not exceeding twelve months old.—First prize, £15, J. H. Arkwright (Conjuror); second, £10, T. J. Carwardine (Lord Oxford); third, S. Edwards, Leominster, Herefordshire (Master Butterfly). Reserve and commended, W. Tudge (King of the Roses).

Cow, above three years old.—First prize, £20, Representatives of W. Evans, Usk, Monmouthshire (Lady Blanche); second, £10, Earl of Coventry, Worcester (Giantess); third, £5, J. E. Spencer, Cowbridge, Glamorganshire (Princess of Wales).

Heifer in milk or in calf, not exceeding three years old.—First prize, £15, S. Edwards (Leonora); second, £10, S. Edwards (Beatrice); third, £5, J. H. B. Lutley, Brockhampton, Worcester (Teacher the 2nd).

Yearling heifer, above one and not exceeding two years old.—First prize, £15, J. Morris, Madley, Hereford (Empress); second, £10, S. Edwards (Spangle 3rd); third, £5, J. Morris (Tidy 3rd). Reserve and highly commended, W. Taylor, Ledbury, Herefordshire (Lancashire Lass). Commended, J. Williams, Cowbridge, Glamorganshire (Lady Quinet).

Heifer calf, above six and not exceeding twelve months old.—First prize, £15, J. H. Arkwright, Leominster (Gaylass 4th); second, £10, W. Taylor (Empress); third, £5, J. Arkwright (Abigail). Reserve and highly commended, T. Penn, Ludlow, Herefordshire (Downton Rose). Highly commended, T. Thomas, St. Hilary, Cowbridge (Lady 3rd).

Cow, and not less than two of her offspring.—First prize £25, T. Thomas, Cowbridge (Rosaline); second, £15, T. J.

Carwardine (Cherry); third, £13, J. Morris, Malley, Herefordshire (Browney). Reserve and commended, W. Taylor, Ludbury Herefordshire (Lovely).

DEVONS.

Bull, above three years old.—First prize, £25, Viscount Falmouth (Sirlain); second, £15, G. Turner, jun., Thorpe-lands, Northam (Volunteer). Reserve, Major Buller C.B., Cradton, Devonshire. Commended, Viscount Falmouth Probus, Cornwall (Romancey Rye).

Bull, above two and not exceeding three years old.—First prize, £25, W. Farthing, Bridgewater, Somerset (Royal Aston); second, £15, Viscount Falmouth (Reflector). Reserve, Major Buller, C.B.

Yearling bull above one and not exceeding two years old.—First prize, £25, W. Farthing (Lord Newsham); second, £15, Viscount Falmouth; third, £5, Viscount Falmouth. Reserve, Major Buller, C.B.

Bull calf above six and not exceeding twelve months old.—First prize, £15, W. Farthing (Master Stowey); second, £10, Viscount Falmouth; third, £5, W. H. Walrond (Master Jack). Commended, Major Buller, C.B.

Cow above three years old.—First prize, £20, W. Farthing, (Prettyface); second, £10, W. Farthing (Picotee); third, £5, Mrs M. Langdon, North Molton, Devon (Actress 8th). Reserve, and highly commended, R. Julyan, Grampond, Cornwall (Fancy). Commended, W. Smith, Whituple, Devon (Rosalie), Mrs M. Langdon (Cherry 9th).

Heifer in milk or in calf not exceeding three years old.—First prize, £15, Mrs M. Langdon (Tempress 8th); second, £10, W. Smith (Madge).

Yearling heifer above one and not exceeding two years old.—First prize, £15, W. Farthing (Prettyface 2nd); second, £10, Mrs M. Langdon (Tempress 12th). Reserve and highly commended, Mrs M. Langdon (Cherry 10th).

Heifer calf above six and under twelve months old.—First prize, £15, W. R. Fryer (Kalmia); second, £10, W. Farthing (Famous 2nd); third, £5, W. R. Fryer (Harebell). Reserve and highly commended, Mrs M. Langdon (Cherry 13th). Commended, W. H. Walrond, Topsham, Devon (Choice); R. Julyan, Grampond, Cornwall (Flora); Earl Fortescue, South Molton, Devon (Eva); W. R. Fryer (Bouquet).

SUSSEX.

Bull above three years old.—First prize, £15, E. and A. Stanford, Ashurst, Steyning, Sussex (Dorchester). Commended, E. and A. Stanford (Lanbridge).

Bull above two and not exceeding three years old.—First prize, £15, J. and A. Heasman, Angmering, Arundel (Hereford); second, £10, J. Braby (The Czar). Reserve, A. Agate, Broomhall Farm and West Street, Horsham, Sussex (Berry).

Yearling bull above one and not exceeding two years old.—First prize, £10, J. and A. Heasman (Lord Bath); second, £5, E. and A. Stanford.

Bull calf above six and not exceeding twelve months old.—First prize, £10, J. and A. Heasman; second, £5, A. Agate (Oxford). Reserve, A. Agate (Berry 1st).

Cow above three years old.—First prize, £15, J. Braby (Bouncer); second, £10, J. and A. Heasman (Croesus). Reserve and commended, C. Whitehead, Maidstone, Kent (May Duchess).

Heifer in milk or in calf above two and not exceeding three years old.—First prize, £15, J. and A. Heasman (Rosebud); second, £10, J. Braby (Larky). Reserve and commended, J. and A. Heasman (Lady Oxford).

Yearling heifer above one and not exceeding two years old.—First prize, £15, J. Braby (Rival); second, £5, A. Agate (Betsey 2nd). Reserve, E. and A. Stanford.

Heifer calf above six and not exceeding twelve months old.—First prize, £10, J. and A. Heasman (Flora); second, £5, A. Agate (Spite 2nd). Reserve and highly commended, C. Whitehead (Cherry Brandy). Commended, J. and A. Heasman (The Lady); A. Agate (Pitcher 3rd); E. and A. Stanford (Marigold 4th).

LONGHORNS.

Bull above two years old.—First prize, £15, Duke of Buckingham and Chandos, Buckingham (Conqueror 3rd); second, £10, Major-Gen. Sir F. Fitzwygram, Bart. (Prince Victor). Highly commended, R. Hall, Derby (Blue Knight).

Bull above one and not exceeding two years old.—First prize, £15, Duke of Buckingham and Chandos (Sumbo); second, £10, J. Godfrey, Hinckley, Leicestershire (The Captain).

Cow in calf or in milk above three years old. Prize £15, R. Hall (Calke).

Heifer in calf or in milk not exceeding three years old.—First prize, £15, R. Hall (Bodelwyddan); second, £10, R. Hall (Polly 2nd).

JERSEY.

Bull above two years old.—First prize, £15, C. Bernardino Dixon, Hurley Warren, Southampton (Sant Brelade); second, H. Addington Rigg, Walton-on-Thames (Gipsy Lad); third, £5, W. Alexander, Manor Farm, Jersey (Grey King). Reserve, J. Cardus, West-End, Southampton (Dairy King).

Bull above one and not exceeding two years old.—First prize, £15, Earl of Egmont, Midhurst, Sussex (Lord Montague); second, £10, F. Crang, Timsbury, Bath (Kanger). Third, £5, Lord Chesham, Chesham, Bucks (Emperor). Reserve and highly commended, W. Alexander, Jersey (Tommy).

Cow above three years old.—First prize, £15, P. B. Miller, Bishops-Stortford, Herts (Duchess); second, £10, Lord Chesham, Lutmer, Chesham (Haphazard); third, £5, Lord Chesham (Laura). Reserve and highly commended, W. H. Walrond, Topsham, Devon (Beauty); C. B. Dixon, Shirley Warren, Southampton (Gruette); C. B. Dixon (Grisette); H. A. Rigg, Wykeham Lodge, Walton-on-Thames (Darling); H. A. Rigg (Flirt).

Heifer, in-milk or in calf, not exceeding three years old.—First prize, £15, J. Olaus, Bishops-Stortford (Fancy); second, £10, Lord Chesham, (Laurel); third £5, T. B. Miller, (Beauty). Reserve and highly commended, Lord Chesham, (Patti). Highly commended, Lord Poltimore, Exeter (Hawthorn); G. D. W. Digby, Sherborne Castle (Queen of the Vale 2nd).

GUERNSEY.

Bull, above one year old.—First prize, £15, R. N. G. Baker, Exeter (Prince Charlie); second, £10, W. H. Walrond (The Count). Reserve and highly commended, J. James, Guernsey (Chieftain). Highly commended, W. H. Walrond (Duke); Rev. J. R. Watson, Guernsey (Cloth of Gold 6th).

Cow, above three years old.—First prize, £15, R. N. G. Baker, Devon (Young Nancy); second, £10, Rev. J. R. Watson (Miranda). Reserve and highly commended, Rev. J. R. Watson, (Sylvia No. 2). Highly commended, Rev. J. R. Watson (Juno). Commended, H. S. Woodcock, Wigan, Lancashire; J. James (Gipsy).

Heifer, in-milk or in-calf, not exceeding three years old.—First prize, £15, R. N. G. Baker (Dolly); second, £10, R. N. G. Baker (Lady Jane). Reserve and highly commended, R. N. G. Baker (Croesus). Commended, Rev. J. R. Watson (Nellie).

DAIRY CATTLE.

Pair of dairy cows, in milk, over four years old, milking properties to be specially considered.—First prize, £10, R. Stratton, Newport, Monmouthshire (Fairy Queen and Alice); second, £10, J. R. Keen, Bath (Dairy Maid and Red Rose); third, £5, F. Harvey, Gloucester (Sovereign and Lady). Reserve, J. Yalland, Bristol.

Pair of dairy cows, not exceeding four years old, milking properties to be specially considered.—First prize, £20, Sir P. Miles, Bart., Bristol (Dannless 2Hh and Julia); second, £10, J. Yalland, Bristol.

Pair of heifers, in calf, under three years old.—First prize, £15, R. Stratton (Pearl and Bonnet); second, £10, J. Yalland, Bristol. Reserve, J. Cardus, Southampton (Lopsy and Darling).

WELSH BLACK.

Bulls, two years old and upwards.—First prize, £20, C. S. Mainwaring, Denbighshire (Talihirion); second, £15, Earl Cawdor, Pembroke (Prince of Wales); third, £10, D. Davies, Cardiganshire (Young Robin Dhu). Reserve and highly commended, H. Leach, Pembroke (Turk). Commended, G. Thomas (John Jones); J. C. Best, Denbigh (Sweep).

Bulls, not exceeding two years old.—First prize, £20, W. James, Narberth, Pembrokeshire (Nigger Boy); second, £15, J. S. Wilkinson, Pembroke (The Devil); third, £10, Mrs. L. Williams, Carmarthen (Lynan). Reserve and highly commended, R. Humphreys, Carnarvon (Prince Llewellyn 3rd). Commended, H. Davies, Carmarthen (Egwad).

Cow, above three years old, in-calf or in-milk.—First prize, £15, J. C. Best, Plas-y-n-Vivod (Welsh Duchess); second, £10, J. Walters, Carmarthen (Lady); third, £5, J. C. Best (Black Queen). Reserve and highly commended, H. Harries, Narberth, Penabroke (Mary Anne). Highly commended, Mrs. L. Williams, Carmarthen (Rosal); F. G. Jones, Bala, Merionethshire (Black Queen).

Heifer, in milk or in calf, above two and not exceeding three years old.—First prize, £15, W. Jenkins, Glanwern, Talsarn, Cardiganshire (Nell); second, £10, Earl Cawdor, Stackpole Court, Pembroke (Kitty 6th); third, £5, Earl Cawdor (Vivandaria).

Heifer, above one and not exceeding two years old.—First prize, £15, Earl Cawdor (Leonora); second, £10, R. Humphreys, Beddelert, Carmarvonshire (Black Queen 2nd); third, £5, Mrs. L. Williams, Love Lodge, Llandilo, Carmarthenshire (Myfanw). Reserve and highly commended, J. Davies, Pengawse, Whitland, Pembrokeshire (The Gift). Commended, J. Davies, Alleston, Pembroke (Tulip).

SHEEP.

LEICESTERS.

Shearling ram.—First prize, £20, T. H. Hutchinson, Catterick; second, £10, H. Eaton, Barton-le-street, Malton, Yorkshire; third, £5, W. Brown, High Gate House, Holmeon-Spalding-Moor, Yorkshire. Reserve and highly commended, H. Borton. Commended, T. H. Hutchinson.

Ram of any other age.—First prize, £20, T. H. Hutchinson; second, £10, H. Borton (Liverpool); third, £5, H. Borton (Broughton). Reserve and commended, W. Tremaine, Grampond, Cornwall. Commended, T. Marris, Croston, Uleby, Lincolnshire.

Pen of five shearing ewes of the same flock.—First prize, £15, G. Turner, jun., Thorpe-lands, Northampton; second, £10, G. Turner, jun.; third, £5, W. Brown. Reserve and commended, W. Tremaine.

GLOUCESTERS.

Shearling ram.—First prize, £20, J. Gillett, Oaklands; second, £10, R. Swanwick; third, £5, R. Swanwick. Reserve and commended, J. Gillett. Commended, R. Swanwick.

Ram of any other age.—First prize, £20, and Champion prize of £25, R. Swanwick; second, £10, T. Brown, Marham Hall; third, £5, R. Swanwick. Reserve and commended, T. Brown.

Pen of five shearing ewes of the same flock.—First prize, £30, J. Gillett; second, £10, T. and S. G. Gillett, Faringdon, Oxfordshire; third, £5, J. Gillett. Reserve and commended, S. Smith.

LINCOLNS.

Shearling ram.—First prize, £20, H. Smith, Cropwell Butler (Maxwell); second, £10, A. Garfit; third, £5, W. and H. Dudding, Panton House, Wragby, Lincolnshire. Reserve, W. and H. Dudding.

Ram of any other age.—First prize, £20, H. Smith; second, £10, C. Sell, Basingbourne, Royston, Cambridgeshire; third, £5, A. Hack, Backminster, Grantham, Lincolnshire. Reserve and commended, W. and H. Dudding.

Pen of five shearing ewes of the same flock.—First prize, £15, C. Sell; second, £10, T. Gannell, Willow House, Milton, Cambridge; third, £5, J. Byron, Kirkby Green, Sleaford, Lincolnshire. Reserve and highly commended, J. Pears, Mere, Lincoln.

OXFORDSHIRE DOWNS.

Shearling ram.—First prize, £20, C. Howard, Biddenham, Bedford; second, £10, C. Hobbs, Maisey Hampton, Fairford, Gloucestershire; third, £5, J. Treadwell, Upper Winehendon, Aylesbury (Baron Heythrop). Reserve and highly commended, C. Hobbs. Highly commended, C. Howard; G. Adams, Bidwell Farm, Faringdon, Berkshire (Royal Oxford). Commended, C. Hobbs; F. Street (for two animals).

Ram of any other age.—First prize, £20, J. Treadwell (Royal Liverpool); second, £10, J. Treadwell (The Swell); third, £5, F. Street (Royal Liverpool). Reserve and highly commended, C. Hobbs.

Pen of five shearing ewes of the same flock.—First prize, £15, A. Brasse, Chipping Norton, Oxon; second, £10, J. Treadwell; third, £5, G. Adams. Reserve and highly commended, G. Wallis, Old Shifford, Bampton, Faringdon, Oxfordshire. Highly commended, G. Street, Manden, Amptill, Bedfordshire; F. Street.

SOUTH DOWNS.

Shearling ram.—First prize, £20, Lord Walsingham, Mer-ton Hall, Thetford, Norfolk; second, £10, Lord Walsingham; third, £5, H. Gorringe. Reserve and highly commended, W. Rigden, Ashcroft, Kington-by-Sea, Shoreham, Sussex. Highly commended, W. Rigden; Lord Walsingham; C. Chapman, Frocester Court, Stonehouse, Gloucestershire. Commended, R. N. Grenville; The Duke of Richmond and Gordon, K.G., Goodwood, Chichester, Sussex.

Ram of any other age.—First prize, £20, Lord Walsingham; second, £10, Lord Walsingham; third, £5, Lord Walsingham. Reserve and highly commended, H. Gorringe. Highly commended, H. Gorringe. Commended, H. Gorringe.

Pen of five shearing ewes of the same flock.—First prize, £15, Lord Walsingham; second, £10, Sir N. W. Throckmorton, Bart., Buckland, Faringdon, Berkshire; third, £5, H.R.H. The Prince of Wales, K.G., Sandringham, King's Lynn, Norfolk. Reserve and highly commended, C. Chapman. Highly commended, W. Rigden; H. Gorringe. The whole class commended.

SHROPSHIRE.

Shearling ram.—First prize, £20, H. Townshend, Caldi, cote Hall, Nuneaton, Warwickshire; second, £10, G. Graham The Oaklands, Birmingham; third, £5, T. J. Mansell, Dudmaston Lodge, Bridgnorth, Salop. Reserve, T. Nock, Sutton Maddock. Highly commended, Lord Chesham, Latimer, Bucks; T. Mansell, Harrington Hall, Shifnal, Salop; T. J. Mansell, Salop; E. Crane and A. Tanner, Shrawardine, R.S.O., Salop. Commended, H. Townshend; G. Allen, Knightley Hall, Eccleshill, Staffordshire; T. J. Mansell; W. H. Clare, Twycross, Atherstone; W. H. Clare.

Ram of any other age.—First prize, £20, H. Townshend; second, £10, E. Crane and A. Tanner; third, £5, H. J. Sheldon, Brailes House, Shipton-on-Stour, Warwickshire. Reserve and highly commended, E. Crane and A. Tanner. Highly commended, J. H. Bradburne, Pipe Place, Lichfield, Staffordshire (Lord Aston). Commended, F. Bach (Tartar); T. Mansell; T. Mansell.

Pen of five shearing ewes of the same flock.—First prize, £15, Lord Chesham; second, £10, C. Byrd, Littywood, Stafford; third, £5, T. Nock. Reserve and highly commended, G. Graham. Highly commended, J. E. Farmer, Felton, Ludlow, Salop. Commended, R. Thomas, The Buildings, Easchurch, Salop.

HAMPSHIRE AND OTHER SHORT-WOOLS.

(Not qualified to compete as Southdowns or Shropshires).

Shearling ram.—First prize, £20, A. Morrison, Fonthill House; second, £10, H. Lambert, Great Abington, Cambridge; third, £5, J. Barton, Hackworth Farm, Basingstoke, Hants. Reserve and highly commended, A. Morrison. Highly commended, R. Coles, Warnminster, Wiltshire (Young Victor).

Ram of any other age.—First prize, £20, A. Morrison; second, £10, J. and M. Arnold, Westmeon, Petersfield, Hants (Gladstone); third, £5, F. R. Moore, Littlecot, Pewsey, Wilts. Reserve and highly commended, R. Coles. Commended, T. C. Saunders, Watercombe, Dorchester; A. Morrison.

Pen of five shearing ewes of the same flock.—First prize, £15, J. Read, Honington, Salisbury, Wilts; second, £10, J. Read. Reserve and highly commended, F. R. Moore. Highly commended, T. C. Saunders; H. Lambert.

DEVON LONG-WOOLS.

Shearling ram.—First prize, £10, R. Corner; second, £5, Sir J. H. H. Amory, Bart., M.P., Knightsays Court, Tiverton, Devon. Highly commended, Sir J. H. H. Amory, Bart., M.P.

Ram of any other age.—First prize, £10, Sir J. H. H. Amory, Bart.; second, £5, R. Corner. Reserve, A. Bowerman, Capton Willton, Taunton.

Pen of five shearing ewes of the same flock.—Prize, £10, Sir J. H. H. Amory, Bart. Reserve, R. Corner.

SOMERSET AND DORSET HORNED.

Shearling ram.—First prize, £10, H. Farthing, Nether Stowey, Bridgwater, Somerset; second, £5, J. Culverwell, Claveshay.

Ram of any other age.—Prize, £10, H. Farthing.

Pen of five shearing ewes of the same flock.—Prize, £10, J. Mayo, Broadway Farm, Dorchester, Dorset; second, £5, J. Mayo. Highly commended, J. Mayo.

DARTMOORS.

Shearling ram.—First prize, £10, J. L. Brenbridge, Martin Farm, Wildon Down, Okhampton, Devon; second, £5, J. L. Brenbridge. Reserve, R. Palmer, Venn Farm, Beaworthy, Exbourne, Devon.

Ram of any other age.—First prize, £10, R. Palmer; second, £5, W. Squire, Bonnatford Farm, Brentor, Bridestowe, Devon (Tom). Reserved and highly commended, W. Squire (Bob).

Pen of five shearling ewes of the same flock.—Prize, £10, J. L. Brenbridge.

EXMOORS.

Shearling ram.—First prize, £10, Lord Poltimore, Poltimore Park, Exeter, Devon; second, £5, Lord Poltimore. Reserve and highly commended, Mrs. M. Langdon (Big Ben).

Ram of any other age.—First prize, £10, Earl Fortescue; second, £5, Mrs. M. Langdon (King of the Forest). Reserve and highly commended Mrs. M. Langdon (Rent Layer).

Pen of five shearling ewes of the same flock.—First prize, £10, Lord Poltimore; second, £5, Earl Fortescue. Reserve and highly commended, Earl Fortescue.

PIGS.

LARGE WHITE BREED.

Boar, above six months and not exceeding twelve months old.—First prize, £10, J. and F. Howard, Britannia Farms, Bedford (Tiger 3rd); second, £5, R. E. Duckering (Cultivator 17th).

Boar, above twelve months old.—First prize, £10, Earl of Ellesmere (Samson 2nd); second, £5, J. and F. Howard (Tiger 2nd). Reserve and highly commended, R. E. Duckering (Cultivator 15th).

Pen of three breeding sow pigs of the same litter, above three and not exceeding six months old.—First prize, £10, Earl of Ellesmere; second, £5, R. Tommas, Winson Green, Birmingham. Reserve and highly commended, J. and F. Howard.

Breeding sow.—First prize, £10, R. E. Duckering; second, £5, Earl of Ellesmere (Duchess). Reserve and highly commended, Earl of Ellesmere (Fride of the Village). Highly commended, P. Eden, Cross Lane, Salford, Manchester (Lilium); P. Eden (Lilly). Commended, R. E. Duckering.

SMALL WHITE BREED.

Boar, above six months and not exceeding twelve months old.—First prize, £10, Earl of Ellesmere (The Swell); second, £5, S. Spencer, Holywell, St. Ives, Hunts. Reserve and highly commended, G. M. Sexton, Wherstead Hall, Ipswich (Victorious). Highly commended, R. E. Duckering.

Boar, above twelve months old.—First prize, £10, S. Spencer (Omega); second, £5, Earl of Ellesmere (Second Duke of Lancaster). Reserve and highly commended, S. Spencer (Pat).

Pen of three breeding sow pigs of the same litter, above three and not exceeding six months old.—First prize, £10, Earl of Ellesmere; second, £5, Earl of Radnor.

Breeding sow.—First prize, £10, S. Spencer; second, £5, Lord Moreton, Tortworth Court, Falfield, Gloucestershire (Pearl). Reserve and highly commended, R. E. Duckering.

SMALL BLACK BREED.

Boar, above six months and not exceeding twelve months old.—First prize, £10, G. M. Sexton (Childeric) second, £5, G. M. Sexton (Thurio). Reserve and highly commended, G. M. Sexton (Sir Joseph). Highly commended, Earl of Portsmouth, Eggesford House, Weimbworthy, North Devon.

Boar, above twelve months old.—First prize, £10, G. M. Sexton (Insulaire); second, £5, J. Partridge, Hillerton House, Bow, North Devon. Reserve and highly commended, G. Turner, jun., Thorpepauls, Northampton. Commended, Earl of Portsmouth.

Pen of three breeding sow pigs of the same litter, above three and not exceeding six months old.—First prize, £10, W. F. Collier, Woodtown, Horrabridge, South Devon; second, £5, Earl of Portsmouth.

Breeding sow.—First prize, £10, Rev. W. Hooper, Chilfrone Rectory, Dorchester (Gipsy Queen); second, £5, J. Partridge. Reserve and highly commended, Earl of Portsmouth. Highly commended, Earl of Portsmouth, J. Partridge, and G. M. Sexton (Pilgrimage). The whole class commended.

BERKSHIRE BREED.

Boar, above six months and not exceeding twelve months

old.—First prize, £10, H. Humfrey, Kingstone Farm, Shrivenhall, Berks. (Bertie Savina); second, £5, A. Stewart, Saint Bridge Farm, Gloucester (Major). Reserve and highly commended, W. Hower, Sevenhampton (Hopewell 2nd). Highly commended, C. Williams, Filton House, Barnstaple, N. Devon (Rumpus).

Boar above twelve months old.—First prize, £10, H. Humfrey, Kingstone Farm (Mountain Walk); second, £5, W. Hower (Unison). Reserve and highly commended, A. Stewart (Victor). Highly commended, R. Swanwick (Emulation). Commended, H. Humfrey (Brugley 1st).

Pen of three breeding sow pigs of the same litter above three and not exceeding six months old.—First prize, £10, A. Garfit, Seothern, Lincoln; second, £5, A. Stewart. Reserve and highly commended, W. Hower.

Breeding sow.—First prize, £10, A. Garfit (Cherry Blossom); second, £5, H. Humfrey, Kingstone Farm Shrivenhall, Berkshire (Donna Louise). Reserve and highly commended, R. Fowler. Highly commended, J. Hilliard, Plumber Farm, Blandford, Dorset (Beauty), N. Benjafield, Short's Green Farm, Motcombe, Shaftesbury (Pretty Face), N. Benjafield (Taunton Duchess), N. Benjafield (Taunton Beatrice), A. Stewart, A. Stewart (Peers), B. St. J. Ackers (Fair Flora 3rd), R. Tommas, Winson Green, Birmingham (Queen of the Night). The whole class commended.

OTHER BREEDS

(not eligible to compete in any of the preceding classes).

Boar above six months and not exceeding twelve months old.—First prize, £10, R. E. Duckering; second, £5, Earl of Ellesmere (Young Hero). Reserve and highly commended, R. Tommas (Punch). Commended, Earl of Ellesmere (Don Caesar).

Boar, above twelve months old.—First prize, £10, P. Eden (Star of the East); second, £5, R. Tommas (Esau 2nd). Reserve and highly commended, Earl of Ellesmere (King Victor).

Pen of three breeding sow pigs of the same litter, above three and not exceeding six months old.—First prize, £10, Earl of Ellesmere; second, £5, T. Pullin, Oxwick Farm, Yat-Chipping Sodbury. Reserve, C. Mort, Shrewsbury.

Breeding sow.—First prize, £10, Earl of Ellesmere (Kate Vaughan); second, £5, P. Eden (Sunset). Reserve and highly commended, R. E. Duckering. Highly commended, P. Eden (Nell Gwynne).

CHEESE.

Four cheeses over eighty-four pounds each, any make or colour, made in 1877 (open to makers only).—First prize, £20, C. T. Stallard, Stanton Wick Farm, Pensford, Gloucestershire; second, £15, J. Wilcox, Stomacher Farm, Shepton Mallet; third, £10, W. and T. Allen, Crookwood Farm, Erchfont, Devizes. Reserve and commended, C. B. Maby, Storridge Farm, Westbury, Wilt.

Four cheeses under eighty-four pounds each, made in 1877.—First prize, £15, J. Bennett, Waunstraw, Frome; second, £10, C. Cross, Seymour's Court Farm, Bekington, Bath; third, £5, J. Hoddinott, Hill House, Lipyeat, Bath. Reserve and highly commended, J. Lee, Haighton Hall, Bangor-Isycoed, Wrexham, Flintshire.

Four cheeses over seventy pounds each, made in 1878.—First prize, £20, W. Corp, Sandford Orcas, Sherborne; second, £15, J. Bennett; third, £10, G. Gibbons, Tunley Farm, Bath. Reserve and highly commended, J. Wilcox, Shepton Mallet.

Four cheeses under seventy pounds each, made in 1878.—First prize, £15, J. Hoddinott; second, £10, J. Bennett; third, £5, C. R. Maby. Reserve and commended, E. Parrott, St. Algar's Farm, Frome, Somerset.

One hundredweight of thin cheeses, under twenty pounds each, made in 1878.—First prize, £20, J. Bennett; second, £15, T. J. Moon, Vallis Farm, Frome, Somerset; third, £5, J. Smith, Napdown Farm, Thornbury, Gloucester. Reserve and commended, C. Cross.

One hundredweight of truckle cheese under twenty pounds each, made in 1878.—First prize, £20, J. Bennett; second, £15, E. Parrott; third, £10, E. Bennett, Nethers-street, Bromham, Chippenham. Reserve and commended, J. Ham, Chapel Farm, East Brent, Bridgwater, Somerset.

BUTTER.

Six pounds of fresh butter in 1lb. or ½lb. prints or rolls (open to makers only).—First prize, £10, J. Davis, Katherine Farm,

Henbury, Bristol; second, £8, E. Withey, Yew Tree Farm, North Wick, Dundry, near Bristol; third, £5, E. Vowles, Tickenham, Clevedon, Somerset; fourth, £3, A. Davis, King-road Farm, Shirehampton, Bristol. Highly commended, Rev. G. W. Grainger, Matilda Blanche Gibbs, J. Keel, H. Moran, Eleanor Parsons, T. Read. Commended, T. Ayliffe, Sir J. H. Heathcoat Amory, Bart., M.P., Emily Dean, R. Fowler, J. Godfrey, E. G. Hallett, T. and Margaret and Ann Jones, J. Moss, Hannah Stiff, F. Young.

Twenty pounds of salted butter, to be delivered at Bristol twenty-eight days before the show.—First prize, £7, E. G. Hallett, Alston Farm, Chardstock, Chard, Somerset; second, £5, Lord Poltimore, Poltimore Park, Exeter, Devon; third, £4, Catherine Bowen, Trevayog, Fishguard, Pembroke; fourth, £2, H. Davies, Typicca, Dryslwyn, Carmarthen. Highly commended, Gwynne Vaughan Bowen, J. and Susan Gifford, T., Margaret and Anne Jones, S. Owen. Commended, Sir J. H. Heathcoat Amory, Bart., M.P., G. Bull, J. Greening, E. Paget.

FARM PRIZES.

The following prizes were offered by the Bristol Local Committee for the best-managed farms in Gloucestershire, East Somerset, and North Wilts:—

SECTION I.—Arable farms, with at least two-thirds of their area under rotation of cropping.

Farms of two hundred acres and upwards in extent.—First prize, £50, T. R. Hulbert, North Cerney, Cirencester; second, £25, W. Arkell, jun., Glebe Farm, Hatherop, Fairford.

Farms above eighty and under two hundred acres in extent.—No entry.

SECTION II.—Dairy or stock farms, where the course of cultivation is chiefly directed to the production of cheese or butter, or of animal food.

Farms of two hundred acres and upwards in extent.—First prize, £50, A. J. Steeds, Red House Farm, Stratton-in-the-Fosse, Bath; second, £25, G. Gibbons, Tunley Farm, Bath. Special prizes: J. R. Keen, Chewton Farm, Stow Easton, Bath; J. Maskeylene, Ilankeston, Malmesbury.

Farms above eighty and under two hundred acres in extent.—First prize, £30, J. W. Long, Kellaway's Farm, Chippenham; second, £15, J. Hoddinot, Lippyat, Batn.

AWARDS FOR DAIRY UTENSILS.

For the best milk can, suitable for conveying milk long distances.—W. Alway and Sons, £10.

For the best churn for churning a sufficient quantity of milk to produce not more than 20lb. of butter.—E. Ahlborn, £10.

For the best mechanical or automatic butter worker, suitable for large dairies and for factories.—E. Ahlborn, £10.

For the best mechanical or automatic butter worker, suitable for small dairies, price to be specially considered.—E. Ahlborn, £10.

For the best cheese tub.—R. Cluett, £10.

For the best curd knife.—W. Gilman, £5.

For the best curd mill.—H. Bamford and Sons, £5.

For the best cheese-turning apparatus.—Carson and Toone, £10.

For the best mechanical means of cleaning churns and other dairy utensils.—No exhibit of merit, and therefore no award.

For the best automatic means for preventing the rising of cream.—H. E. Mines, £10.

For the best milk cooler.—Lawrence and Co., £10.

For the best method of keeping a large quantity of milk at a temperature of 40 deg. Fahrenheit for a period of not less than twelve hours.—No award, entries not complying with conditions.

For the best milking machine, to be tested during six consecutive months of the spring and summer of 1879.—No entry.

The judges awarded prizes to the following:—R. Cluett, Bank Buildings, Tarporley, Cheshire, £10, for improved Cheshire cheese tub; H. Bamford and Sons, Leighton Iron Works, Uttoxeter, Staffordshire, £5, double roller curd mill; W. Gilman, Staffording, near Ashborne, Derbyshire, £5, new curd knife; £10 to Thomas Taylor for a churn for churning cream; Robinson and Richardson and Thomas Bradford and Co., highly commended for churns for the same purpose; E. Ahlborn, £10 for a butter-worker, and the same exhibitor £10 for his butter-working board.

Vipan and Heady are highly commended for a milk can. The judges award a special prize of £10 to E. Ahlborn for cistern and milk pans on the Swartz system.

IMPLEMENT AWARDS.

SILVER MEDALS.—Hornsby and Sons, for machine for cutting and trimming hedges. John Fowler and Co., for circular valve attached to 16-horse power cultivating engine. Morris and Griffin, for Turton's permanent rick coverings.

THE IMPLEMENTS.

The show-yard was laid out on an excellent plan, great regularity and compactness being secured in the arrangement of the stands. There was, however, one portion of the machinery-in-motion department to which these words of commendation do not apply, for in the portion alluded to there was a worse muddle than we have ever seen at any previous show of this or any other Society. By some miscalculation in planning the space to be occupied by the rows of stands, what should have been the avenue between them was filled up with engines, heaps of coal, and packing encumbrances, so that there appeared to be no thoroughfare for visitors, and the majority probably passed it by without entering the scene of disorder. This is the more to be regretted because some of the most interesting machines in motion were in the thick of this chaos, and amongst the victims were some of the oldest exhibitors at the Society's meetings.

Of real novelties, as distinguished from improvements on old machines, there was a great dearth. The greatest novelty was the two-horse hedge-clipping machine shown by Richard Hornsby and Sons, of Grantham. This machine is mounted on two wheels of large diameter, both of which communicate motion to the working parts. The pair of knives are carried by a sliding bar projected from the side of the machine, which is so arranged as to be capable of ready adjustment at the will of the driver, who can set the knives to any angle so as to cut off more or less of the hedge, or alter its shape. The knives are like a pair of reaping-machine knives working together with a shear-like action, but they are much stronger than those used on reapers, as may be imagined when it is stated that they will readily clip branches off a hedge as thick as a man's thumb. The cutter bar hangs over the hedge on either side, so that the horses may walk on whichever side is the more convenient, and the most expeditious way of clipping is to cut the hedge into a Λ shape, so as to avoid the necessity of a separate cut for the top. The machine will clip one side of a hedge as fast as the horses can walk, and it requires a boy to drive and a man to work it. We were informed that five miles of fence may be cut on both sides in a day, which at the rate usually paid for clipping—4d. for 22 yards—the machine will earn no less than £6 13s. per day. It is obvious, however, that no such price would have to be charged by the owner of the machine, who could afford to let it out at a much lower rate. Messrs. Hornsby also exhibited a thrashing machine of new construction, embodying several improvements upon those formerly made by them. Every riddle can be seen at work and is easily to be reached. The owner is placed below instead of above the screens, so as to deliver the corn at the right height for a man's back, the sacks being filled on a small platform hanging from the end of the machine. The improvements in the excellent mowers and reapers made by this firm were noticed in our report of the recent show at Oxford.

Ransomes, Sims, and Head, of Ipswich, had their usual extensive display of engines, thrashing machines, ploughs, horse-rakes, lawn-mowers, &c. Their new eight-horse power agricultural locomotive engine embodies the latest improvements, and is suited for ploughing on the roundabout system, for thrashing, and for road purposes.

It is made stronger than formerly for hauling heavy weights, and is capable of drawing fourteen tons up a gradient of 1 in 10. The six horse-power engine made on the same pattern will draw ten tons up the same gradient. The coal bunkers carry coal enough for five hours' consumption, and the water tanks hold enough water for an hour-and-a-half's use. Amongst the other articles noticed particularly on the two stands of this firm were the 14 horse-power traction engine, and the 4-furrow seed coverer, a very useful light plough, which can be used either for ploughing in corn or for skinning purposes. The "Universal" haymaker is now fitted with patent adjustable tines to suit any crop, and the "Star" horse-rakes are made with any height of wheels up to 5ft. 6in., and with teeth large enough to cock hay.

Lampit and Son, of Warwick, showed some improvements in millers' machinery, in the forms of the "Acme" flour-dresser, middlings purifier, and the "Champion" rigid vertical fire-proof mill for crushing and reducing middlings.

J. and H. McLaren, of Leeds, have acquired a quick celebrity for the manufacture of traction engines, and this year they have adapted several improvements to their simple, compact, and well-constructed engine. Steel is largely used in its construction, the spur-gearing being made entirely of that material, and wrought-iron brackets have been substituted wherever possible for those of cast-iron. All the cylinders are steam-jacketed, the boilers are made strong for working at a high pressure, and the arrangements for reducing the consumption of fuel have been carefully made. Altogether this engine has been deservedly commended by the general opinion of those best qualified to judge. Aveling and Porter, of Rochester, have improved their engines by adopting a sliding sleeve worked on a fixed shaft, which does away with the necessity for a pinion sliding on the keyway. All the gearing is now placed inside the hornplate, which is carried straight up to take all bearings. The locomotive engines are also fitted with winding drums, and are made with 7ft. wheels.

John Fowler and Co., of Leeds, have introduced some improvements in the construction of their cultivating and traction engines. Amongst those are a round steam chest with balanced slide-valve, and a spring bridle to take the strain off the engine when travelling. Messrs. Fowler and Co. also show their well-known steam ploughs, cultivators, and harrows, and a piece of Deauville's portable railway, with waggons for the same. This railway is suitable for mines, quarries, farms, &c., and was first introduced in France, where its use has attracted world-wide attention. Visitors rarely passed without stopping to look at that giant of steam cultivation, the Sutherland plough, exhibited on this stand.

We referred in our Oxford report to the improvements made since last year by J. and F. Howard, of Bedford, in their "Simplex" mowers and reapers. At Bristol Messrs. Howard exhibited their new self-binding reaper, described last week in our notice of some of the implements at the Paris Exhibition. For such opinion as can be formed from an examination of a machine out of the field, we must refer our reader to that notice; but we hope to make the more intimate acquaintance of this and other self-binders in the harvest trials. Amongst the other new features in the manufactures of this firm we noticed a four-furrow steam plough, made stronger and deeper than previously; a new arrangement by which the driver of a cultivator may regulate the distance which the self-moving anchor will travel; a new gullows plough, J.J., with swivel-head for throwing it down in turning at headlands, and a screw to adjust depth of ploughing in the easiest manner; a new turn-wrest plough which turns over automatically as the horses are turned,

the driver having simply to move a catch; a double-furrow plough convertible into a single plough, with combined wood and iron beam, the iron being of T section, and with a screw-head to take the place of the old-fashioned hake in altering the line of draught; and a one horse three-wheel haymaker with seat for driver.

We noticed John Henry Knight's (Weybourne, Farnham) steam power digging machine for hop grounds, on its first introduction, with great interest, as it was a most ingenious and effective-looking implement, and one much needed to supersede a vast amount of hand labour. Since then it has been used and very highly spoken of by practical judges. At Bristol it appeared in an improved form, with a single wheel instead of two for steering, and a new arrangement for adjusting the depth of tines. The implement is driven by a manilla rope from a groove pulley on a portable or traction engine, and the cost of digging hop-gardens by its use is, we believe, very much less than that of hand-digging.

E. R. and F. Turner showed their "Gippeswyk" engine, formerly only made in a vertical form, adapted as a horizontal engine, in which form it is very compact and requires no fixing other than a mere screwing on to pieces of wood for bearings. Messrs. Turner also exhibited a new pattern horse gear, made chiefly for Continental uses and to compete with cheap American productions, of the kind. On the stand of E. Page & Co., of Bedford, we noticed some cheap and serviceable drag harrows with adjustable teeth and a very simple and easy arrangement for putting the implement in and out of work. Hunt and Tawell, of Earls Colne, showed a new maize mill, with solid steel roller, which can be easily sharpened when required; also an improved root-cutting machine, with interchangeable discs for pulping, grating, or slicing. On C. Denig and Co.'s (Chard, Somerset) stand there was a clod crusher with a seat for driver and frame so arranged as to throw all the weight on the roller and none on the horse's back. R. A. Lister and Co., of Dursley, Gloucestershire, showed Phillips's new self-raking reaper, noticed in our account of the Oxford show, and a combined machine and a mower of the same make, with other articles. Richmond and Chandler, of Salford, showed their famous chaff-cutters and horse gears, fitted with recent improvements. In the former the rollers and feeding web are both reversed by the same lever, thus providing against accidents to the man feeding or the machine itself. In the horse gears an arrangement for stopping the poles the instant the horses cease to pull has been introduced, thus avoiding the objectionable knocking of the poles against the horses' legs on a sudden pull up, which has been so objectionable, and often mischievous. Willacy's (Preston) farm-yard manure spreader has been improved since last year; but we did not see it at work.

A. C. Bamlett, of Thirsk, has introduced a new controllable cam to adjust the size of sheaves in using his reapers, and arrangements for easily lowering or raising the height of cut, and for putting in and out of gear—both within reach of the driver. The fingers are now made of wrought iron lined with steel, which is a great security against frequent breakages and consequent stoppages. Mr. Bamlett invited the attention of the judges to these fingers, and we hope they were noticed as favourably as they deserved to be. Farmers at any rate are certain to notice them, as they know from vexatious experience the great loss of time occasioned by the frequent breakages of cast-iron fingers, especially on mowing machines. Davey, Sleep, and Co., of St. German's, showed an improved two-furrow turn-wrest plough, adjustable in all its parts, and fitted with quadruple wheel steering; also their excellent treble and double whippetrees.

Next to the hedge clipping machine, perhaps the most striking novelty in the showyard was the new single-row turnip topping and tailing machine exhibited by Thomas Hunter, of Maybole, Ayrshire. We noticed in our report of the Liverpool show last year Mr. Hunter's very ingenious machine for the same purpose; but this is quite of a new form, and a decided improvement. The new machine works on a slide instead of wheels, which we consider a great advantage, and it is now made so that the knives cannot cut the bulbs of the turnips. It is provided with pushers in front to bring out-growing turnips into the line of working. This very ingenious machine is also very cheap, and we shall acknowledge ourselves mistaken if it does not come into general use. It can be worked by a pony.

Corbett and Peele, of Shrewsbury, showed some improvements in horse hoes and cheese presses; also their Royal Prize combination of winnower, corn elevator, and weighing machine, which is attracting a great deal of attention at the Paris Exhibition. The American revolving mould-board ploughs of their construction is used chiefly in the North and in Staffordshire. It must effect a great saving of labour in ploughing for spring crops, where that operation is carried out.

The Koldmoos Weed Eradicator, manufactured and exhibited by Ord and Maddison, of Darlington, has been so much simplified and improved since last year as to have the appearance of a new implement. It has, we believe, found much favour in districts where charlock is troublesome, but it is also designed to extract thistles and other weeds as well as charlock. George Kearsley, of Ripon, has fitted his reapers and mowers with an arrangement for holding up the finger bar, and for locking the bar automatically when fully turned up for travelling. John Wilder, of Reading, has improved his cake-breakers and chaff-cutters, and showed besides these machines a set of deep-well machinery, and a street-watering machine used by the Reading Commissioners. William Anson Wood, of London, has adopted some improvements in the manufacture of his reaping and mowing machines.

A new method of separating wheat from wild oats and some other weeds was exhibited by J. and B. Sainty, of Wisbech. A zinc plate is introduced, and is made partially to cover the upper screen of their dressing machine. On to this plate the oats and other light seeds are blown, while the wheat or barley falls on to the screen. It is a very simple plan, and appears to be an effective one. John Huxtable, of Brayford, Devon, showed a new form of double-furrow, turn-wrest plough, in which there is a share on each breast, and a furrow-wheel which turns automatically as the horses turn on the headlands; also a turn-over plough with self-locking action.

W. Crosskill and Sons, of Beverly, showed amongst their numerous farm carriages an improved portable farm railway and trucks for the same. The Bristol Wagon Works Co. had a new water cart with a body so constructed as to allow of its being regulated as a perfect balance when going up or down hill, securing the greatest pressure of the water over the delivery pipe in either case. They also showed a new manure spreader, Wheaton's patent, for hand or horse power, which works in a very simple manner. Besides these novelties the firm showed a large collection of farm carriages and implements of various kinds, dairy utensils, &c. Gilbert Sinkwell, of Dunstable, Beds, had an improved platform weighing machine, with patent sack lifter and spring oader. Piggott Brothers, of London, showed tents and pavilions of the newest designs, with a large variety of stack and engine covers, netting, and other articles. Hill and Smith, of Brierly Hill, Staffs, exhibited a new tubular hurdle for cattle and horses, and a sample of their new tubular continuous sheep and cattle fencing, all of

which have a good appearance and great strength. This firm also showed a very large selection of iron, rod, and wire work of every description, including field, entrance, and wicket gates, poultry fencing, wire-work for gardens; also sheep racks, cattle troughs, &c. Thomas Lucknal, of Ealing, London, has improved his revolving hoe for thinning turnips. It is in a very light form, and intended to be used by hand. It may be combined with a drill, so that where the plants are too thin the thinners may be raised by depressing the handles, and seed can be deposited. A new combination of various appliances, to be used on one two wheeled tip barrow, consisting of milk cans on springs, swing and water carts, and liquid manure tub, pump suction, manure hod, &c., was shown by G. Campion, of Ramsey, Hunts; also Campion's patent handled iron drag harrow, made suitable for hard land. Reuben Chett, of Tar orley, had some improved dairy utensils, which were entered for trial. An improved corn and seed cleaning machine was exhibited by J. Richardson, Carlisle.

The best rail milk-can we have yet seen was on the stand of Vipan and Heady, of Leicester. It is double-cased, so that there are no rivets inside, and has a locking cover, with a ball valve which affords ventilation when the can is upright and closes to prevent the spilling of the milk if the can is turned over. On one side of the bottom it is fitted with small wheels, in order that the can may be steadily wheeled along, instead of being "bundled" about after the fashion that we see at railway stations in the moving of the old-fashioned cans. This can was entered for trial, as was also a portable milk carriage with india-rubber spring for preventing the shaking of the milk. Messrs. Vipan and Heady have also introduced a very cheap and useful combination in the form of a three-tine hoe and moulding plough, which a pony can draw. This little implement is excellently fitted for market gardeners' use. Several churns described as "new implements" were shown and entered for trial by George Llewellyn and Son, of Haverfordwest. F. and C. Hancock, of Dudley, also had some novelties in churns for trial.

A very useful invention in the form of a cheese-turner has been brought out by Carson & Toone, of Warminster. The frame is constructed partly of iron, and at each end there is a centre on which the whole frame with its shelves for cheeses revolves, so that as many cheeses as the stand can contain may be turned in a minute. The shelves are adjustable so as to suit cheeses of any thickness. As we write we have not seen the awards of the judges of dairy appliances; but we were informed that this cheese-turner had obtained a prize. A chaff-cutter, with sifter and elevator, was also on this stand, and Lauder's patent revolving hay collector, which gathers hay into windrows ready for carting. Alway & Sons, of London, and James Brown, of Shepton Mallett; Thompson Brothers, of Bridgwater, and W. Waide, of Leeds, showed dairy utensils and implements for competition.

Robinson and Richardson, of Kendal, also competed with a mechanical butter worker and two barrel churns; and George Hathaway, of Chippenham, entered several churns with Archimedean and adjusting dashers, and other recent improvements. The removability of dashers for cleansing operations is very advantageous. J. and J. E. Stephens, of Stonehouse, and David Noble, of Strauraer, exhibited new forms of curd cutters; and Greenwood, Hancock, and Co., of London, showed improved cans, churns, and milk coolers. Amongst the other exhibitors in the trial class were Taylor and Wilson, of Clayton-le-Moor; E. Ahlborn, Hildesheim, Hanover; Thomas and Taylor, of Stockport; Bradford and Co., of London; and the Albion Iron Works Company, Rugeley. The last-mentioned firm also showed, amongst a large collection

of implements, a chaff-cutter with travelling web, and their patent self-acting horse-rake, improved since last year. This rake has a simple and ingenious arrangement for altering the pitch, and altogether is a very effective looking implement. Henry Bamford and Sons, of Uttoxeter, had some novelties in dairy implements, including a cheese-turning apparatus. Burney and Co., of Millwall Docks, London, showed a capital selection of cattle troughs, tanks, cisterns, drinking pans, and corn bins.

The recent successes in trial-fields of the mowers manufactured by Harrison, McGregory, and Co., of Leigh, Manchester, have attracted attention, and their new self-raking reaper, the "Albion," was referred to in our report of the Oxford Show. They had also a self-acting back-delivery reaper, which is much used, we believe, in Scotland and the North of England.

The sheaf-binding reaper, to tie with string, exhibited by J. H. King, of Newmarket, Stroud, at Liverpool last year, has been since much improved. It makes a double twist in the string, and, if not too complicated for field work and management by farm labourers, its mere originality gives it a claim to success. Unlike all the other self-binders in the field it has no high platform to which the corn has to be raised by means of a web. On falling upon the platform the corn is first gently removed into position by an adjustable feathering rake, which is one of the recent improvements introduced, we believe, by Heatherington and Co., of Manchester, who manufacture the machine, and exhibited it on another stand. When in position the corn is carried by prongs working through openings in the platform to the binder attached to the side of the reaper, about on a level with the platform. This machine is entered for the trials which are to take place near Bristol in harvest.

Walter A. Wood, of Worship Street, London, has improved his well-known self-binding reaper since last season. The fliers are now adjustable as to height according to the length of the corn, and there is an alteration in gearing for altering the height of cut and for throwing the machine in and out of gear. This machine has the advantage of being better known in this country than any other self-binder, through the numerous field trials of it last year. Mr. Wood also exhibited a new self-raking two-horse reaper, with five rakes of which all, or every second, third, fourth, or fifth can be used at option. His new iron-frame mower has all the gearing enclosed, and the back of the knife is made to lap a little over the cutter bar, so as to keep the points of the knives close to the cutting edges of the fingers.

COMPLETE LIST OF EXHIBITORS OF IMPLEMENTS,
SEEDS, MANURES, &c., WITH THEIR CHIEF EXHIBITS.
STAND

1. Ransomes, Sims, and Head, Ipswich.—Locomotive engines, thrashing machines, ploughs, rakes, mowers.
2. Lampitt and Sons, Warwick.—Flour-dressing machines, vertical fire-proof mills.
3. J. and H. McLaren, Leeds.—Agricultural locomotives.
4. Aveling and Porter, Rochester.—Locomotive engines, locomotive waggons.
5. J. Fowler and Co., Leeds.—Cultivating engines, traction engines, agricultural locomotives, ploughs, waggons.
6. J. and F. Howard, Bedford.—Locomotive engines, ploughing engines, cultivators, ploughs, harrows, horse rakes.
7. J. H. Knight, Surrey.—Steam power digging machines.
8. J. Buckingham, Luncannon.—Ploughs, cultivators.
9. E. R. and F. Turner, Ipswich.—Thrashing machines, mill stones.
10. W. Rainforth and Sons, Lincoln.—Drills, harrows.
11. E. Page and Co., Bedford.—Horse rakes, drag harrows.
12. Hunt and Tawell, Halstead.—Dressing machines, chaff cutters, oil-cake breakers.

STAND

13. C. Dening and Co., Somerset.—Corn drills, clod crushers, root pulpers.
14. R. A. Lister and Co., Gloucestershire.—Self-raking reapers, chaff cutters.
15. Richmond and Chandler, Salford.—Chaff cutters, horse gear.
16. R. Willacy, Preston.—Cowhouse fittings, cattle feeders.
17. A. C. Bamlett, Thirsk.—Mowing machines, reapers.
18. H. Cooch, Northampton.—Winnowing machines, corn elevators.
19. Davey, Sleep, and Co., Cornwall.—Ploughs and land-pressers, horse rakes.
20. T. Hunter, Ayrshire.—Turnip topping and tailing machines.
21. J. L. Larkworthy and Co., Worcester.—Harrows, ploughs, sheep troughs.
22. Corbett and Peck, Shrewsbury.—Combination machines, corn-dressing machines, chaff cutters, cheese press, harrows.
23. Ord and Maddison, Durham.—Weed eradicators.
24. G. Kearsley, Ripou.—Mowers and reapers.
25. J. Wilder, Reading.—Chaff cutter, horse gear, oilcake mills.
26. T. Allcock, Nottingham.—Chaff cutters, horse rakes.
27. Reynolds and Co., London.—Poultry houses.
28. Peuney and Co., Lincoln.—Potato diggers, trucks.
29. W. A. Wood, London.—Grass mowers, reapers.
30. J. B. Sainty, Cambridgeshire.—Separating and blowing machines, sacking elevators.
31. J. Huxtable, Devon.—Ploughs.
32. C. Clay, Wakefield.—Cultivators, harrows, horse hoes.
33. W. Crosskill and Sons, Beverley.—Carts, farm trucks.
34. The Bristol Waggon Works Co., Bristol.—Tipping carts, farm waggons, rakes, churns, turnip cutters.
35. C. D. Phillips, Newport.—Rick sheets, waggon covers.
36. A. E. Peirce, London.—Cattle troughs, wheel barrows.
37. Hayes and Son, Peterborough.—Waggons, carts.
38. J. S. and G. Cannings, Hants.—Carts, cattle troughs.
39. W. Marshall, Exeter.—Waggons, carts.
40. W. N. Venman, Bristol.—Carts, barrows.
41. F. P. Milford, Exeter.—Waggons, carts.
42. G. Lewis and Son, Kettering.—Waggons, horse hoes.
43. S. T. Osmond, Wilts.—Carts, pumps.
44. J. Bellamy, London.—Cisterns, corn bins.
45. W. Ball and Son, Kettering.—Waggons, ploughs, harrows.
46. W. Smith and Son, Kettering.—Hoc, grindstone c.
47. Sawney and Co., Beverley.—Dressing machines, elevators.
48. G. Sinkwell, Dunstable.—Sack elevators, hoes, troughs.
49. R. and J. Linaere, Sheffield.—Knives, hoes.
50. A. M. May and Co., London.—Horse hoes.
51. J. G. Rollins and Co., London.—Hay rakes, lawn mower, forks, pumps, churns, vices.
52. Lane and Champion, Birmingham.—Barrows, trolleys.
53. I. James and Son, of Cheltenham.—Water vans, manure pumps.
54. G. Ball, Rugby.—Waggons, carts.
55. Bayliss, Jones, and Bayliss, London.—Continuous fencing cattle hurdles, wicket gates, chain arrows.
56. Figgott Brothers, London.—Rick cloths, engine covers, stable cloths, reins, hammocks, summer houses, coats.
57. Hill and Smith, Staffordshire.—Continuous sheep fencing, sheep hurdles, deer hurdles.
58. Moule's Earth Closet Co.—Closets.
59. T. Huckvale, Ealing.—Floes for turnips.
60. G. Campion, Huntingdonshire.—Milk cans, drag harrows.
61. R. Cluett, Cheshire.—Milk tankards or cans, curd mills.
62. J. Wilding, Lancaster.—Washers, wringing machines.
63. W. H. Delano and Co., London.—Root cutters, sheep shears, horse clippers, combination tools.
64. J. Richardson, of Machine Works, Carlisle.—Cleaning machine.
65. S. and F. Ransome and Co., Strand, London.—Steam pressure gauge, engine fittings, driving bands, pulleys.
66. F. Morton and Co., Liverpool.—Galvanised fencing, field gates, tree guards, hurdles.
67. Vipan and Healdy, Leicester.—Milk cans, pulper, stripper, slicing machines, hoes, corn crusher, garden furniture.

STAND.

68. Atmospheric Churn Company, London.—Churns, refrigerators.
69. G. Llewellyn and Son, Pembrokeshire.—Churns.
70. F. and C. Hancock, Dudley.—Churns.
71. Carson and Toone, Warminster.—Chaff machines, 2-horse gears, cheese presses.
72. R. Tinkler and Co., Penrith.—Churns.
73. W. Alway and Sons, London.—Milk cans, churns.
74. J. Brown, Somerset.—Churns, cheese vats.
75. Robinson and Richardson, Kendal.—Butter workers, churns.
76. Thompson Brothers, Bridgewater.—Milk cans, cheese presses, scrapers.
77. G. Hathaway, Chippenham.—Churns.
78. W. Waide, Leeds.—Churns.
79. H. Duffield, London.—Dairy utensils.
80. W. Gilman, Hartington.—Milk vats, curd mills.
81. J. and J. E. Stephens, Gloucestershire.—Curd cutters.
82. D. Noble, Wigtown.—Cheese tubs, curd knives.
83. W. Dauncey, Dursley.—Curd mills and hoppers.
84. Greenwood, Hancock, and Co., London.—Milk cans, churns, purifying machines, milk coolers, mixing machines.
85. J. M. Bell and Co., London.—Churns.
86. Taylor and Wilson, Accrington.—Churns, home washing and wringing machines.
87. E. Ahlborn, Germany.—Churns, dairy utensils.
88. Albion Iron Works, Rugeley.—Chaff cutters, root pulpers, horse hoes, rakes, trucks, troughs.
89. Thomas and Taylor, Cheshire and Salford.—Churns, washing, wringing, and mangling machines.
90. T. Bradford and Co.—Washing, wringing, and mangling machines, potato washers, churns.
91. H. Bamford and Sons, Uttoxeter.—Chaff cutters, 2-horse gear, cheese-making apparatus, pig troughs, pumps.
92. J. Fuller and Co., Bristol.—Drags, waggonettes.
93. J. Barton and Sons, Bristol.—Broughams, carts.
94. J. B. Pinnock, Bristol.—Waggonettes, carts.
95. Burncy and Co., London.—Cisterns, liquid-manure-carts, cattle troughs, drinking troughs, corn-bins, oil-tanks.
96. H. Peck and Co., Lancashire.—Rick covers.
97. J. Offord, London.—Carriages.
98. S. and A. Fuller, Somersetshire.—Carriages, carts.
99. Gold Bros., Windsor.—Carts.
100. Bligh Bros., Canterbury.—Carts, carriages.
101. B. Newham and Son, Bath.—Waggonettes, carts.
102. Startin and Sons, Birmingham.—Broughams, village-carts.
103. Morgan and Co., London.—Landaus, phaetons.
104. C. Thora, Norwich.—Carts.
105. Bennett and Son, Ipswich.—Phaetons, carts.
106. Braigny and Son, Peterborough.—Carts, waggonettes.
107. S. Hart, London.—Landaus, waggonettes.
108. E. and H. Vezey, Somerset.—Broughams, carts.
109. J. Roberts and Sons, Bridgewater.—Phaetons, market carts.
110. Bristol and W. of England Perambulator and Invalid Chair Works.—Perambulators.
111. Centaur Bicycle Co., Coventry.—Bicycles.
112. Howes and Sons, Norwich.—Carts, phaetons.
113. W. King, Leighton Buzzard.—Broughams, carts.
114. B. Edgington, Surrey.—Rick cloths, garden chair.
115. D. Hart and Co., London.—Weighing machines.
116. Perkins and Bellamy, Ross.—Corn drills, troughs, cattle cribs.
117. C. Fuge, Somerset.—Carts, phaetons.
118. J. Marston and Co., Birmingham.—Landaus, carts.
119. Harrison, McGregor, and Co., Leigh, Manchester.—Chaff cutter, pulper and slicers, "Albion" mowers.
120. H. Denton, Stafford.—Harrows, rollers, hoes, troughs.
121. H. J. H. King, Stroud.—Sheaf binding machines.
122. W. A. Wood, Worship Street, London.—Self binding harvesters, self delivery reapers, mowers, grindstones.
123. Burgess and Key, London.—Self binding apparatus for reaping machines, mowers and reapers.
124. Waite, Burnell, Huggins and Co., London.—Self binders, lawn mowers, harrows.
125. Johnston Harvester Co., New York and London.—Combined reapers and mowers, self delivery reapers.
126. D. M. Osborne and Co., Liverpool.—Self delivery combined mowers and reapers, self delivery reapers, grindstones.

STAND.

127. M. T. Neale, London.—Sheaf binders.
128. Hetherington and Co., Manchester.—Sheaf binding machines.
129. J. Unite, London.—Rick cloths, ropes, driving aprons, lawn tents.
130. Samuelson and Co., Banbury.—Self raking reaping machines, "Banbury" turrip cutters, lawn mowers.
131. J. Coultas, Grantham.—Drills, corn and seed drills, potato planters, hoes.
132. J. Smyth and Sons, Suffolk, Essex, and Paris.—Corn and manure drills.
133. J. Savery, Bristol.—Ploughs, cultivators, hoes, harrows.
134. J. W. Robinson and Co., Liverpool.—Potato diggers.
135. J. Williams and Son, Flintshire.—Chaff cutters, pulpers and slicers, mowers and reapers.
136. R. Boby, Bury St. Edmund's.—Haymakers, horse rakes, corn-dressing machines, corn screens, seed drills.
137. J. Baker, Wisbeach.—Winnowers and corn elevators.
138. J. Humpage, Bristol.—Reaping and mowing machines.
139. A. S. Whiting, Canada and Liverpool.—Hay and straw forks, manure drags, weeding hoes.
140. J. and H. Keyworth and Co., Liverpool.—Mowers and reapers, hay rakes, wringers.
141. Powell Brothers and Whitaker, Wrexham.—Chaff cutters, root pulpers and slicers.
142. Coleman and Morton, Chelmsford.—Cultivators, liquid manure and water carts, corn screens, oilcake cutters.
143. W. and C. Woolnough and Co., Surrey.—Corn and seed drills, hoes.
144. T. C. Watts, London.—Factory engines.
145. W. Alleck, Swindon.—Water and liquid manure carts, pumps, engine boilers, troughs.
146. E. H. Beuttall and Co., Maldon.—Chaff cutters, oilcake breakers, pulpers.
147. J. Cooke, Lincoln.—Ploughs.
148. F. and H. Mattison, Bedale.—Reapers, mowers.
149. T. Lloyd and Sons, London.—Flour mills and dressing machines, grinding mills, linseed crushers.
150. D. Tilley, Cowbridge.—Dibbling machine.
151. T. McKenzie and Sons, London and Belfast.—Water-wheels, pumps, trucks, churns.
152. Reading Iron Works, Reading.—Traction engines, circular saw benches, thrashing machines, rakes.
153. Markt and Co., New York and London.—Lawn mowers, digging forks, Union churns, watering engines.
154. Maldon Iron Works, Co., Maldon.—Horse gear, chaff cutters, oilcake mills, root shredders, troughs.
155. Barford and Perbourn, Peterborough.—Steam cultivating tackle, corn-grinding and oilcake mills, garden rollers.
156. W. Brenton, Cornwall.—Mowing machines, reapers, corn drills, broadcast corn and seed machine.
157. J. Crowley and Co., Sheffield.—Chaff cutters, lawn mowers.
158. Woods, Cocksedge, and Co., Stowmarket, Suffolk.—Horse gear, turp cutters, oilcake breakers, carts.
159. H. S. Crump, Gloucester.—Sheep racks, troughs, corn bins.
160. B. Reid and Co., Aberdeen.—Corn and seed drills, hand-thrashers.
161. W. Baker, Bristol.—Reaping machines, horse rakes, chaff cutters, harrows, ploughs.
162. H. Beare and Sons, Newton Abbott.—Haymakers.
163. W. Whittaker, Bristol.—Millstones.
164. Bryan Corcoran, junr., Mark Laue, London.—Millstones, millstone cements, woven wires, sieves.
165. Jeffery and Blackstone, Stamford.—Haymakers, horse rakes, bean mills, chaff cutters, horse gear.
166. W. N. Nicholson and Son, Newark on Trent.—Crank engine and boilers, grist mills, haymakers, horse rakes.
167. Richard Hornsby and Sons, Grantham, Lincolnshire.—Portable steam engines, self raking reapers, grass mowers.
168. J. S. Stone, Newport.—Carts, waggons.
169. A. W. Gower and Son, Winchfield.—Corn drills.
170. Newall and Ogilvie, Bristol.—Land rollers, harrows, engines and boilers.
171. Lowcock and Barr, Shrewsbury.—Grass mowers, chaff cutters, root pulpers, land rollers, ploughs.
172. A. W. Gower and Son, Market Drayton.—Drills of various kinds.

- STAND.**
173. Picksley, Sims, and Co., Leigh.—Chaff cutters, grinding mills, harrows, combined mowers and reapers.
174. John Matthews, Somersetshire.—Vases, pedestals, fountains.
175. Dunball Steam Pottery, Bridgwater.—Tiles, bricks, pipes.
176. C. Bradshaw and Son, Bristol.—Cattle ponds, barn floors.
177. Cattybrook Brick Co., Almondsbury, Bristol.—Facing bricks, pipes.
178. A. G. Mumford, Colchester.—Clover seed screens.
179. T. Thomas, Penbrooke.—Water wheels, horse gears, thrashing machines, chaff cutters, land rollers.
180. N. Henwood, St. Germans.—Waterwheels, churn and milk coolers.
181. S. Attwood, Chippenham.—Ploughs, hoes, reaping machines, rakes.
182. Smith and Grace, Northamptonshire.—Hoes, grist mills, oilcake breakers.
183. Follows and Bate, Manchester.—Barrel churns, weighing machines, ventilators, lawn mowers, knife cleaners.
184. Davis and Son, Bath.—Fire ranges, cooking stoves.
185. R. and J. Reeves and Son, Wilts.—Elevators, seed drills, carts, troughs, harrows.
186. Nottingham Malleable Iron Co., Nottingham.—Malleable and steel heaters, injectors.
187. B. and J. Brown and Co., London.—Oil feeders, needle lubricators.
188. B. Warner, Devices.—Portable summer houses.
189. Wright and Butler, Birmingham.—Petroleum lamps, stoves, and lanterns.
190. J. White and Co., London.—Oil feeders, lubricators.
191. G. B. May and Co., Bristol.—Fire-resisting safes.
192. Aldred and Spielmann, London.—Sample of permanent way for steam or other tramway.
193. Haynes and Sons, London.—Hand-pumps, syringes, kitcheners.
194. Denton and Jutsum, London.—Varnishes.
195. A. and J. Main and Co., London.—Bar fencing, hurdles, galvanised netting.
196. Alexanders and Loveridge, Leominster.—Cattle cribs, troughs, corn bins.
197. Hepburn and Gale, London.—Driving bands, beltings, pipes.
198. Bristol Indiarubber and Oilskin Company, Bristol.—Pipes.
199. S. E. Norris and Co., Shadwell.—Bands, suction hose.
200. Staynes and Sons, Leicester.—Machine driving bands.
201. St. Louis Beef Canning Company, Bristol.—Cooked corn beef, tongues, hams.
202. John Bartlett and Son, Bristol.—Waggon weigh-bridge, balance scales.
203. Parnall and Sons, Bristol.—Weighing machine, scales.
204. Summerscales and Sons, Yorkshire.—Washing, wringing, and mangling machines.
205. Whalley, Smith, and Paget, Keighley, Yorkshire.—Washing, wringing, and mangling machines, chaff cutters.
206. George Pearce, London.—Milk dishes.
207. Thomas Wolstencroft and Company, London.—Washing machines, clothes wringers.
- 208.—Bradbury and Co., Bristol.—Hand and treadle sewing machines.
209. Willeox and Gibbs Sewing Machine Co., London.—Hand and treadle sewing machines.
210. J. Beach and Co., Dudley.—Food for cattle, sheep, pigs
211. Day and Sons, Cheshire.—Driftfield oils, conditioning draught horse powders, ewe drenches, foot-rot oils.
212. Arnold and Sons, London.—Veterinary agricultural instruments.
213. S. Pettifer, Tetbury.—Medicine chests.
214. F. C. Matthews, Son, and Co., Driffield, Yorkshire.—Matthews' corn cake, "special" linseed cake.
215. Day, Son, and Hewitt, Dorset Street, Baker Street, London.—Stockbreeders' medicine chests, red drench.
216. Slack and Brownlow, Hulme.—Filters, pillar, glass, dining-room, pocket filters.
217. Brooksbank and Watson, Keighley.—Washers, wringing and mangling machines, chaff cutters.
- STAND.**
218. Newton Wilson and Co., London.—Sewing, plaiting, and kilting machines, washing machines, bicycle.
219. W. Walker and Son, Nottinghamshire.—Corn drills.
220. G. Cheavin, Boston.—Refrigerator, syphon, self-acting filters.
221. E. Lucas, London.—Carriage rugs and mats.
222. A. Lyon, London.—Mincing and other domestic machines.
223. G. Beavis, junr., Devon.—Pump.
224. J. L. Catchpole, Suffolk.—Seed and corn separators.
225. Anti-Lithon Composition Co., Bristol.—Boiler composition.
226. P. Priggs and Wm. Benson, Bristol.—Disintegrator.
227. Lones, Vernon, and Holden, Smethwick.—Nuts, axles.
228. W. J. Barns, Bristol.—Hand glasses, garden seats and arches.
229. W. Parnall and Co., Bristol.—Scale, nail extractor, mixing machines, chaffcutters, weighing machines, corn mills.
230. Pick and Baker, Bedford.—Drag harrows, ploughs.
231. John A. Hall, Bristol.—Oil lamps, stoves.
232. George Ingold, Bishop Stortford.—Pumps.
233. William Clark, London.—Sheep-shearing and horse-clipping machines.
234. Kell, Meats, and Co., Gloucester and Ross.—Horse drills, manure distributors, ploughs, rollers.
235. Wm. Gardner, Gloucester.—Millstones, grain separators, middlings purifiers, sack carts.
236. William Whiteley and Sons, Huddersfield.—Malleable castings, double-ended keys, drilling machines.
237. John Thornton, Worksop.—Flour-dressing machines.
238. Joseph Thornton, Nottinghamshire.—Seed-crushing rolling machines.
239. Buss, Sombart, and Co., Manchester.—Steam engine governors.
240. Leonard Thomas and Co., Dursley.—Spades, shovels, and edge tools.
241. Thomas Baker, Berkshire.—Water carts, cultivators, dressing machines.
242. St. Pancras Iron-Works Co., London, N.W.—Stable fittings, cow stalls, troughs.
243. A. Roberts and Co., Sheffield.—Street orderly bins, ashes and dust bins.
244. J. Fussell, Sons, and Co., Frome.—Scythes, hooks, hay knives.
245. T. H. P. Dennis and Co., London.—High-pressure fullway valves.
246. R. E. Crompton, London, E.C.—Raf, three-cylinder engine.
247. F and H. Randell, Norwich.—Water or liquid-manure cart, drinking tanks, turnip drills.
248. A. Field and Co., Liverpool.—Combined mowers and reapers, rakes, hoes, drags, pumps.
249. Musgrave and Co. Belfast and London, W.—Piggery fronts, cow-house fittings.
250. W. Tasker and Sons, Andover.—Traction engines, portable steam engines, winnowing machines, water carts.
251. Holmes and Sons, Norwich.—Portable steam engines, thrashing machines, corn-dressing machines.
252. Coalbrookdale Co., Shropshire.—Vertical steam engines and boilers, pumps, fireplaces complete, garden seats.
- DEPARTMENT FOR MACHINERY IN MOTION.**
253. Ransomes, Sims, and Head, of Ipswich.—[see Stand No. 1.]
254. Ruston, Proctor, and Co., of Lincoln.—Portable steam engines, thrashing and finishing dressing machines.
255. E. R. and F. Turner, Ipswich.—[see Stand 9].
256. Edward Humphries, Pershore.—Portable steam engines, thrashing and finishing dressing machines, grinding mills.
257. Richmond and Chandler, Salford.—[see Stand 15].
258. Wallis and Steevens, Basingstoke.—Portable engines, combined thrashing and finishing machines, elevators.
259. Crossley Brothers, Manchester.—Silent gas engines.
260. Coalbrookdale Company, Wellington.—[see Stand 252].
261. Holmes and Sons, Norwich.—[see Stand 251].
262. W. Olley and Company, London.—Steam power saw benches, vertical engines.
263. W. Tasker and Sons, Andover.—[see Stand 250].
264. Nalder and Nalder, Wantage.—Thrashing machines, malt screens.

STAND.

265. Brown and May, Devizes.—Road locomotive or traction engines.
266. Marshall, Sons, and Company, Gaisborough.—Portable steam engines, thrashing machines, straw elevators.
267. Philip and Henry Philip Gibbons, Wautage.—Portable steam engines, thrashing machines.
268. Savile Street Foundry and Engineering Company, Sheffield.—stonebreakers, bone mills, portable engines.
269. H. R. Marsden, Leeds.—Stonebreakers.
270. William Box, Faringdon.—Traction engines.
271. Plambeck and Darkin, London.—Engines and boilers combined.
272. W. G. Bagnall, Stafford.—Engines and boilers, locomotive engines.
273. A. Campbell and Company, Thrapstone.—Combined engines and boilers.
274. Seekings and Ellery, Gloucester.—Semi-portable steam and horizontal engines.
275. J. J. Lane, London.—Vertical engines and boilers.
276. J. Watts and Co., Bristol.—Horizontal condensing engines, steam pumps.
277. A. Shanks and Son, Leadenhall St. London.—Horizontal steam engines.
278. General Engine and Boiler Co., London.—20-horse power engines, engines with gas-heated boilers.
279. T. C. Fawcett, Leeds.—Clay grinding pans, brickmaking machines, brick and tile presses, rotary printing machines.
280. C. Powis and Co., London.—Portable steam engines, circular saw benches, mortising machines.
281. W. Griffith, Bristol.—Bangor and Port Denorvic roofing slates.
282. J. Gardner, Birmingham.—Sausage chopping machines, vertical engines and boilers combined, lard presses.
283. Spencer and Gillett, Wilts.—Vertical boilers, pumps, grinding mills.
284. Bradley and Craven, Wakefield.—Fixed engines and locomotives, clay mills, brick presses.
285. W. Hellier and Co., Bristol.—Roofing tile-making machines.
286. J. D. Pinfold, Rugby.—Crushing, pugging, and tile-making machines, combined engines and boilers.
287. Hind and Lund, Preston.—Middlings or agricultural mills, vertical engines and boilers.
288. W. Houghton and Co., Great Grimsby.—Double aspirator, separator, and smutter, bran dusters.
289. T. D. Jones, Liverpool.—Middlings mills, graders and separators.
290. W. Allelin, Northampton.—Portable steam engines, rack saw benches, beltings.
291. C. Burrell and Sons, Thetford, Norfolk.—8-horse power steam cultivating engines, 8-horse power traction engines.
292. A. Dodman, King's Lynn, Norfolk.—Combined vertical engines and boilers, hand-power sawing machines.
293. Clarke's Crank Co., Lincoln.—Loco cranks, pump cranks, and engine cranks.
294. C. W. J. Blancke and Co., Manchester.—Steam gauges, water gauges, oil syphons, valves, whistles, boiler test pumps, and hydraulic gauges, valves.
295. Schaffer and Eudenburg, Manchester.—Steam vacuum and hydraulic gauges, valves.
296. Gresham and Craven, Salford.—Injectors for steam boilers, portable boilers.
297. Rowson, Drew, and Co., Thames Street, London.—Portable forges, hand blowers, fans.
298. A. I. Bateman and Co., East Greenwich.—Emery grinder.
299. Le Gros, Shaw, Clark, and Co., London.—Air compressors, rock drills, steam traps.
300. Le Grand and Sutcliff, London.—Tube wells, pumps, turstiles, fencing.
301. Dmiston Engine Works Co., Durham.—Stone breakers, bone mills.
302. R. Broadbent and Son, Cheshire.—Stone breakers, portable engines.
303. Oldham and Booth, Yorkshire.—Double roller bone mills, dust mills.
304. Thomson, Sterne and Co., Glasgow.—Grinders, saw sharpening machines, tool grinders, gas engines.
305. Machinery and Hardware Exhibition and Agency, London.—Gas-making apparatus, portable forges.

STAND.

306. T. J. Constantine, London.—Cooking ranges, heating stoves.
307. Wurr and Lewis, London.—Band-sawing machines, circular saw benches.
308. W. S. Underhill, Shropshire.—Steam engines and boilers, saw benches, circular and hand saws, harrows.
309. Louis Simon and Son, Nottingham.—Gas engines, grain weighing machines.
310. G. E. Sherwin, Birmingham.—Engines and boilers, crushing and grinding machines.
311. Williamson Bros., Kendal.—Water wheels, centrifugal pumps, fans.
312. Nelson Fedden, Cardiff.—Improved steam sugar cane, mills and engines.
313. J. Pickering, Stockton-on-Tees.—Hoists with chain for 12 ft. lift, pulley blocks.
314. Cottrell and Co., Hungerford.—Folding elevators, driving gears.
315. Watson and Haig, Andover.—Elevators, gear works, crushing mills.
316. F. Savage, King's Lynn.—Locomotive and winding engine combined, safety snatch blocks.
317. Hempsted and Co., Grantham.—Portable steam engines vertical engines, stackers and straw elevators.
318. A. K. Bruce, London.—"Agricultural Gazette," printing machine.
319. Clayton and Shuttleworth, Lincoln.—Portable steam engines, traction waggons, stacking elevators, pony gears, &c.
320. W. and S. Eddington and Co., Chelmsford.—Portable steam engines, thrashing machines, wash mills, pug mills, &c.
321. W. Foster and Co., Wellington Foundry, Lincoln.—8-horse power portable steam engines.
322. Barrows and Stewart, Banbury.—6-horse power portable steam thrashing engines, portable engines.
323. Davey, Paxman, and Co., Colchester.—Portable engines, vertical engines and boilers, steam corn dryers.
324. Edmund Samuel Hindley, Dorset.—Vertical steam engines and boilers, hoisting and winding engines.
325. Hayward, Tyler, and Co., Whitecross-street, London, E.C.—Steam pumps for high lifts, hot air engines.
326. Lawrence and Co., London.—50-barrel beer refrigerators, milk refrigerators.
327. Thwaites and Carbutt, Bradford.—5-cwt. steam hammers, blower and duplex engines, gas exhausters, model of mine ventilators, cold air apparatuses.
328. W. Stubbs, Rickerscote.—Brick making machines.
329. Bennett and Sayer, Deby.—Portable engines, combined clay mills and brick machines, quarry presses.
330. Tange Bros., Birmingham.—High pressure expansive steam engines, centrifugal pumps, lifting jacks and blocks.
331. J. D. Garrett, Prussia.—Portable engines, straw elevators, machine drums, drum discs.
332. W. R. Dell and Son, London.—Flour dressing machines, middlings purifiers, millstones, smut machines.
333. C. Hopkinson, Retford.—Middlings, dusters, separators, and purifying machines, elevators, millstone cranes.
334. Corcoran, Witt, and Co., Mark Lane, London.—Corn grinding mills, millstones, buckets, sieves, silk cloths.
335. J. Fiechter-Langmesser, Liverpool.—Silk clothings, middlings purifiers.
336. C. L. Wray and Co., Liverpool.—Flour dressing machines.
337. J. Harrison Carter, London.—Disintegrators, cockle separators, bran dusters, smut machines.
338. J. Walworth and Co., Bradford.—Wheat, rice, and seed separators, wheat cleaner, and smut machines.
339. P. van Gelder, Liverpool.—Cockle and seed separators, millstone exhausts, millstone dressers.
340. T. Bradford and Co., Salford, Liverpool, and London.—[See Stand 90].
341. H. Bamford and Sons, Uttoxeter.—[See Stand 91].
342. Thomas and Taylor, Cheshire, Manchester, and Salford.—[See Stand 89].
343. Albion Iron Works Co., Rugeley.—[See Stand 88].
344. H. L. Miller, Birmingham.—Portable gas-making apparatus for 100 lights.
345. Newton, Chambers, and Co., Sheffield.—Cooking ranges.

STAND.

346. J. Evans and Sons Wolverhampton.—Steam pumps, vertical boilers, hydraulic rams, hand pumps.
347. Imperial Steam Pump and engineering Co., Smethwick, Staffs.—Double acting steam pumps, vertical boilers.
348. Robey and Co., Lincoln.—Traction engines, thrashing and finishing machines, straw elevators, fixed engines.
349. Wilkins and Son, Calne.—Steam cheese-makers, curd mills, milk pans, milk strainers, galvanized wire nettings.
350. H. E. Mince, Bristol.—Milk cans, butter churns, curd mills, steam engines and boilers, scalding apparatus.
351. Newall and Ogilvie, Bristol.—[See Stand 170].
352. R. Hornsby and Sons, Grantham, Lincolnshire.—[See Stand 167].
353. W. N. Nicholson and Son, Newark.—[See Stand 166].
354. Jeffery and Blackstone, Stamford.—[See Stand 165].
355. Tuxford, and Sons, Boston.—Coal-saving engines, thrashing and finishing machines, pumps for drainage.
356. Woods, Cocksedge, and Co., Stowmarket.—[See Stand 158].
357. S. Corbett and Son, Wellington.—Chaff cutters, oilcake breakers and grinders, metallic grinding mills.
358. Crowley and Co., Sheffield.—[See Stand 157].
359. R. Maynard, Cambridge.—Sifting and bagging chaff engines, portable steam engines.
360. Barford and Perkins, Peterborough.—[See Stand 155].
361. F. Ley, Derby.—Pedestal swing cranes, barrows, hand hoists, self-sustaining blocks, pulley blocks, steel fencing.
362. Maldon Iron Works Co., Maldon.—[See Stand 154].
363. J. Weighell, Pickering.—Corn grinding mills, thrashing machines, horse gears, portable steam engines.
364. Reading Iron Works Co., Reading.—[See Stand 152].
365. McKensie and Son, Dublin.—[See Stand 151].
366. J. J. Bartlett, Wimborne, Dorsetshire.—Stacking machines, pony gear, drag harrows.
367. Perkins, Paternoster, and Burlingham.—Stacking machines and straw elevators, horse gear.
368. Garrett and Sons, Leiston Works, Saxmundham.—Self-moving engines, thrashing machines, straw elevators.

DEPARTMENT FOR SEEDS, ROOTS, MODELS, MANURES, &c

369. E. and W. Pearson, Liverpool.—Pure linseed and cotton seed cake, linseed meal, Egyptian cotton seed.
370. P. W. Barr and Co., Liverpool.—Feeding stuffs.
371. A. H. Smith, Gloucestershire.—Latch for shop door, gas stove for fixing in the wall and for public buildings.
372. John G. Eagles, Bath.—Cattle cake.
373. W. G. Clarke, Limehouse, London.—Pig meal, biscuits for cattle, sheep, and pigs, biscuits for dogs.
374. Tattershall Cattle Food and Condiment Company, Bristol.—Condiment, food for dairy cows, store cattle.
375. J. Thorley, London.—Food for cattle.
376. Ayres, Chambers, and Ayre, Yorkshire.—Feeding oil-cakes.
377. Spratt, London.—Meat fibrine dog cakes, biscuits for greyhounds and horses; poultry meal, pig meal.
378. J. Miller and Co., Gloucestershire.—Cattle food, manures for all crops.
379. H. Wheeler and Son, Gloucester.—Collection of grass and farm seeds, clover and grass seeds for 1 to 4 year's lay.
380. A. Hutchinson and Co., Great Winchester Street, London.—Waterproof cart sheet, delivery hose.
381. Preller Leather Co., Borough, London.—Double band, leather, double and single machine band, leather rope.
382. May Arnold, Whitethorns, Acton.—Hot water incubator for hatching hen, goose, duck, pheasant.
383. William Nicholls and Co., Chippenham.—Extract of annatto.
384. Clutterbuck and Griffin, Bristol.—Cheese rennet extract.
385. H. and T. Proctor, Bristol.—Concentrated corn hop, clover, grass, &c., manures.
386. Morris and Griffin, of the Ceres Works, Wolverhampton.—Manure and guano, sacks, rick and oil sheets, &c.
387. Thomas Farmer and Co., Mark Lane, London.—Chemical manures, bone manure, superphosphate of lime, &c.
388. Diagonal Patent Rocking Furnace Bar Co., London.—Model of boiler furnace, samples of bars for various purposes.
389. Joseph Davis and Co., Crampton-street, Newington Butts, London.—Barometer, water-testing apparatus.

STAND.

390. James Howard, Chesham.—Assortment of articles for dairy and domestic use.
391. Webb and Sons, Wordsley, Stourbridge.—Prize stocks of home-grown farm seeds, grass and clover seeds, &c.
392. John Milton Jones, Gloucester.—Specific for foot rot in sheep composition, softening and preserving leather.
393. Lilwall Bros., Worcester.—Chemical Embrocation, Constitution powders, condition balls for horses.
394. Henry Down and Co., Bedfordshire.—“Down's Farmers' Friend,” a dressing for seed wheat.
395. John Hare and Co., Bristol.—Samples of varnishes, pure white lead, painters' colours, &c.
396. Thomas Neale and Sons, Wilts and London.—Stock-breeder's medicine chests, anti-flatulent drink, &c.
397. E. Fardon and Co., Bristol.—Medicine or pigpowders.
398. B. G. Tipper and Son, Birmingham.—Preparation for horses, cows, pigs, sheep, and poultry, cattle cakes.
399. Agricultural and Horticultural Association, Millbank-street, Westminster.—Agricultural garden seeds.
400. Daniel de Pass, Leadenhall-street, London, Ichaboe guano, curacao and charcoal superphosphate.
401. Avon Manure Company, Bristol.—Artificial Manure, and raw material used in its manufacture.
402. W. Smith and Co., Bristol.—Sample of Ohlendorff's dissolved Peruvian Government guano.
403. Amies Chemical Manure Co., Mark Lane, London, E.C.—Manures in bags caisters, and bottles.
404. H. Webb and Co. Worcester.—Fixed Peruvian guano, combined manures, palm and cocoa-nut meal.
405. W. and H. M. Goulding, Dublin and Cork.—Bone manures, grass manures.
406. Sutton and Sons, Reading.—250 specimens of grasses, mangel roots, flower, farm, and grass seeds, models, &c.
407. Cassell, Petter, and Galpin, Ludgate-hill, London, E.C.—“Live Stock Journal,” works bearing on Agriculture.
408. Proprietors of “The Farmer,” Salisbury-square, London.—“The Farmer” and other publications.
409. W. Darkin, Catherine-street, Strand, London, W.C.—“Bell's Weekly Messenger, and Farmers' Journal.”

GREENHOUSES AND OTHER ARTICLES NOT UNDER SHEDDING.

410. Coalbrookdale Company, Wellington.—[See Stand 252].
411. J. D. Garrett, Germany.—[See Stand 331].
- 412.—Priestman Brothers, Yorkshire.—Portable steam crane, with self acting bucket.
413. H. Horath, Cardiff.—Fork elevators, for raising hay, corn, or straw.
414. George Nickerson, Barningham, Suffolk.—Combined hay, corn, and straw elevators.
415. Richard Jones, Liverpool.—Barrow hoists, hod hoists.
416. Davies Bros., Wolverhampton.—Galvanised corrugated iron roofs, iron sheetings, pitched and lean-to roofs.
417. James Howorth, Farnworth, near Manchester.—Revolving Archimedian screw ventilators.
418. Charles L. Hett, Brigg.—High-pressure steam engines, tubular boilers, hydraulic rams, soot valve and strainers.
419. William T. Wright, Cardiff.—Horse pitch-fork or elevators, steerage and lifting harrows.
420. William Mitchell, Brandon.—Collection of agricultural sectional ladders and steps.
421. Thomas Brimson, Banbury.—Ornamental lean-to Conservatory and viery.
422. A. and J. Main and Co., Glasgow.—[see Stand 195].
423. James Crispin, Bristol.—Greenhouses, heated propagating plant cases, upright tubular boiler.
424. R. and J. Reeves and Son, Westbury.—[See Stand 185].
425. Timothy Thomas, Cardigan.—[See Stand 179].
426. Benjamin Warner, Devizes.—[See Stand 188].
427. Follows and Bate, Manchester.—[See Stand 183].
428. F. Savage, King's Lynn.—[See Stand 316].
429. B. Wheeler and Co., Nottingham.—Span-roofed greenhouses.
430. W. Parham, Bath.—Glazed horticultural buildings, glass wall coping, plant preservers, melon frames.
431. J. H. P. Dennis, Chelmsford.—Lean-to greenhouses, wall-tree covers, summer-houses, hot water boilers,

STAND.

432. Crauston and Luck, Birmingham.—span-roof green-houses, lean-to conservatories.
 433. M. E. and E. Horley, Dunstable.—Greenhouses, amateur's workshops, melon boxes, garden frames.
 434. F. G. Priddey, Droitwich.—Amateur's greenhouse, portable poultry and summer houses.
 435. H. Inman, Stretford.—Shepherd's hut on wheels, rustic garden houses and seats, tables, stools.

THE ANNUAL MEETING

was held yesterday afternoon, in the Members' Tent, in the Showyard, at Bristol; Colonel Kingscote, President, occupied the chair. Amongst those present were Lord Chesham, Lord Vernon, Sir John Morris, Sir M. Lopes, Messrs. Whitehead, Jacob Wilson, Musfeu, T. C. Booth, B. St. John Ackers, D. R. Davis, Geo. Wise, Walter Gibley, Neville Grenville, Botler, and Secretary (Mr. Jenkins). The Secretary announced the award of farm prizes, and stated that the entry in the dairy farms had been so large and the farms entered for competition of such a good class that the Council had resolved to give two special prizes. Votes of thanks to the Mayor and Corporation of Bristol and to the Local Committee for the welcome and assistance they had given to the show were passed.

The Mayor (Mr. Edwards) responded.

Thanks were also passed to the railway companies.

The CHAIRMAN asked if any member had any suggestion to make, whereupon Mr. Greening of the Cooperative and Horticultural Association, recommended that the Council of the Royal Agricultural Society should not make statements publicly affecting other Associations without first communicating with those Associations.

A member rose to order, and the Chairman ruled that Mr. Greening should make his complaint to the Council.

Mr. BRABY wanted more prizes offered to Sussex stock, and he hoped that in future they would be as liberally dealt with as Herefords and Devons.

The CHAIRMAN had no doubt the matter would be taken into consideration.

Mr. ROBERTS thought that analyses should not be published without the consent of the parties concerned.

Several members expressed a hope that railway companies in future issue railway tickets to members visiting the show at single fares.

The PRESIDENT said that the matter had been pressed on the attention of companies year after year, but to no purpose.

Sir JOHN MORRIS moved a vote of thanks to the President for his services during the past year, and spoke in high terms of what he had done to promote the interests of the Society, and to render their meeting successful.

Mr. MUNN seconded the motion, and said not only had the President done his duty as an agriculturist, but he had, in the House of Commons and as a supporter of local societies, contributed a great deal to the promotion of the work which they all had at heart.

The vote was passed by acclamation.

In the course of his reply to the vote the CHAIRMAN said that nothing could be more interesting than the trials which they had had in dairy produce and utensils, and he hoped that they would be of practical benefit, and be appreciated by the whole kingdom. He regretted that the competition in arable land farming had not been greater than in the dairy farms. He congratulated them that if they had not a great show they had a good average one, and although the attendance was not so large the day before, owing to the cloudy weather, no doubt there had been a larger attendance that day than at any provincial show except Liverpool. It was larger than at Birmingham, 17,542 persons having entered the show-yard up to three o'clock. He hoped that with the Prince of Wales

as President they would next year have a great show. As they were aware it would be in London, and would be on a much larger scale. They would have to spend money, and he hoped they would get more money. They had seen how the Prince of Wales had worked in connection with the British department of the Paris Exhibition, and he was quite sure that His Royal Highness would give the same attention to that show next year.

Mr. DENT moved that the Prince of Wales take the chair at the Council meeting during the ensuing year.

Mr. WELLS seconded the motion, which was carried unanimously, and the meeting terminated.

VISIT OF THE PRINCE OF WALES.

Bristol was elaborately decorated to receive the Prince of Wales, who visited the Royal Agricultural Show on Friday.

The special train conveying the Prince from London reached Bristol at 12.40, and was received with a cheer from those present, which was taken up by those outside.—The Mayor briefly welcomed the Prince and introduced the Town Clerk, who read a long address adopted last week by the Town Council.

The Prince of Wales read the following address in reply:—“I have listened with sincere satisfaction to the address just presented to me by the Mayor, Aldermen, and Burgesses of this ancient and loyal city of Bristol, on this my first visit to it. I assure you that it is with heartfelt regret that I find myself compelled by the numerous and pressing calls on my time to devote so short a period to the inspection of the many various objects of interest for which the city of Bristol is so generally and deservedly renowned. But I have seen quite enough to satisfy me of the loyalty of its inhabitants to the Queen, and thank you heartily for the kind expressions you have used as regards myself, the Princess, and my family. Deeply impressed with the paramount importance to the welfare of this country of a close and constant study of agricultural science, I have watched the proceedings of the Royal Agricultural Society with unlagging interest, and no efforts on my part shall be spared to promote its prosperity. I am well aware of the highly favourable impressions produced on other members of my family by your noble town, the splendour of its public and private buildings, and the good disposition of its inhabitants, of which my late father, the late Prince Consort, entertained a high appreciation. It will be my privilege to report to the Queen the loyal terms which you have used as regards her Majesty: and I thank you again for your kind words of hope and good will for myself, the Princess, and our family.”

Arrived at the yard his Royal Highness was welcomed by the Council of the Society, and conducted to a pavilion specially prepared for his reception, and most elegantly fitted up. Here soon afterwards the Prince lunched with about twenty-five gentlemen, and subsequently inspected some of the exhibits.

Before leaving the Prince went to see Horsby's new prize medal hedge-cutting machine at work on a temporary fence erected for the purpose in the showyard. Messrs. James and William Horsby explained the working of the machine to His Royal Highness, who expressed himself as much pleased with its simplicity and efficiency.

Mr. Jacob Wilson (the Steward of General Arrangements) has received the following communication from Colonel Kingscote, C.B., M.P. (President of the Royal Society):—

34, Charles Street, Berkeley Square, W.

July 13, 1878.

MY DEAR SIR,—I have the Prince of Wales's permission, indeed, am desired, to thank you, the other Stewards, also Mr. Jenkins, for the excellent arrangements you made for His

Royal Highness's reception in the show-yard yesterday; for the privacy and comfort he enjoyed at luncheon time, and the admirable manner in which he was shown so much that was interesting in the very limited time at his disposal. The Prince remarked to me that the arrangements were admirable throughout, and that not the slightest "hitch" occurred from the time he left London until he got back here. His Royal Highness was also much gratified and pleased at the loyal and enthusiastic reception he met with within the City of Bristol, along the route, to and from, and in the show-yard.

I enclose £5, the Prince of Wales's donation to the fund on behalf of the widow and orphans of the poor man who was killed, and shall be glad to hear you have received it safely.—

Yours, very truly,

Jacob Wilson, Esq.

NUGEL KINGSCOTE.

SOCIETY MEETINGS AT THE SHOW.

ENGLISH CART HORSE.

The annual meeting of this Society was held on Friday in the Members' Club, at the Royal Agricultural Showyard, Bristol, Lord Spencer presiding. The Secretary (Mr. Sexton) reported that the steps for the incorporation of the Society had been taken, and a special meeting for approving bye-laws was fixed. An editing committee was appointed. Captain Heaton complained of the small amount given in prizes for cart horses at the Bristol meeting compared with the amount given at Liverpool.

HEREFORD HERD BOOK.

A general meeting of members of this Society was held in a room in the Bristol Show-yard, at one o'clock, on Thursday last. Mr. J. H. ARKRIGHT occupied the chair, and there were also present the Rev. Sir George Cornewall, Bart., Mr. W. Stallard (Mayor of Hereford) Mr. C. Williams, Mr. W. S. Powell, Mr. T. Cadlee, Mr. T. Duckham, Mr. T. Davis, Mr. J. Aconans, Mr. H. Heywood, Mr. T. Rogers, Mr. Thomas Thomas, Mr. W. H. Taylor, Mr. J. White, Mr. H. Wyndham, and Mr. S. Urwick (Secretary).

The SECRETARY read the following report of the Council:—

The Council have to report that a general meeting of members was held on July 3rd, in accordance with the articles of association, and the meeting was adjourned until to-day. The Society was registered on the 4th of March, and the whole of the preliminaries have been completed. The Council have appointed an Editing Committee, and a Finance and General Purposes Committee, which report from time to time through their Chairman to the Council assembled. The Secretary has been installed in office, and the Society's offices are at 20, East-street, Hereford. At the meeting held on July 3rd, the auditors were elected. The Seal of the Society has been engraved and approved. At the present time 97 life and 109 annual members have been enrolled. A large number of certificates of entry have been sent, and the entries for the forthcoming volume will close on the 1st of August. The Council take this opportunity of reminding the members of the Society of the great importance of individual members using their influence to induce friends of the Hereford breed of cattle to join the Society and forward their entries without delay to the Secretary; and it is to be hoped that the number of members reported to-day will shortly be doubled. The Council desire to draw particular attention to a temporary amendment which has been made to the rule which insisted on a minimum number of pedigree crosses being attached to all entries. It is well-known that from various causes many herds exist which are well bred as any in the book in which a systematic registration of pedigree has not been kept. It is very important that these animals should no longer be kept in the dark and excluded from the Herd-book, and so a codicil has been added to Rule 37 allowing such entries to be made, subject to the discretion of the Editing Committee, accompanied by a statement in good faith that some cause exists for the previous non-appearance of these animals in the Herd-book. One of the good effects of the meeting to-day will be that wide publicity is given to this amendment, and attention drawn to the absolute necessity of merging the old-fashioned love of privacy into the public

interest of the breeds of horned cattle. It is fully intended that this privilege should be terminable so soon as the Council can see their way to invite their older and more aristocratic rivals, the Shorthorns, and insist upon a certain number of crosses being registered as a *sine qua non* with the entries. The Council believe that their volume will be worthy of the Hereford Herd Book Society, and they hope that all members will consider it as the first duty of membership to "hunt up" such cases as those referred to, as well as to induce all friends of the Hereford breed to enrol themselves as members, and to further in every way and on all occasions the important aspirations of the Society, whose first step in public is made this week. The formation of the Society is the best guarantee that the work will be done in a business-like manner. The Editing Committee will enter on their duties feeling that they have ample material in hand, and that they have the confident support of a comprehensive and influential Society not only in the British Isles, but all over the world.

The report was adopted on the motion of Mr. SPALDARD, seconded by Mr. HEYWOOD.

Nine new members were elected, and after the transaction of some other business the meeting terminated.

JERSEY HERD BOOK.

A meeting of gentlemen entrusted with the improvement of Jersey cattle was held on Friday at the Royal Agricultural Show Yard, Bristol, under the presidency of Lord Chesham. Mr. John Thornton narrated what had been done with a view of establishing a Herd-Book for Jersey. He stated that the idea was started on the 11th of May, at Mr. Simpson's sale, where a subscription was opened for the purpose of carrying out the object. It was not decided that the book should be a public one, like the Shorthorn book, or a private enterprise. After a long conversation it was resolved to establish a Herd-Book, and that a subscription be opened for the purpose. Subscriptions amounting to nearly £100 were announced, making with the funds in hand about £200. It was resolved to send a circular to breeders to hold a meeting on a future day. A committee was appointed, and Lord Chesham was elected President. Votes of thanks to the Chairman and to Mr. Thornton closed the proceedings.

SHORTHORN.

The fourth annual general meeting of the Shorthorn Society was held on Friday, in the Members' Club, at the Royal Agricultural Showyard, Bristol, Col. Kingscote in the chair, in the absence of Lord Skelmersdale. Among those present were the Duke of Manchester, Lord Chesham, Lord Fitzhardinge, Mr. T. C. Booth, Mr. J. B. Booth, Mr. Foljambe, M.P., and Mr. W. Sheraton.

The SECRETARY (Mr. Hine) read the report, which stated that the Society now consists of 433 life members, and 658 annual members, showing an increase of 20 members during the past year. The accounts showed that the balance in the hands of the Society's bankers, after paying for printing Volume 23, and for reprinting Volume 10, was £306, and £700 on deposit. The Council are of opinion that in all catalogues the names of breeders of animals not bred by them should be given in such catalogues. The Council also expressed an opinion against duplicate muzzes of bulls, and their satisfaction at the support which had been accorded to the Cattle Plague Bill by producers and consumers.

LORD FITZHARDINGE moved the adoption of the report, and suggested the forwarding of a memorial to the Duke of Richmond, urging the Government to stand firm on the Cattle Bill.

Mr. GEO. GARNE seconded the motion.

Mr. FOLJAMBE supported the motion, and agreed with Lord Fitzhardinge's remarks on the Cattle Bill.

The report was adopted.

The auditors and old members of the Council were re-elected.

A vote of thanks to the Chairman was moved by Mr. BOOTH, who expressed his approval of the services rendered by Col. Kingscote in furthering the interests of the Society, which were in the interests of the public on the Contagious Diseases (Animals) Bill.

In responding, Col. KINGSCOTE regretted that the Bill should have been weakened, and that any party feeling had been introduced in the matter.

AGRICULTURAL SOCIETIES.

EAST LOTHIAN.

Bright genial weather brought the East Lothian Society as successful a gathering as they have ever had at their annual exhibitions.

In its stock department the show was, on the whole, highly satisfactory, although there were several classes, as for example those of draught horses and Cheviot sheep, where only middling quality was to be seen. It was hardly, however, to be expected that in the Clydesdale classes there should be found here the same pith of bone as is met with in the West country; and at such a distance from the Lanmermuirs the absence of Cheviots was perhaps excusable. As a lot, the mares in the draught section were comparatively inferior; but among the yeld mares better stuff was exhibited, the class being topped by Mr. Adam Smith's well-known four-year-old Mitty, which has already secured champion prizes this year at Falkirk and Stirling; and the second ticket going to Lord Polwarth for another four-year-old, which is good in the body, if somewhat bare on the thighs. The two-year-old fillies also mustered pretty strongly, Mr. Aitken gaining the principal premium with a filly that stood closest of all the prize-takers to Mitty—her characteristic being thoroughly Clydesdale, and her size good, though the head was not all that could have been wished. In the class of one-year-old fillies Mr. Smith had little difficulty in securing the award with a fine thick, "feathery-legged" youngster, and in the carrying off with his four-year-old two special prizes—the one given "for the best female Clydesdale" on the ground, and the other "for draught mares." The same stable furnished the best colt shown—a two-year-old, not very good about the fore feet and pasterns, but with fine big Clydesdale legs. Of roadsters and hunters there was a better turn-out than is usually seen at county shows, a really pretty quartette being Mr. James Skirving's well brought out mare, Mr. Burnet's thoroughly well-paced colt, Mr. Waugh's Enterprise, an animal of fair size, but rather small in bone, and Mr. Caverhill's chesnut colt, placed second to Enterprise, than which he was better in bone, though slightly flat in rib.

By the exhibitors of Shorthorns, the best appearance was made in the aged bull and aged cow classes. Among the bulls a notable victory was achieved by the red three-year-old Leander, which represented the Whittingham herd. In securing this place Leander best several other pretty good animals from the herds of the Duke of Buccleuch, Sir Thomas Hepburn, the Marquis of Tweeddale, Sir David Baird, and Lord Polwarth. Last year, at the Highland Society's Show, he was placed with a commendation alongside the Dalkeith three-year-old King Errant, which was again on this occasion pitted against him, but was passed over, principally, in all probability, on account of his patchiness behind. As now brought out Leander is a grand lengthy bull, with remarkably straight quarters, and a fine coat. The second ticket was awarded to Lord Polwarth for a promising two-year-old, Peter the Great, which, if slightly coarse in the head, seems quite worthy of its claim to extra pure blood. With animals that were ticketed at Edinburgh last year the Duke of Buccleuch attained a better place in the aged cow class, his pair of handsome reds, Cherry Maid and Cherry Princess, carrying off both first and second premiums, and thereby keeping out in the cold Sir Thomas Hepburn's Lady Mary, a roan that showed well last year, but has since failed to improve, as well as other likely animals. In the allotment of the tickets, there was some hesitation as to whether the preference should be given to the Maid or the Princess, and when finally the red ticket was given to the latter, which is the younger by a year, it was apparent enough that the two ran remarkably close. In the other two female classes the first-prize takers were easily judged, the average quality of the lot being inferior. To the Whittingham bull was awarded a special prize, as the best Shorthorn exhibited.

For sheep breeders the interest of the exhibition centred of course in the Leicesters. In this department there was rather a close contest for the challenge prize offered for the best male, between a four-shear sheep from Castlemaims, and a shearing which represented the Yester flock. In Mr. Smith's tup, which stood first at Glasgow a few weeks ago,

the judges had before them a sheep whose principal, indeed almost only, fault is that years are beginning to tell on his handling and on his mutton, while in the shearing they had an animal got by a ram purchased from Lord Polwarth for £185, the strongest point about which are his size and substance, the coat not being wholly satisfactory. Ultimately the decision was given in favour of the shearing, whose appearance is altogether so remarkable for his age as can hardly fail to carry him well forward at Dumfries.—*Scotsman*

LINCOLNSHIRE FARMERS' ASSOCIATION.

This Society held the tenth General Annual Meeting of its members at the Corn Exchange, in Seaforth, on Monday, the 8th inst. Captain Smith, the Chairman of the Association, presided, and proposed the adoption of the Committee's report, which was unanimously carried. By this report, which also contained a statement of accounts for the year of the Society terminating on the 10th ultimo, and which had been previously posted to every member, it appeared that the operations and success of the Association had been considerably greater than in any former year. During the preceding 12 months 115 new members, being owners or occupiers of upwards of 33,000 acres of land, had joined the Association, thus making the whole number of members amount to over 1,060, representing in the aggregate more than 321,000 acres of land. The majority of the members of the Society of course reside within its district free of delivery; but it appears that there are many of them living outside such district—and in almost every part of the Kingdom—who find it is to their interest to become members, though the extra carriage from such district to the railway stations at which they require delivery has to be paid by themselves. The Association was formed 10 years ago by some of the leading agriculturists in South Lincolnshire, and has now assumed proportions and achieved a success which were scarcely anticipated by them at that time. The Society was established on purely co-operative principles for the purpose of purchasing genuine superphosphate of lime of guaranteed quality at wholesale prices, and supplying it to the members at cost price. The members (who incur no risk of liability whatever) pay no annual subscription, all they have to pay being an entrance fee of 2d. per acre on their occupations on becoming members, and a fee of 1s. per ton on the manure they order during each year to meet the expenses of management. The gives *in cetero* the system and the precautions which are taken to secure a superphosphate of lime—which is the only manure supplied—of undoubted quality and condition. The depots of the Association are under the entire control of the Committee and their agents, and the report furnishes very satisfactory evidence that the manure purchased for the members and stored therein is an article of the most undeniable character. The manure is supplied by some of the largest and most respectable manufacturers in England, and before being accepted is analysed and reported on by the Chemist of the Association, Dr. Augustus Voelcker, of London.

PETERBOROUGH.

MEETING AT BOROUGHBURY.

The annual exhibition of this Society was held at Boroighbury on July 3rd and 4th, and was the most successful the Society has ever held as regards the quantity and quality of the stock exhibited; and also the attendance of visitors, many thousands entering the showground on Thursday, great numbers, no doubt, being attracted with the hope of seeing the Prince and Princess of Wales. The arrangement for the reception of the animals was the same as at former shows, except for the ponies, which were placed under a canvass tent with open sides; and a large stand for the use of the general public, and a smaller one for the Royal party, were erected facing the ring in

which the horses were judged and the jumping took place. The show of horses was the largest and finest the Society has ever had, the entries numbering 253, about 70 more than those of last year. In Class 1, open to all England, for the best hunter of any age, there were some splendid exhibits, Mr. William Staple, of Oxney, a successful competitor at many shows, taking first honours with a handsome-looking gelding, and Mr. Wright, of Wollaton, being second with a dark chestnut mare. Mr. Bayly's Tavistock, which took the 100 guineas Clampton Cup at Islington, and one or two other hunters of some note, were entered in this class, but they did not put in an appearance. In Class 2, open to tenant farmers only, Mr. J. T. Blott, of Great Staughton, took first prize with his pretty, compact, bay gelding, Grailham, which carried off the first prize as a three-year-old last year, and third honours at the Alexandra Park Horse Show this year. It was also awarded the first prize of £10 in Class 4, for four-year olds for hunting purposes, Mr. A. Whittome, of Whittlesey, gaining the red ribbon with his brown horse Paddy, a most useful-looking animal. Mr. T. Percival was awarded second prizes in Classes 2 and 3 for his Claret, a promising brown gelding, which has not taken honours before, Mr. Wright's Rosamond, which was second in Class 1, being first in Class 3. In Class 5, for harness horses, and Class 6, for hackneys not exceeding 15½ hands high, there were also some very good useful animals. Cobs were not very numerously represented, but what there were were very good specimens, Mr. J. Hy. Stokes, of Great Bowden, taking the prize with a handsome brown mare, a bay cob belonging to Mr. J. Rowell, Bury, being deservedly highly commended. Ponies, as usual at this show, were exceedingly well represented, nearly all the animals exhibited in the three pony classes being handsome little things. Three-year-olds, two-year-olds, and yearlings adapted for hunting purposes comprised an excellent lot of animals, Mr. Topham, of Thorney, and Mr. W. J. Cheney, Gidding Grove, being awarded first and second prizes for three-year-olds; Mr. Dudding, of Howell, and Mr. Middleton, Wansford, first and second for two-year-olds; and the Marquis of Exeter and Mr. Laurance, jun., Warmington, first and second for yearlings—all first-class animals. Mares with foals at foot were not strong in numbers, but for quality they were excellent and appeared to take some judging, Mr. Odam, of Newboro', gaining first award both for mare and foal. In the cart-horse classes there were 71 entries, against 41 last year, and most of the exhibits were fine powerful animals, particularly those in Class 22. The prize, a self delivery reaper, value £35, given by Messrs. Hornsby, after careful deliberation, was awarded to a magnificent iron-grey horse belonging to Mr. J. Snodin, of Stonesby, which took two first prizes as a yearling, a second prize at Oakham last year as a two-year-old, second prize at Newark a month ago, and a first at Doncaster, beating the animal that was placed before it at Newark. A splendid bay belonging to Mr. Rowell, of Peterborough, was highly commended. The cattle classes were not so well filled as at last year's meeting, but what was lacking in numbers was made up by the excellent quality of the animals exhibited, the bulls and fat oxen being represented by some splendid-shaped monsters, the former nearly all being highly commended. The great prize-taker Telemachus the 6th only gained second honours on this occasion, the first prize and champion cup being awarded to a grand six-year and five-month-old beast belonging to Mr. W. Linton, of Sheriff Hutton. In the class for two-year-old bulls, however, Mr. Linton had to be content with second place, Mr. Bland, of Dingley Grange, Market Harboro', an old exhibitor, being placed first. In the cow classes there were only two entries, and only one of those put in an appear-

ance. Mr. Sharp, of Broughton, to whom the first prize of £10 was awarded for a big useful Shorthorn. In the class for heifers under two years were two very pretty animals belonging respectively to Mr. St. John Aekers, Painswick, Gloucester, and the Marquis of Exeter; and the Hon. C. W. Fitzwilliam was awarded a first prize for a well-bred handsome heifer calf. The sheep entries were larger than last year, and all the animals were fine specimens of their kind, as might be expected when such men as Capt. Catling, Mr. R. Wright (Nocton Heath), the Marquis of Exeter, Mr. C. Sell, Mr. T. Close, jun., &c., were amongst the exhibitors. The pigs were not remarkable for obesity, but there were some very nice clear-skinned animals amongst the exhibits. There was not so large a display of implements as usual at this show, but most of the specimens exhibited were of modern construction, and contained the latest improvements.

On Thursday the Midland Counties foxhound show was held in the Skating Rink, which abuts on the agricultural show-ground, to see which the Prince and Princess of Wales honoured the city of Peterboro' with a visit. At first great doubts existed as to whether their Royal Highnesses would do so, and very little preparation was made by the citizens to receive the Royal visitors until the previous day. They then, however, set to with a will, and on Thursday the streets presented a very gay appearance, which did much credit to the activity of the inhabitants considering the short time at their disposal for decorations. About 1 o'clock the Royal party arrived by special train at Peterboro' and at once proceeded to Milton Hall, the residence of Earl Fitzwilliam. The suite consisted of Sir D. Probyn, Col. Clarke, the Hon. Mrs. Stonor, and Lord Colville. After partaking of luncheon, the Royal party inspected the Cathedral, and arrived at the Rink shortly after three, where they were received at the entrance by the Marquis and Marchioness of Huntley. After witnessing the judging of some of the hounds, they passed through the show ground to the pavilion erected especially for their accommodation, and witnessed the jumping for some of the prizes. They then returned to the Great Northern station and proceeded by special train to London.

The following were the awards:—

PRIZE LIST.

JUDGES.—HUNTERS: Earl of Macclesfield; Earl of Coventry, Worcester; T. Parrington, York.—NAG HORSES: S. C. Roper, Bury St. Edmunds; W. Dudding, Sleaford.—CART HORSES: Capt. R. Heaton, Worsley; T. Lamb, Grantham; J. W. Rowland, Boston.—CATTLE: M. Savidge, Chipping Norton; R. March, Luton; J. Lynn, Grantham.—SHEEP AND PIGS: Tom Casswell, Falkingham; G. Taylor, Norwich.

HORSES.

NAG HORSES.

Hunters of any age.—First prize, a silver cup of £25, W. Staple, Oxney, Peterboro'; second, £10, W. Wright, Wollaton, Nottingham.

Hunters of any age.—First prize, £15, J. T. Blott, Great Staughton; second, £5, T. Percival, Wansford.

Hunters of any age, calculated to carry 12 stone.—First prize, £10, W. Wright, Wollaton; second, £5, T. Percival.

Four-year-old hunting mares or geldings.—First prize, £10, J. T. Blott; second, £5, A. Whittome, Whittlesey.

For the best jumper in Classes 1, 2, 3, and 4.—First prize £8, E. Waller, Peterboro'; second £3, Miss Bradley.

Horses in harness, not less than 14 hands high.—First prize, £10, silver cup, T. Benton, Earith; second, £5, H. Wayman, Downham Market.

Hackneys not exceeding 15½ hands high.—First prize, £7, H. Wayman, Downham Market; second, £3, J. H. Stokes, Market Harborough.

Weight-carrying cobs, above 13 hands 2 in. and not exceeding 15 hands high.—Prize, £5 silver cup, J. H. Stokes.

Best jumper in Classes 5, 6, and 7.—First prize, £5, J. Warwick, Thorpe; second, £2, E. Warwick, Orton, Longueville. Extra prize awarded to T. Johnson, Walton.

Ponies (driven) not exceeding 14 hands.—First prize, £5, H. Wayman; second, £2, W. Pope, Downham Market; third, £1, G. Clarke, Sutton Marsh.

Ponies (ridden) not exceeding 13½ hands.—First prize, £5, W. P. Birch, Finedon, Wellingboro'; second, £2, J. L. Row, Woodstone House, Peterboro'.

Ponies (ridden) not exceeding 12½ hands.—First prize, £3, T. Benton, Earith, Hunts; second, £2, J. W. Goodacre Peterboro'; third, £1, W. Benton, Peterboro'.

Jumpers in Classes 8, 9, and 10.—The prizes in this class (£1 and 10s.) were divided between R. Webster, Peakirk, and W. J. Cheney, Gidding Grove, Stilton, being equal.

Rider under 14 years old in Classes 9 and 10.—Prize, a whip to W. J. Cheney.

Three-year-old hunting geldings or fillies.—First prize, £7, J. Topham, Thorney; second, £3, W. J. Cheney, Gidding Grove.

Two-year-old hunting colts or fillies.—First prize, £7, W. Dudding, Howell, Steaford; second, £3, S. Middleton, Wausford.

Yearlings for hunting purposes.—First prize, £7, Marquis of Exeter, Burghley House, Stamford; second, £3, J. Lorraine, jun., Warrington.

Mares for hunting purposes, each having a foal by a thoroughbred horse.—First prize, £10, silver cup, J. Odam, Newborough; second, £3, J. Goodlift Huntingdon. For the best foal in the class.—Prize, £2, J. Odam.

Hackney mares not exceeding 15½ hands, each having a foal.—Prize, £5, J. L. Wright, Holme Fen.

Horses of any height for jumping (open).—First prize, £10, T. Johnson, Walton; second, £6, E. Warwick, Orton Longueville.

Pair of cart horses.—First prize, £20, W. Rowell, The Bank, Peterborough; second, £5, J. Cooke, Postland House, Crowland.

Cart mares with foals.—First prize, the Rowell cup, value £10, R. H. Griffin, Borough Fen, Peterborough; second, £5, C. Beart, Stow Bardolph, Downham Market.

Foals.—First prize, £3, C. Beart; second, £2, H. Todd, Northborough, Deeping.

Two-year-old cart geldings.—First prize, £5, W. Rowell; second, H. Bird, Farcot, Peterborough.

Two-year-old cart fillies.—First prize, £5, R. Hopper, Whitlessa; second, R. H. Griffiths and J. Rowell, Manor Farm, Bury, equal.

Yearling cart colts.—First prize, £5, W. Staple, Oxney, Peterborough; second, S. Fyson, Warboys, Hunts.

Yearling cart fillies.—First prize, £5, R. Scotney, Thorney Fen, Thorney; second, R. H. Griffin.

Cart horses of any age.—A self-delivery reaping machine, value 35 guineas, J. Snoddin, Stonesby, Melton Mowbray.

CATTLE.

Fat oxen.—First prize, £10, R. Wright, Nocton Heath, Lincoln; second, £5, T. Bond, North Thoresby, Louth.

Fat cows or heifers.—First prize, £5, Colonel J. Reeve, Leadenhall, Grantham; second, £2, R. Wright, Nocton.

Bulls above 2 years old.—First prize, £10, W. Linton, Sheriff Hutton, York; second, £3, Marquis of Exeter.

Bulls under 2 years old.—First prize, £10, T. H. Bland, Market Harborough; second, £5, W. Linton, Sheriff Hutton.

Bull calves under 1 year old.—First prize, £5, T. Lamb, Welbourn, Grantham; second, £2, Marquis of Exeter.

Cows in milk.—Prize, £10, J. J. Sharp, Broughton.

Heifers in calf or in milk under 3 years.—First prize, £7, C. W. Griffin, Werrington; second, £3, C. T. Part, Aldenham Lodge, Watford.

Heifers under 2 years old.—First prize, £5, B. St. John Ackers, Gloucester; second, £2, Marquis of Exeter.

Heifer calves under 1 year.—First prize, £4, Hon. C. W. Fitzwilliam, Alwalton; second, £2, G. Ashby Ashby, Naseby Wooleys, Rugby.

Cows and heifers of any breed.—Prize £5, J. Turner, Norman Cross, Stilton.

For the best Shorthorn in Classes from 25 to 31.—Prize, a Cup or £30, W. Linton, Sheriff Hutton, York.

SHEEP.

Long-wooled rams of any age.—First prize, £7, H. Smith, Cropwell Butler, Bingham; second, £3, C. Sell, Bassingbourne, Cambs.

Long-wooled shearing rams of any age.—Prize £5, H. Smith, Cropwell Butler.

Down rams of any age.—First prize, £7, C. M. C. Dormer, Rousham, Banbury; second, £3, ditto.

Five long-wooled ewes.—First prize, £5, C. Sell; second, £2 10s., Captain R. C. Catling, Needham, Wisbech.

Five long-wooled shearing ewes.—First prize, £5, and £5 cup, for the best pen in Classes 36 and 37, C. Sell; second, £2 10s., R. Wright, Nocton Heath, Grantham.

Ten long-wooled ewe lambs.—First prize, £5, and £5 cup for the best pen in Classes 38, 39, and 40, Captain R. C. Catling; second, T. Close, jun., Barnack.

Five long-wooled wether lambs.—First prize, £4, Marquis of Exeter; second, £2, S. Middleton, Water Newton.

Five cross-bred lambs.—First prize, £4, J. Lewin, Wyton, Hunts; second, £2, T. Johnson, Walton.

Extra stock.—T. Close, jun., for six ewes.

PIGS.

Boars, large white breed.—First prize, £3, S. Spencer, Holywell, St. Ives; second, £1 10s., R. H. Griffin, Boro' Fen.

Boars, small ditto.—£3 and £1 10s., S. Spencer.

Breeding sows, large ditto.—First prize, £3, S. Spencer second, £1 10s., G. Young, Ufford, Stamford.

Breeding sows, small ditto.—£3 and £1 10s., S. Spencer.

Boars, Berkshire breed.—First prize, £3, B. St. J. Ackers, Painswick, Gloucester; second, £1 10s., C. S. Part, Watford.

Breeding sows ditto.—First prize, B. St. John Ackers; second, £1 10s., ditto.

BUTTER.

Three pounds.—First prize, Mrs. W. Grossmith, Longthorpe; second, 10s., R. Webster, Peakirk.

Ditto (Alderney excluded).—First prize, £1, J. Poles, Alwalton; second, 10s., Mrs. T. Nottingham, Ufford. *Lincoln and Stamford Mercury.*

RIPON AND CLARO.

MEETING AT HARROGATE.

Harrogate was on July 5th the scene of an agricultural show, which also embraced the districts of Ripon and Claro. For some years past a similar show has been held at Ripon, but not with increasing success, the entries last year having dwindled down to 375, which was a smaller number than in 1876, and still less than in the previous year. Under these circumstances a vigorous effort was made to revive its fortunes, and this resulted in the formation of a Society which should also include Harrogate, where no local show has taken place for many years. Friday's show was the first under the more extended scope of the Society, and it has, so far, been attended with encouraging success. The total entries numbered 592. This included a large entry of dogs, which were omitted from last year's programme at Ripon; but irrespective of this feature, the entries are much more numerous than under the old *régime*, and on this occasion the show extends over two days instead of only one. The Shorthorn cattle were good, and included some prime animals. Mr. Fawcett's prize winner Maggie Mildred, in Class 4, deserves special mention, having won prizes on each of the four occasions she has been shown this year—viz., at Otley (second), and first at Thorne and Doncaster. In addition to winning the chief honours of her class, her owner was awarded the special prize of ten guineas offered by the Harrogate Improvement Commissioners for the best female animal in the show. The bulls were not above the average of what is seen on such occasions; whilst the sheep and pigs were also indifferent. Of horses there was a fair turn-out. The hunters and hacks were especially good, and there were one or two excellent carting mares. Mr. Crowther, Mirfield, added one more to the many laurels of his brood mare, Beauty. The premium for ponies brought out a few

capital specimens, including Viscountess Downe's Rosemary, which now came second, although first recently at Thirsk, being remarkable both for quality and good action as a lady's pony. As usual, considerable interest attended the leaping competitions. The winner, a beautiful grey, which invariably cleared the hurdles in graceful style, was closely run for the prize by Major Stapylton's well-known brown gelding, Whalebone, which again took the second prize. The weather for the show kept fair during almost the entire day, although cloudy and threatening; and there was an attendance of 2,252 visitors, £120 being taken.

The judges were: For cattle, sheep, and pigs, Mr. T. C. Booth, Warlaby, Northallerton, and Mr. J. R. Singleton, Givendale, Pocklington. For horses, Mr. Jas. Darrell, West Ayton, York; Mr. S. Fisher, Hutton Cranswick, Driffield; Mr. Joseph Harrison, North Ormsby, Redcar; and Mr. George Robson, Shires, Easingwold.

LIST OF PRIZES.

SHORTHORN CATTLE.

(Open to all England.)

For the best bull, two years old and upwards; 1, J. Waind, Kirby Moorside; 2, H. Borton, Malton. Bull, above one and under two years; 1, Rev. T. Sheepsbanks, Arthington; 2, G. Yeats, Studley. Bull calf, not exceeding twelve months; 1, G. Yeats; 2, H. Fawcett, Old Bramhope. Cow or heifer, in calf or milk, three years old and upwards; 1, H. Fawcett; 2, T. H. Hutchinson, Catterick. Heifer, in calf or milk, above two and not exceeding three years; J. Waind. Heifer, above one and not exceeding two years; 1, J. Suarry, Sledmere; 2, J. Singleton, Pocklington. Heifer calf, not exceeding twelve months; 1, G. Yeats; 2, T. H. Hutchinson. A special prize offered by the Harrogate Improvement Commissioners for the best female animal in the show; H. Fawcett, Old Bramhope.

CATTLE OF ANY BREED, OR A CROSS.

Cow for dairy purposes; 1, J. Steele, Harrogate; 2, J. Goodrick, Pannal, Harrogate.

SHEEP.

LEICESTERS OR LONGWOOLS.

Ram of any age (bred and reared within a radius of eleven miles of Ripon or Harrogate); 1, J. Simpson, Wetherby; 2, J. Dalton, Ripon. Pen of three shearing gimmers; 1, M. Lamb, Otley; 2, J. Dalton. Pen of three shearing wethers; J. Smith, Helperby. Pen of three shearing gimmers, of any breed or a cross; J. Smith. Pen of three shearing wethers, of any breed or a cross; J. Smith.

PIGS.

Boar of any age, of the large breed; 1, Thompson Hannam, Leeds; 2, J. Graham, Leeds. Sow of any age, of the large breed; 1, T. Nicholson, York; 2, R. Wearing, Ripley. Boar of any age, of the small breed; 1, T. Nicholson; 2, J. Graham. Sow of any age, of the small breed; 1, E. Maude, Bingley; 2, T. Hannam.

HORSES.

Brood mare for breeding hunters, with foal at foot or stinted; 1, F. Appleyard, Roundhay; 2, J. T. Robinson, Thirsk. Three-year-old gelding or filly for the field; 1, J. T. Robinson; 2, Viscountess Downe, Thirsk. Two-year-old gelding or filly for the field; 1, J. T. Robinson; 2, T. H. Hutchinson, Catterick. Yearling colt or filly for the field; 1, H. F. C. Vyner, Ripon; 2, J. T. Robinson. Brood mare for breeding roadsters, with foal at foot or stinted; 1, R. Martin, Flaxton; 2, J. Aekroyd, Harrogate. Three-year-old gelding or filly for the road; 1, W. Kirby, Skirpenbeck, York; 2, J. Morley, Dishforth, Thirsk. Two-year-old gelding or filly for the road; R. Martin. Yearling colt or filly for the road; 1, E. C. Housman, Wintringham House, Knaresborough; 2, J. Scriven, Saltaire.

FOR THE FARM.

Brood mare for breeding agricultural horses, with foal at foot or stinted; 1, J. F. Crowther, Miffield; 2, Lady Mary Vyner, Ripon. Three-year-old gelding or filly; 2, C. Wright, Tadcaster; 2, H. Lawson, Easingwold. Two-year-old gelding or filly, G. Crooks, Northallerton. Yearling colt or filly; 1, J. Jackson, Northallerton; 2, T. Thwaites, Harrogate.

HUNTERS.

Gelding or mare, five and not exceeding six years; 1 and 2, J. Smith. Gelding or mare, four years old; 1, J. J. Dunnington, Jefferson, York; 2, J. Atkinson, Northallerton.

ROADSTERS.

Mare or gelding, equal to carry 15 stone; 1, C. Rose, Malton; 2, J. Merryweather, Guisborough. Gelding or mare, equal to carry 12 stone; 1, J. Pallister, Ripon; 2, C. F. Mason, Thirsk.

PONIES.

Pony, not exceeding 14 hands; 1, W. Askew; 2, Viscountess Downe.

LEAPERS.

Gelding or mare, of any age or height; P. Jowett, Halifax; 2, Major Stapylton, Helperby; 3, W. Askew.

—*Leeds Mercury.*

SHORTHORN.

A Meeting of the Council of this Society was held at the Society's rooms, 12, Hanover Square, on Tuesday, July 2nd inst., Lord Skelmersdale, President of the Society, in the chair.

The following new members were elected:—

Ashton, Charles, Delrow House, Watford.
Barchard, Francis, Horsted, Uckfield, Sussex.
Chapman, George, Brook Farm, Exton, Oakham.
Hodgson, John, Jun., Eamont Bridge, Penrith.
Shutt, Isaac T., Harrogate Wells, Yorkshire.

EDITING COMMITTEE.

Colonel KINGSCOTE reported that the Committee had had before them several pedigrees of bulls and cows sent for insertion in Volume 24, some of which they had accepted, and had instructed the Secretary to communicate with the different owners and breeders in reference to others. That the Committee had had a complete proof of the pedigrees of bulls for Volume 24 laid before them, and they confidently hoped that the Volume would be in the hands of members by December next.

This report was adopted.

GENERAL PURPOSES COMMITTEE.

Colonel KINGSCOTE reported that the accounts for the month of June had been examined by Messrs. Quilter, Ball, and Co., and the Committee, and were found to be correct, that the Secretary's petty cash account had been examined, and passed and showed an expenditure of £14 16s. 5d. during the past month; that of receipts for the same period had been £32 8s., the balance of the Society's current account at the bankers being £307 1s., and £700 on deposit. That the annual audit of the Society's accounts to 31st December, 1877, was held on the 27th ult., and that an abstract of the cash account and a copy of the balance sheet were now laid upon the table. That the Committee recommended that the insurance on the stock of Herd Books be increased to £4,000.

This report was adopted.

The draft of the Report of the Council to the Annual General Meeting of Members was read and adopted.

SN AITH.

The annual exhibition in connection with this Society was on July 11 held in Cowick Park, about a mile from Snaith, kindly placed at the service of the committee by Mr. B. Shaw, for the purpose. With plenty of accommodation the ground will be found all that could be desired when the arrangements are a little more convenient. The show this year was nothing inferior to any of its predecessors so far as the quality of the stock exhibited is concerned, but in point of entries there is a great falling off compared with previous years. There was, however, a fair display of horses, particularly of the agricultural, draught, and roadster classes, though of hunters the show was hardly so good as has been witnessed in some previous years. Of the cattle the bulls were an excellent class, but the cows and heifers were only a moderate lot, if it is excepted one or two animals. The sheep comprised several very fine lots, the best, however, being the shearlings—rams, wethers, and gimmers. Neither poultry nor dogs furnished a very large show, though there were some good exhibits amongst both. Farm produce, however, was unusually fine, and of butter and eggs there has seldom been a

more choice display. The attendance of visitors was hardly so large as on some former years, probably owing to the weather being somewhat threatening, and partly to the long

distance of the show ground from the town. During the afternoon the Pontefract Borough Band, which was in attendance, gave a selection of music.—*Doncaster Gazette.*

FREE TRADE IN LAND.

No. VIII.

Mr. Joseph Kay, Q.C., has sent the following letter to *the Manchester Examiner* in continuation of the series already given so far in our columns:—

I have now, in No. I., published on the 20th of December last, shown how the present English land laws have accumulated most of the land of Great Britain and Ireland in a few hands, and also the vast extent of some of these estates.

In No. III., published on the 8th of January last, I endeavoured to explain, in a popular way, the laws which have brought about the extraordinary and highly inexpedient condition of things described in No. I.

In Nos., IV., V., and VI., published by you on the 14th of February, the 28th of February, and the 24th of April respectively, I endeavoured to show some of the more serious direct and indirect consequences of these English land laws.

I now propose to try to explain as clearly as I can the way in which the land is divided among all classes of the people in foreign countries, the remarkable consequences of such division, and the causes which have led and are still conducing to such division.

But before I enter on these subjects, I must, at the risk of being deemed somewhat egotistical, explain to my readers how it happens that I have any right to express any opinion whatever upon questions of so much difficulty.

In 1844, I was appointed by the Senate of the University of Cambridge, on the recommendation of Dr. Whewell, the then Master of Trinity College, the "Travelling Bachelor of the University." This office required me to travel during each of three years, in foreign countries, to investigate some subjects or institutions of public interest. I was appointed to examine the state of the education of the working classes in Western Europe, and to report upon such state to the University. At that time my brother, Sir James Kay-Shuttleworth, had just established, in company with Mr. Tufnell, the first pauper industrial school at Norwood, and the first institution we ever possessed for the education of teachers, at Battersea, and I had been a good deal associated with him in the management of the latter institution. The great question of national education was just beginning to attract public attention as one of the great problems of the future, which we had to solve somehow or other.

At this time I knew nothing either of our own land laws or of those of foreign countries, and I consequently felt no interest whatever in questions connected with them.

I left England on my appointed duties, furnished with introductions from our Government and from the German Ambassador, Chevalier Bunsen, to all the governments and other authorities and heads of institutions who could aid me in my proposed inquiries. I went first to Switzerland, partly because in that country were to be found some of the greatest leaders of the educational movement which had been for many years spreading through Western Europe, and partly because I knew that some of the cantons were, even at that time, making the greatest efforts to perfect the schools for the children of all classes of their people. I visited first the rich agricultural cantons of Neuchâtel, Berne, Vaud, Argovie, Zurich, Geneva, and Thurgovie.

As I travelled through these prosperous districts, from school to school, I was more and more struck by the prosperous appearance of the farms, by the high farming, the substantial comfort, size, and excellence of the farm buildings, the numbers, beauty, and fine condition of the cattle, the extraordinary richness of the pastures, and the evident care that I observed on every hand not to waste anything, either land in wasteful fences or in undrained plots, or any portions of the manures from the farms and homesteads, or anything that could by any means conduce to increase the produce of the farms. I was astonished also to see how much care and expense were bestowed on the embellishment of the exterior of the houses, as if the inmates were really interested in them.

I noticed, also, that although the every-day working dresses of the men and women were of very coarse, substantial, and often home-made materials, I seldom, if ever, saw rags even on the working days, while on the Sundays men and women always appeared in comfortable, substantial, unpatched clothes, and often, if not generally, in their national costume, or at least with some part of their picturesque cantonal ornaments. But what surprised me as much, if not more, than anything, was that as I drove along the public roads for miles, even near the towns, the roads were bordered by rows of magnificent fruit trees of various kinds. These trees had no protection against theft. There were no hedges or palings. They were all open to any passenger along the roads. Any one could have plucked the fine fruit. I have often seen in the autumn the overlaiden boughs supported by long poles, forked at one end, and even then nearly breaking under their burden. I have seen the ground beneath covered with ripe and fallen fruit, but no one touching or interfering either with trees or fruit. I have seen hundred of miles of such roadside orchards in Switzerland, Germany, and Italy, and have constantly looked with astonishment at the wonderful respect for property which all this evinced.

After some time spent in examining the primary schools throughout Switzerland I went to the Lake of Constance, to visit and inspect the celebrated Training College for Teachers, which was then presided over by the celebrated Veheli, at that time one of the most distinguished promoters of the education of the working classes in Europe. It will be seen directly why I refer to this college.

It was situated about a mile from the old city of Constance, close to the shore of the vast and beautiful lake, and upon a rising ground, which slants gradually upwards from the water. It is an ancient turreted house, and was formerly the palace of the abbot of the vast convent situated about half a mile distant, and which was, at the time of my visit still occupied by monks. The college commanded magnificent views. Close below it, spreading out seventy miles in length and twenty miles in breadth, lies the Lake of Constance. To the left rose the ancient time-honoured towers of the Council and martyred city. Far to the right rise the lofty snow-clad peaks of the mountains of Appenzell.

This commodious and splendidly-situated building, had some years before my visit in 1844, been set apart by the Republican Government of the canton as the college for the education of teachers for the village schools of this agricultural canton. The Government had also allotted to it orchards and a large farm, which was entirely managed by the students, who learned there under skilful teachers scientific farming.

The education given to the students was such as fitted them to become the teachers of young children of any class of society. They all were taught, besides the ordinary subjects, mathematics, practical science, music, and drawing. And they were only received into the college after having passed a severe entrance examination. The first time I went there Veheli was in the fields, superintending the farm labour of the students. One of them offered to go for the director, and begged me to walk through the college and examine anything I desired. I found all the furniture of the plainest. The bed linen was coarse. The chairs and table simple deal. But the books, the mathematical diagrams on the black boards, the drawings of the students, the musical instruments and music books, showed what a contrast the education bore to the daily life.

Veheli came dressed in a farmer's tweed coat, an old weather-beaten hat, and thick farming shoes, with hands and skin like a farmer's, but his eye and features told of the intellect and intelligence of the man.

He explained to me in this and subsequent visits that his students were intended for rural schools, to live among the farmers, who owned and worked their own farms; that they

would have to associate with the peasant farmers and their families, and to teach their children; that it was most important for them to be able to understand the farmer's work, to talk with them, to advise them, and to disseminate a better knowledge of scientific farming and gardening; that in this way, too, they gained the respect, esteem, and support of the parents; that they, being accustomed to these simple country pursuits, did not become discontented in their simple rural homes, but, on the contrary, found their work and life at the rural schools easier and more comfortable than their simple life in the college.

I began then to realise the fact that the Swiss peasant and yeoman farmers were actually owners of the land they farmed. It was they who paid for the high and careful training being given to the students in Vecheli's College.

I went with him into the fields, and found the students there, clad just like peasants, and engaged in all kinds of farm work. When they returned to the college they deposited their farm clothes and clogs in places provided, and put on their simple students' dresses.

After seeing much of this most remarkable and interesting institution, in which the students remain two years, I went with Vecheli to see a large agricultural school in the neighbourhood. This was supported by the peasant and yeoman farmers of the canton, and not by the Government. To it were sent the sons of farmers who wished their sons to acquire a fair knowledge of agricultural chemistry, the treatment of soils, the management of manures, the management of cattle, &c. There I found a building well supplied with all the scientific materials and apparatus necessary, very intelligent professors, and a large class of students earnestly pursuing their studies and work. Vecheli again explained to me that this was maintained in order to enable the sons of the small farmers to improve to the utmost their modes of farming and the capabilities of their land.

I was extremely surprised, and began to ask myself, do our leasehold farmers act in this way? Is it true that actual ownership is such a wonderful stimulant to self-improvement, self-denial, and exertion? Is it true that it is not the schools alone to which must be attributed the prosperous and independent condition of the peasantry?

I began, in short, earnestly to study not only the education question, but the almost equally grave one of "free trade in land." The more I travelled through the educated agricultural cantons of Switzerland the more I was interested and astonished at the beneficial influences of *ownership* upon the yeoman farmers and the peasants. They laboured and struggled for themselves—the full results of all the labour, self-denial, and intelligence they exercised were their own. They worked for no landlord. They shared none of their winnings from their lands with any master. The more I saw, the more I was impressed with the moral and social effects of the release of the land from the feudal laws, and I began to ask myself would not similar results follow a similar release in England?

I returned to England, and began the earnest study of our land laws. I then returned to the Continent, and travelled through the principal countries of Germany. Throughout these countries I found that the feudal laws had been done away with, and that the educated yeoman farmers and peasants were cultivating their own lands. Everywhere I found the good effects of these great reforms manifested in the moral well-being of the yeoman farmers and peasants, in the healthy self-help they manifested in their hopeful looks, in the good and substantial appearance of their villages and houses, in the economical and careful management of their fields.

But one of the most remarkable proofs of the vast blessings conferred upon the people by the united effects of education and "free trade in land" was offered by the condition of Saxony as compared to the neighbouring country of Bohemia. These two countries lie side by side. A great part of the people of these countries speak the same language, profess the same religion, and belong to the same race, but the condition of the peasants of these two countries at the period of my visit was as different as could well be imagined.

In Saxony the people had for years been educated by admirably trained teachers, from their fifth to their fifteenth year. In Bohemia the instruction then given was much inferior in all respects, and, such as it was, it was more in those days directed to the object of making them good subjects of

the absolute Government at Vienna, than of making them intelligent and thoughtful men as in Saxony.

In Saxony the feudal laws had, as in almost all the rest of Germany, been abolished. The land belonged for the most part to the yeoman farmers and peasants who cultivated it. In Bohemia the land was divided amongst great nobles, who left their estates in the hands of agents, and who carried off their rents, as most of the Irish landlords do, and spent them in the distant capital of Vienna.

Now, what was the comparative condition of the peasantry of these two rich countries lying side by side? In Saxony there was very little pauperism: the peasants were well and comfortably clad; ragged clothes were scarcely ever to be seen; beggars were hardly ever met. The houses of the peasants were remarkably large, high, roomy, convenient, substantially built, constantly whitewashed, and orderly in appearance; the children were clean, comfortably clad, and respectful and intelligent in manners. There was little apparent difference between the young children of the different classes. These children were taught in the same schools and by the same teachers until they were twelve years of age, as is the case throughout a great part of Germany and Switzerland. The land was most carefully cultivated, as well as in any part of Europe, and the general condition of the peasantry was more prosperous and happy-looking than that of any other country I had seen, except, perhaps, the peasantry of the Swiss cantons, Berne, Vaud, and Neuchatel, or that of the Rhine provinces of Prussia.

In Bohemia, just across the frontier, on the other hand, a totally different spectacle presented itself, and one which could not fail to strike any observant traveller with astonishment. As soon as I crossed the Saxon frontier, from the land of "free trade in land" and education, into Bohemia, the land of great estates, feudal land laws, and defective education, I found myself surrounded by beggars of the most miserable appearance, like our "tramps." The peasants were poorly dressed, were often in ragged clothes, and were constantly, if not ordinarily, without shoes or stockings. The cottages were small and wretched. The villages were generally only collections of the most miserable wooden cabins of one storey in height, and were crowded together as much as possible. The land was only half cultivated, wanted that appearance of care, neatness, and economy of every available portion which is the invariable sign and consequence of free trade in land.

I travelled through one part of Bohemia with a Saxon. He pointed out the beggars to me, and said with pride, "You will not see such sights in my country. Our peasants are owners of their own little estates, and have been steadily improving in their social condition ever since we repealed our feudal and entail laws, and did away with any impediment to the sale and transfer of land, and since we began to educate the children as we now educate them. Our people are well educated. They have got libraries in their villages. They are contented, because they are intelligent and know that their success in life is untrammelled by unjust laws, but depends on their own unfettered exertions, and that there is nothing to prevent their succeeding if they are only prudent. But these poor Bohemians have no strong stimulus to be prudent or industrious. They have no interest in the soil. They are little better than the serfs of the great lords at Vienna."

I travelled through another part of Bohemia with a very intelligent Prussian landlord, with whom I had a great deal of conversation. He said to me, "What a strange spectacle it is to see this fine country so badly cultivated and the peasants so poorly housed! Look, too, what great tracts are left entirely uncultivated! You do not see anything like this in those parts of Prussia where the peasants are educated proprietors. There they are prosperous, and the land is beautifully cultivated. Here a great part of the land is waste, while the peasants are the miserable dependents of great landlords, who spend their rents at a distance from their estates. If Bohemia were only cultivated like Prussia it would be one of the richest countries in the world. But it never can be properly cultivated under the present system."

How all this made me think, not only of England, but still more of unhappy Ireland!

I need not say that, after such an experience and such a lesson as this, all belief in English and Irish and Scotch land

laws passed away from me for ever. I saw more clearly than I had ever done what education and freedom were capable of effecting in all classes, and in all nations, and in all departments of human industry. I had been the agent of the Anti-corn-law League while I was a student at Cambridge. I became henceforward the earnest advocate of free trade in land.

What may be the state of Bohemia now, since the introduction of Liberal reforms in the Austrian Empire, I know not, but I know I have given a faithful picture of things as they were in the years 1845-8. Since those years I have lived much among the yeomen and peasant proprietors of Switzerland and Germany, and the more I have seen the more earnestly I have become convinced of the truth of the conclusions to which I was forced in the years 1844-50.

But it must be borne in mind that I speak of what has been accomplished by the repeal of the feudal laws in countries in which education has progressed hand in hand with the other great social changes. In those parts of Germany and Switzerland where the struggles of the religious parties or other difficulties hindered or prevented the progress of education for many years, after free trade in land had been introduced, the condition of the yeomen and peasant farmers was most clearly far behind the condition of the same classes in those provinces in which education had progressed hand in hand with the other great reforms.

In 1844-50, when very little comparatively had been done for education in the cantons of Friburg, Lucerne, and the other lake cantons and the Valais, the condition of the yeomen and peasant farmers, although they had enjoyed free trade in land as long as the other cantons of which I have spoken, was far inferior. The most cursory glance was sufficient to satisfy the traveller of this, as he looked at the villages, the orchards, or the fields.

So, too, in France at the present day. There they have had free trade in land as long as any nation, but the yeomen and peasant farmers have hitherto had nothing deserving the name of education. Their ignorance is appalling. It is limited to the experience of their own immediate neighbours. They know nothing of the world even at a distance of 100 miles from their doors. Science is a sealed book to them; agricultural schools and teachers, such as those of Germany and Switzerland, are utterly unknown. Their almost inconceivable ignorance is most strikingly described in Mr. Hamerton's able and interesting book, "Round about my House," published as lately as 1876, by a gentleman who has lived for years among the French peasantry, and who probably knows as much, if not more, of their present condition than any other living Englishman. He says, p. 228, "The ignorance of the French peasantry is difficult to believe when you do not know them, and still more difficult when you know them well, because their intelligence and tact seem incompatible with ignorance."

"They are at the same time full of intelligence and inconceivably ignorant." "His ignorance is incredible. He really does not know what the word 'France' means." "Fancy the condition of a mind which has no geographical knowledge! I knew an old peasant who sometimes asked me where places were, and his way was this: he would ask me to point in the direction of the place, and when two places happened to lie in the same direction, it was almost impossible to make him understand that they were not on the same spot." Mr. Hamerton lived in a part of France so near Switzerland that the tops of the Alps were sometimes visible from the summits of the hills in his neighbourhood. But he says, p. 231, "The greater part of the peasantry here have never heard of Switzerland." They adopt the experience and maxims of their predecessors. That is their whole science of farming.

Is it wonderful, then, that France, with only free trade in land, should be half a century behind the countries of Switzerland and Germany, which have had now for so many years the vast combined advantages of free trade in land and education, and, in many parts, of a thoroughly good agricultural training also?

But even in France how wonderful have been the results of free trade in land, even without education, spite of the dread prophecies that have been uttered since 1830 as to what would be the certain results of the great subdivision of land in that country! Year by year evidence which cannot be gained accumulates upon us, showing the remarkable progress among the small French proprietors and the gradual increase

of their comfort, savings, capital, and intelligence. Let the Republic only last and accomplish what it has pledged itself to perform—viz., to give a thoroughly good education to every child from its fifth to its fifteenth year, as in Switzerland and Germany, and the prosperity of the yeomen and peasant proprietors of France will soon rival, if not surpass, the prosperity of their German rivals.

TIPTREE HALL FARM.—A party of gentlemen interested in agriculture, including Mr. Read, M.P., Sir T. Acland, M.P., Mr. Morley, M.P., and Mr. Pell, M.P., visited Mr. Mechi on July 10 at Tiptree Hall. The London contingent left Liverpool-street station at 11 o'clock, and at Kelvedon station they found vehicles waiting, in which they were conveyed, through pleasant country roads, to Tiptree Hall Farm. Many of the neighbouring agriculturists were already on the ground, and the whole party were welcomed with characteristic cordiality by Mr. Mechi. The leading features of Mr. Mechi's farming are well known. As he himself says, 35 years ago, when he purchased Tiptree Hall farm, he was considered a revolutionist. He was a leveler in a double sense. He not only disregarded the old notions as to drainage, but he cut down all the trees, removed the cumbersome and weed-producing fences, put in their places light iron hurdles on wheels, applied manure lavishly, made good roads, and erected strange looking buildings, some of which now, owing to the general application of steam to the work of the farm, resemble more a manufactory in Lancashire than a farmstead in Essex. The visitors first examined the live stock, and it was made sufficiently clear that Mr. Mechi's system had not injuriously affected his interests as a breeder and feeder. The corn crops were in fine condition, though in two places deficiencies in the barley were observable. Compared with wheat seen before Tiptree Hall Farm was reached, Mr. Mechi's was luxuriant; and when it is remembered that his land is naturally poor the contrast was even, it may be said, remarkable. Of the complete nature of the change which has passed over Mr. Mechi's farm, perhaps it is only necessary to mention that whereas in 1841 he purchased the land, nearly all freehold, for £25 an acre it has since been valued at £50 an acre. But at what outlay was this change brought about? Mr. Mechi says his improvements cost nearly £25 per acre. His improvements are not all, however, sunk in the soil. His interested visitors noted the covered yards, the steam machinery in the field and at the homestead, the suitable accommodation for meat making, the iron hurdles on wheels, and sewage irrigation. Deep cultivation, drains, and sewage irrigation have effected much at Tiptree Hall Farm; but energetic and scientific and intelligent application of all the scientific improvements connected with husbandry has helped in at least an equal proportion. Meeting again in front of the hall, the host escorted his visitors to the dining-room and conservatory, where a luncheon was provided. A few toasts were drunk, and a few short speeches were made by the host, Mr. Morley, and Mr. Read. The latter gave, in a few general sentences, the health of Mr. Mechi and his family. This brought to a close a pleasant afternoon at Tiptree Hall.—*Times*.

WAYS OF WASHING THE FACE.—There are several wrong ways of washing the face, and but one right. Towel, flannel, sponge are all out of place where the face is concerned. The hands only should be used. Doctor Wilson's directions are:—"Fill your basin about two-thirds full with fresh water; dip your face in the water, then your hands. Soap the hands well, and pass the soaped hands with gentle friction over the whole face. Having performed this part of the operation thoroughly, dip the face in the water a second time, and rinse it completely. You may add very much to the luxury of the latter part of the operation by having a second basin ready with fresh water to perform a final rinse." But the care of the complexion requires that not only the face, but the whole body shall be daily subjected to the bath. The sponge-bath is, perhaps, the best, and the temperature of the water must be regulated by the sensations of the bather, and by the season of the year. No one can deny the charm of clear, soft colour in the cheeks and lips—and it must be an incorrigible complexion indeed that will not yield to the measures that I have recommended.—*Cassell's Magazine*.

LIFE IN NEW ZEALAND.

THE VOYAGE OUT.

[An old and valued contributor to this journal, whose articles on practical farming were highly appreciated, having gone to live for a time in New Zealand, purposes to send us a series of letters descriptive of the colony and his own experience there. To begin with, he sends what he no doubt rightly thinks may be interesting to his old friends and readers, as a description of the voyage out "from a farmer's point of view."]

On the evening of the day after I parted from you in London (27th Oct.) and joined the good ship "Essex" at Gravesend, the anchor was weighed, and she proceeded on her long, and what eventually proved to be, rather protracted and somewhat tedious voyage across the mighty wilderness of waters that separates England from her Colonial possessions in the Southern seas. Our destination, in the first instance, as you are aware, was Melbourne, and our first and only intended port of call Plymouth, to take on the remainder of our passengers. So baffling was the weather from the Nore outwards that in spite of the assistance rendered by tug steamers for three successive days, it was not until the morning of the ninth day that we entered the comparatively tranquil waters within the Plymouth Breakwater. Here the full complement of passengers was made up, and I myself was joined by the remainder of my company, fifteen in number, as I joined in the Thames for the express purpose of having everything made as snug and comfortable as possible before the others came on board. To women and young children getting on board the ship, even with the protection of the magnificent breakwater, was a very considerable trial to the nerves at the very outset, the weather being what seamen call "nasty," and landmen something stronger, and the staunch built wherries of the Plymouth boatmen became almost unmanageable as they came under the gangways, now bumping against the massive sides of the ship, and the next instant driven out as far as the lines would permit, now up, now down, and all so quickly, that scarcely an instant could be seized to step from the gunwale to the lower steps of the gangway. All were, however, got on board without accident, and comfortably installed in their new quarters much to their own satisfaction, as it really then seemed that half the trouble of the voyage was over when the embarkation was safely accomplished. Foul winds kept us in harbour several days, but at length a favourable change, or at any rate what appeared to be so, having occurred, the anchor was again weighed, a hawser was passed to a tug, and we got through the breakwater into the open sea, accompanied by several other ships bound for Australian and New Zealand ports, the crews and many of the passengers lustily cheering and waving goodbye, expecting of course that an hour or two's sailing would put them all out of sight of each other. But such anticipations were premature, as the acquaintance was destined to be renewed in yet another port in old England, even after we had lost sight of each other for some days, and after a very vivid and stirring experience of a storm in the Channel. I may mention *en passant* that the last piece of news that reached us before leaving Plymouth was that a storm had been predicted from America, and that it might be expected at any moment, and in further confirmation of this rather unpleasant information the storm signal was hoisted just as we passed out, a circumstance which caused not a little depression of the previous flow of good spirits which had animated every one from stem to stern of the ship at

the thought of the journey having fairly commenced. The tug had not been cast off a quarter of an hour and was not indeed out of sight, although well out of reach, when the captain sincerely regretted having left safe anchorage in Plymouth Harbour. The wind suddenly strengthened and began to blow a gale, which would have been probably of comparatively little moment had it been favourable to the ship's progress in the desired direction; but, as it drove her back into the Channel, it became excessively dangerous, particularly so near land, and with no sea-room. Worse still, the weather became very thick, so that no observations could be taken, and with an obscured atmosphere there was double the danger of being run into by a steamer, a *cottre-temps* which was twice barely avoided by the vigilance of the outlook. The gale speedily became a raging storm, compelling all canvass to be taken in but just the few sails necessary to steady the ship, and enable her to answer the helm. For four days we were driven hither and thither at the mercy of the winds and waves, never probably more than thirty miles from land, which on such a coast and in such a storm was a most dangerous proximity. Sunday, the eleventh November, was a day ever to be remembered by those on board the Essex, and by many others, who, as we afterwards found, fared much worse than we did, as the storm on that day reached its culminating point, and the raging of the sea, to those unaccustomed to it in such an aspect, was truly terrible to look on. How few who sit comfortably at their own fireside reading the account of disasters to shipping in the English Channel can realize the frightful hardships and dangers incurred by those who follow the sea as a profession, and particularly those who are continually in the Channel. The sturdy old Essex, being a frigate built of solid oak and teak, battled manfully with the waves, proved herself well to be one of the now scarce English hearts of oak, although wave rolled over wave in almost lightning succession, thundering on the ship's quarter like the crack of doom, seething and hissing as if they longed to engulf all she contained.

The good ship having excellent powers of flotation, although dipping almost perpendicularly, and with no apparent possibility of righting herself without sweeping her decks with a perfect avalanche of water, yet invariably rose like a sea-bird on the crest of the wave, taking nothing but the mere spray which flew across the ship as the mountain waves dashed themselves into foam on her unyielding timbers. Displaying the utmost confidence in the nautical knowledge, practical seamanship, and cool courage of our captain, the gallant Ticehurst, whose bluff and manly countenance, the very type of a British seaman's, was pleasant to look on, none of the passengers of any class seemed to have the slightest fear for their own safety or that of the ship, nor do I think under any circumstances would the idea of danger ever have presented itself, until actually present, either by collision, running on shore, or springing a leak. On the morning of the 12th we were off Portland, and in a few hours thereafter sailed safely into the roads, and were joined in the course of the day by the bulk of our Plymouth companions, some of them in a most lamentable plight, with loss of sails and rigging and sea-swept decks. When the newspapers were brought on board we found them filled with accounts of what was described as one of the most dreadful storms that had swept across the three kingdoms for many years, great damage having been done on land, and

many wrecks, and much loss of life having occurred on every exposed part of the coasts. With sails renewed and cordage repaired and tightened, we again set sail, the entire ship's company in fine health and spirits, and everyone joyfully anticipating a pleasant future and hopefully predicting it as being certain after such a terribly rough beginning. Here we took a long and affectionate look at the white cliffs of old England so soon to fade from our sight, and exchanged a hearty ringing cheer with the people on the "Shambles," light ship, who kindly wished us a safe and pleasant voyage, these being the last faces we saw and the last words we heard outside the ship, until we took on the pilot off the Head of Port Phillip 96 days after. We experienced severe gales and rough weather for the succeeding fortnight till through the Bay of Biscay, which indeed we scarcely entered, having kept so much to the west. Off Cape Finisterre the voyage began to become enjoyable, the temperature becoming sensibly milder, and the weather considerably better. As we neared Madeira, which, however, we did not sight, the weather became truly delicious and enjoyable to a degree not to be understood by anyone who has not been so far south. It was easy to see that Madeira must be a good climate for invalids, but the great mistake made by those who endeavour to benefit by a change of air is that they are too long before trying it, and thus gain little or nothing by the change. As we were by this time all comfortably settled on board, having got over all our Channel troubles, which, indeed, are well nigh forgotten, and bowling along under the influence of the "Trades," as seamen call the winds in these latitudes. I may with some show of propriety take a short review of the passengers. They were composed of three classes—first, second, and third—and all were respectable people, paying their own passage, some of those in the third compartment taking out with them considerable sums of money. All were quiet and orderly, and what is not always the case, remained in terms of cordiality and friendship from the commencement to the termination of the voyage. Apart from the ship's classification, they resolved themselves into three divisions as regards the object of their long journey, one division going out in search of health, others returning to the land of their adoption after visiting the old country, and the third going out for the first time to push their way in the new country, and carve out a competence for themselves if possible; the last part were the fewest in number, as singular to say, a goodly sprinkling of those who were going out to earn a living in any way that might present itself in anything like a suitable form, had been out in the very same or an adjacent colony before, and some of them had apparently been all over the world. Those who had travelled were much given to conversation, giving long accounts of how strangers ought to proceed, and how to conduct themselves on first landing; but, apart from the amusement it afforded for the moment, and the assistance a fluent speaker thus gave to his listeners in wiling away the time, I do not really think such narratives were calculated to be of the slightest future value to anyone, as the circumstances which present themselves to different individuals are so diversified and are grasped at so differently by different men that it is scarcely safe to imitate the experience or career of another. Industry is the mother of plenty in the colonies as well as elsewhere, and to be industrious and take the first reasonable opening that presents itself is nearly the best advice any man can safely follow who has his way to make in the world by his own exertions. The amusements of all classes were essentially the same, and by the time we entered the tropics they were pursued with a devotedness and assiduity which bid fair to exhaust all sense of pleasure or feeling of recreation long before the end of the journey. Cards and chess were played all day long

and seemed never to pall, and music and the drama filled up an occasional evening very pleasantly. Even admitting that the performances were not very brilliant, they were accepted in a good spirit, and the enthusiasm with which a good song, dance, or other performance was received largely aided in rendering it effective, and the entire entertainment a success. Reading, however, was the universal panacea used for the purpose of killing time, and I am sorry to say Miss Braddon, with her appallingly sensational tales of love, murder, jealousy, bigamy, and suicide was the favourite author, and that her works were to be found at all times in all parts of the ship, and were so eagerly borrowed and so passed from hand to hand that many volumes new on leaving London were scarcely worth taking on shore. Biography, history, or travels would be much wholesome reading, where this amusement becomes necessarily an occupation, and while containing sufficiently striking features to give such works an interest little short of that aimed at by the novelist, a large amount of knowledge is gained which may at some future time be turned to good account. Considering the large number of people collected together, instrumental music was miserably represented, and we sadly missed a mode of entertainment by which one clever performer might have afforded amusement to a large circle through many weary and languid hours. Our party took out a piano. The principal use, however, to which it was put was to lead the choir on Sundays, and by its assistance the sacred music was much better conducted, and greatly enjoyed by those who attended the services. On week days it promised at first to be seldom idle, as volunteer players were plentiful; but it happened to be placed so near the cabin of an invalid passenger as to cause him annoyance, and by courtesy it was shut up throughout the week, so we benefited little by taking it. This poor invalid died just before we rounded the Cape, his being the only death on board throughout the voyage. It would appear that a long sea voyage is often prescribed by medical men for diseases of the chest and respiratory organs, and their patients eagerly accept the advice thus given, hopefully looking forward to great relief, if not a certain cure, and proceed at once to make preparations for the journey. To those who have witnessed the melancholy condition of such invalids during the voyage, their separation from friends, the want of all the little comforts and attentions which make a sick bed tolerable, the irritation caused by the inquiries after their health by so many people who but a few days ago were utter strangers, and who they are perfectly aware do so only from a conventional feeling of courtesy, it seems absolute cruelty to give such advice. The young man who died on board of our ship had been a cavalry officer, and was so proud and sensitive that he could not bear even to be looked at, far less spoken to, on the subject of his illness, and it was apparent to all who came in contact with him, from the very first day he came on board, that he would never see the end of the voyage, and the question naturally arose Why, was a man so far gone in consumption ordered to try such a remedy? Heartrendingly melancholy, and distressing as were the long days and weeks of his last illness, they must have been infinitely more so but for the attention and kindness displayed by two ladies, who treated him as if he had been their own relative, and who supplied him with many little comforts and luxuries from their own private stores. How intense must have been the anxiety and positive agony of mother and sister, his only surviving relatives, thousands of miles away, and how anxiously they must have looked for a letter, although knowing too surely what its contents must inevitably be!

Many of the passengers did their utmost to kill the common enemy by fishing, and letting out a hook baited

with a bit of meat in the expectation of catching the albatrosses or "Molly hawks," which followed the ship incessantly from the time we entered their geographical range in latitude 32 degs. south, quite through the Indian Ocean, until we entered the Heads; but their patience and perseverance were miserably rewarded, as they caught neither fish nor birds. Although a good number of the latter were caught, it was done invariably by the officers, who had the knack of giving the hook a peculiar jerk at the instant the bird seized the bait, which could only be acquired by long experience. At Plymouth and other seaports the harpoon for the dolphin and porpoise, and line and hook for the albatross are very prominently displayed in the shops as highly necessary articles of outfit for the voyage; but money so invested is quite thrown away, as sport there is none. It seems to me to be a mistake interfering with these beautiful birds, and more particularly shooting at and wounding them, as they can seldom be recovered, and the poor things float away to die a lingering death of starvation. They are never so beautiful as when soaring in mid-air on their vast expanse of wing, measuring from 10 to 12 feet from tip to tip, now wheeling majestically around the ship, and anon darting like the lightning's flash down to the surface of the water to pick up some garbage which they had seen thrown from the ship. Watching their beautiful movements cheers many a lonely hour for those who have to remain so many weeks in enforced idleness in their weary journey across the ocean, and many of our passengers, myself included, felt a pang of regret when we saw them fall wounded into the water, or even when drawn alive on deck—they looked so thoroughly miserable and out of place. In the tropics, watching the flight of shoals of flying fish, as they darted out of the water disturbed by the motion of the ship, and skimmed along in thousands to a goodish distance before they again flopped into the water afforded much amusement to the younger portion of the company, as they are most beautiful creatures, and the sight of such a thing as a flying fish is so novel to all who are crossing the sea for the first time that they never tire watching them. We received the usual visits from the illustrious tenants of the deep, the whale giving us an occasional near visit, while the shark, the sailor's abhorrence, impelled by the keen pangs of hunger, would hover around for days watching for the offal of a sheep or pig, two ravenous creatures being caught very cleverly by the Captain himself, their beautiful white flesh, not at all unlike pork, affording a great treat to the sailors that evening, it being very palatable when fried. Shoals of porpoises and dolphins, extending for miles, churning the water almost into foam, as they tore along like so many sea-horses, lighted up an occasional hour or two with a feeling which very much resembled absorbing interest; but after all there were many, many wearisome hours which the bulk of the passengers found it hard to illumine with a single solitary ray of interest. Many of them tried, and a fair proportion of those who did so took it out, not at all unsuccessfully, in sleep. Notwithstanding all that has been said, written, and sung about the charms of life at sea, the freedom of which it is popularly supposed to be the type, and the adventures which young folks religiously believe to be inseparable from a "life on the ocean wave," a lengthened sea voyage is probably the most tiresome and monotonous undertaking that ever mortal man ventured on, as day after day and week after week passes without the slightest change of scene, nothing but a circle of undulating water, probably not more than 16 miles in diameter, changing possibly in a few hours to foaming billows, which chase each other over and over, and dash themselves into white-crested foam, but still giving no relief to the awful desolation which reigns around. The gallant ship herself is but a

speck on the vast wilderness of waters, and the hope of every one is that she will cleave her way with certainty and precision, every dip of her prow, carrying us farther from the land we have left, and bringing us so much nearer to that in which our future hopes and aspirations are centred, the arrival at the Port of debarkation being most devoutly wished for.

Contrary to all expectation, the most pleasant and enjoyable part of the whole voyage was the run through the tropics, as during the whole time the fierce heat of the sun was delightfully tempered with cool and refreshing winds, which, while waiting the ship on her way at moderate speed, enabled the passengers to enjoy themselves thoroughly, and they lay in groups under the awning from morning till night, and sometimes most of the night, amusing themselves to their hearts' content. Many brought their beds on deck, and slept there; but such a proceeding is hazardous and fool-hardy, as the decks, being water-soaked every morning, retain a certain amount of moisture—however drying the weather may be—which is attracted to the surface by the heat of the body, and acts of course prejudicially to the health of the sleeper. The awnings being always taken down at sunset created another danger to those who slept on deck, as the moon at sometime or other in the night was sure to get on the face of the sleepers, and its effects are also most injurious. A good many of those who left their berths for the deck got into the doctor's hands, suffering for some days most acutely. In the neighbourhood of, and crossing the Equator, calms are often experienced which prove very trying to the temper and patience of those who have the management of the ship: these we luckily escaped, being stopped altogether not more than a few hours throughout the voyage. In crossing the line no nonsense was permitted by the captain, or any attempt at practical joking, such conduct being now considered as simply barbarous. Nor was there any collection made for drink, intemperance being greatly dreaded on board ship. From the time we got out of the stormy weather by which we were so sorely beset in the Channel, and to a lesser extent on as far as Cape Finisterre, the weather was remarkably fine, nothing worthy of being called a storm crossing our track, with the exception of about 24 hours when rounding the Cape of Good Hope, when the grandeur of the scene took away all sense of danger. The great rollers here, so vast in extent as to be computed at three to the mile, so different from the short, angry, and far more dangerous waves of the English Channel, struck every one who saw them for the first time with surprise, and even after the storm subsided, the swell which remained was truly majestic. From the time the "Easting" commenced, very light winds were experienced, and the voyage through the South Atlantic and Indian Oceans became extremely tedious, and the degrees of longitude mounted up very slowly, from 0 to 144 occupying 47 days. When fairly past Cape Lewin, and under the Australian coast, although distant several hundred miles, we had the, to us, remarkable sight of an ocean without a swell, the surging motion of the ship, which had never once ceased since she left the Nore, being replaced by the smooth gliding motion of a toy yacht on a mill-pond. We began now to get into the line of ships trading to the Mauritius, a sugar ship passing quite close to us and creating a great sensation, as it was the first sail we had seen for seven weeks, a circumstance which gives some idea of the vast extent and consequent loneliness of the ocean. At 3 p.m. on the 19th February, the great event, not only of the day but of the voyage, was sighting land, which was first observed and pointed out by the captain himself, due north-east, proving to be Cape Otway, which had been thus struck as faithfully and surely as a farmer would direct his horse and trap to the nearest market town.

At 7.30 the revolving light of the Otway was plainly seen from the deck everyone remaining for hours to admire it, as they felt it to be the first link which again connected them with the rest of the world. Next morning all were up betimes to feast themselves on the sight of land, now quite near, and stretching all along as far as the eye could see, behind and in front of the ship, and to the north and east. Every new point of land on the coast or high ground in the interior was picked up with the utmost fervour and zeal as it gradually raised itself from the horizon. The aspect of the land thus seen was rather uninviting, as it was just a series of what appeared to be sandy hillocks covered with a scrub-like vegetation, with no sign of inhabitants, and the entire coast line singularly barren-looking and desolate. The "Heads" gradually came into view, and about ten miles out we were taken in tow by a steamer, the pilot coming on at the same time, and with its

assistance we soon passed through the "Heads" into the magnificent expanse of land-locked water called Hobson's Bay, forty miles long and twenty-eight broad at its widest, passing the pretty and picturesque village of Queenscliffe on the left as we entered, this being one of the great resorts of the Melbourne people in their summer excursions and pleasure trips. We had a pleasant run up the bay by moonlight, the weather being charming, and as we neared land the lights of Melbourne and its suburbs were a welcome and almost wonderful sight to us who had been so long cooped-up on board a ship on the lonely ocean. At 11 p.m. the cable was slipped, the mighty ball ceased rolling, and the sturdy old Essex, after buffeting the waves for 117 days, counting from the London Docks, with all her ship's company safe and sound, swung to her anchor in mid-stream, exactly opposite the Williamstown Pier. J. S.

AN ILLINOIS BREEDING FARM.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I have an opportunity of giving you a description of one of the best, if not the best, of the grazing farms of this country. It is situated in Douglas Co., Central Illinois, and owned by Mr. C. M. Culbertson. He purchased the estate when in a state of nature, about the year 1858, and then began gradually to improve it. There is not a tree or a shrub upon it, except a small grove of natural timber a short distance from the house, but what he placed there. The fields are laid out with good judgment, with gates placed at corners of each lot. Those near the house vary from 12 to 15 acres, and the others from 80 to 320 acres. All the fences are made of Osage orange, varying from six to nine years old. These fences have been cultivated with much care, the spaces filled up, and so well plashed at the right season that not a gap can be seen in any of them. The thorns of the Osage orange are so sharp that none but a mad animal will face them. These fences are now a great protection to cattle, giving shade in summer and shelter in winter. The cattle are wintered in the fields with no other shelter, and principally fed on the blue grass left for that purpose in the reserve pastures, which had been fed down closely in early spring, but getting a little corn and hay in rough weather. The blue grass preserves itself, and holds its nutriment. The small lakes at the homestead and in other lots, with little rivulets running from them, give a supply of water in the hog pens and fields naturally and conveniently. The first and most attractive objects are two lots that contain the 200 cows with calves or to calve. Then we come to 120 steers in another; then 100 more, 180 in another, and in the last 200, besides a small lot drawn out to be disposed of, all in blue grass, white clover, timothy, and prairie grass—a mixture they all enjoy, and this feed is half way up to their knees. They show their happy state of contentment and thrift, some lying stretched in sleep, others composedly standing, chewing their cud of improvement; each lies down with a grunt, and, when tired of rumination, follows the example of its fellow sleepers, and lays on the flesh profitably while sleeping. Mr. Culbertson has proved his thorough practical knowledge and skill by the laying out of his fields, the preservation of his fences, the judgment in the selection of his cattle, the permanent and solid way in which he completes everything he undertakes. He has a place for everything, and when either implement or tool is wanted you have only to look in the place allotted to find it. He has five constant men, and a superintendent over all. Mr.

Conlyn is a thorough man of business, good judge of cattle, a good buyer, and a man in whom Mr. Culbertson places the utmost confidence. The house is the picture of neatness, and as cosy as it is neat. It is situated in a shady nook, ornamented by a variety of trees of varied foliage, the intermixture of leaf and evergreen presenting a pleasing picture. The walnut grove planted fifteen years since by Mr. Culbertson, containing twelve acres, is the background of this scenery, and will ultimately become very valuable. In the rear of the house is a fine hearing orchard, containing peaches, cherries, and apples. The walnut grove is the hog pasture, with the addition of a grass pasture attached. The trees are their only shelter, except when sows come on in bad weather, then well-arranged pens are made to put them in confinement. We come now to the Herefords, purchased of Mr. Miller. Some of these were the younger part of the show herd, and are very superior. Peerless is as fine an animal as ever stood on four short legs. Her substance is remarkable, her symmetry complete, and her quality cannot be surpassed, her heavy neck being the emblem of constitution is superb, her shoulder points and blades well covered and her plates blending well with her shoulder, her fore ribs well sprung, and her crops full. Her bull calf, in my opinion, will grow up almost as perfect as his dam. He is by Mr. Miller's Seventy-six. Sunrise and Sunset are both beautiful animals, and hard ones to be beaten. Maid of Honor's style and substance of a rangy character, now fashionable may be preferred by many. Miss Shaw, Rose of Sharon, and Lucy Elliott may be viewed in the same light, but Peerless is the belle in my estimation, and I think a true type of a perfect animal regardless of breed. Although living on nothing but grass, suckling her calf, exposed to the late storms and cold, she carries a coat of heavy flesh of quality so evenly put on that a first-class butcher would glory in such a one hanging up in his shambles to attract customers. Freeport, half-brother to Peerless, is precisely of the same character as his half-sister, the offspring of which will be certain to make their mark from either thoroughbred or high grade cows. Doctor Morris, though of a little different character, has many excellent points, and will grow up to a good one. Another Hereford bull bred by Thomas Clark has the making of a good animal. These three bulls are kept in separate stalls, communicating with two yards, made with a high permanent board fence to receive the cows and give the bulls exercise. Another building near by contains six box stalls for cows

to calve in during bad weather. The two hundred grade Shorthorns and grade Herefords will be served by these bulls so as to come in at all times in the year. Among them are many grade Shorthorns that would shine in a show ring with the fancy ones with fashionable pedigrees. There are between forty and fifty grade Hereford heifers, in calf by a Hereford bull before Mr. Culbertson purchased them. Take the whole together I never saw a better lot of grades. Not one of them has ever had the slightest chance for pampering, but many of them purchased this spring were miserably poor. From these cows Mr. Culbertson intends to breed his own stock for feeding, culling the worst cows and heifers to feed off with the steers. The heifers he will splay. I have always considered this course of breeding and feeding, keeping the young stock in a thriving state, through the first winter, and after coming to winter quarters fleshy from grass the second, if judiciously fed, will come out at two years old ripe and profitable. When the white faces predominate, and the more varied colour disappears, it will be a scene worthy to behold, and worth travelling many miles to see.

Illinois is full of good cattle feeding for the English market. Every Hereford bull is now picked up to go to the West—Colorado, Wyoming, and the Valley of the Platt. They find that this cross is far better for them than the Shorthorn, as the produce can endure more, are

fit to go to market early, carry their beef there better, and when there fetch a cent per pound more money. The day is not far distant in this country when the Hereford bull will be sought to cross with the fashionable soft-handling, Bates' sort, to give them constitution and quality. Those who condemn the Herefords as milkers had better look to the richness of the milk before they are positive that the Herefords are not dairy cows. Mr. Aldridge, of Elysia, Ohio, has a "pure-bred" Hereford cow, which he challenges to show against a cow of any breed for butter for 100 dollars. She raises two thoroughbred calves every year (her own and another) and makes them both fat. I know this to be so from ocular demonstration two years in succession, and have seen her milked after the calves have been weaned. Let the Herefords be fairly and honourably judged in the showing, and they ultimately prove themselves. Shorthorn breeders have had the power in their own hands in selecting judges, both in England and in this country, and they have prevailed by riding over all other breeds roughshod, and the more they were courted the more stately they grew, until they found that in overdoing it they did nothing to the purpose. The panic is bringing them to a proper sense of good breeding.

I am, Sir, &c.,

WM. H. SOTHAM.

Hereford Park, Illinois, Jan.

AGRICULTURAL SOCIETIES.

CAMBRIDGESHIRE AND ISLE OF ELY.

MEETING AT CAMBRIDGE.

The 15th annual show of this Society was held at Butt Green, Cambridge, on July 25 and 26. 4800 were given in prizes; the entries of cart horses numbered 156; riding horses, 147; cattle, 57; sheep, 132; swine, 18. The leading feature in this Society's Show is the cart horses, and the competition throughout was good. Mr. Street's stallion Stokes's Champion, which was at the Spring Show, and at several recent exhibitions, was again first in the old stallion class, Mr. Little's Black Marquis being second. Mr. Street was also first with a two-year-old, which took the second prize in his class at Bristol. The two-year-olds were not a good lot. In the mares class Mr. Taylor was first, while Mr. Beart won in that for mares and foals. There was a large but not a very good class of two-year old fillies, and no fewer than twenty foals came into the ring, one of which was purchased by Captain Heaton, for Lord Ellesmere, at the high price of 100 guineas. In the weight-carrying hunter class the only prize awarded was won by Mr. Linton, Mr. Jonas winning in the light-weights with Lydon. Confidence, the property of Mr. Flanders, of Mildeuball, was first in a good show of hackney stallions, Mr. Harper, of Bury St. Edmunds, being second with Magnate. For the other prizes see the prize list.

Of cattle there were 50 entries, and the show was a fair one for the district. In the bull classes Mr. Griffin, of Werrington, Mr. Porter, of Mepal, and Mr. Morton, of Downham-market, were first. For cow-in-calf, Mr. Gunnell, of Milton, with Queen Cambridge, carried off the principal award. In the class for heifers Mr. Griffin took first prize, and for Alderney cows Mr. Jonas, of Ickleton. Mr. Gunnell, of Milton, was also successful with his heifer Lady Milton, his bull, Hon. Neville, and his sheep. There was a large show of sheep.

PRIZE LIST.

HORSES.

AGRICULTURAL

- Stallion.—First prize, F. Street; second, W. Little.
 Entire three-year-old colt.—First prize, G. Jonas; second, not awarded.
 Entire two-year-old colt.—First prize, F. Street; second, D. Camps and A. Kent.
 Cart mare.—First prize, H. Taylor; second, F. Street.
 Mare and foal.—First prize, B. Beart; second, R. Skelton.
 Two-year-old cart gelding.—No competition.
 Two-year-old filly.—First prize, R. Moulton; second, L. Jones.
 Yearling colt.—First prize, S. Fyson; second, H. Taylor.
 Yearling filly.—First prize, A. H. Moyes; second, J. Hunt.
 Pair of cart horses, the property of any tenant farmer resident in the limits of the Society, and bred on his farm six months.—First prize, H. Ivatt; second, S. Pison.
 Brood cart mare, any age, having bred a foal.—First prize, H. Taylor; second, C. Beart.
 Three year-old filly.—First prize, J. A. Cheary; second, T. Gunnell.
 Cart foal.—First prize, H. Edwards; second, C. E. Ivatt.
 Foal by King Tom.—Prize, C. E. Ivatt.
 Foal by Samson.—Prize, J. M. Goode.
 Cart mare or gelding in the yard.—Prize, J. Beldam.
 By the Treasurer (G. E. Foster, Esq.)
 Entire horse for agricultural purposes.—Prize, F. Street.

RIDING AND COACHING HORSES.

- Stallion best calculated to get weight-carrying hunters.—First prize, H. Jones; second, not awarded.
 Hackney stallion.—First prize, W. Flanders; second, T. Harper.
 Mare or gelding, under five years, adapted for hunting.—First prize, J. T. Blott; second, R. C. Cooke.
 Hackney mare or gelding.—First prize, W. Flanders; second H. Wayman.
 Mare best adapted for breeding carriage horses or weight-carrying hunters (open to all England).—Prize, S. Holben.
 Weight-carrying hunter, any age.—Prize, J. Linton.
 Light-weight hunter, any age.—First prize, J. Linton; second, A. R. Mason.

Harness horse or mare, not under 14 hands 2 inches (open to all England).—First prize, H. Wayman; second, T. Beuton (protest).

Riding cob, mare, or gelding (open to all England).—Prize, G. S. Hall.

Harness cob or pony, mare or gelding.—First prize, H. Wayman; second, J. F. Kent.

Riding or harness pony, not exceeding 13½ hands.—First prize, D. Camps; second, C. Ambrose.

Riding or harness pony, under 12 hands.—First prize, Miss Lilley; second, T. Banyard.

Saddle or harness horse, exceeding 13 hands (open to all England).—Prize, J. Linton.

Foal by Lydon (open to all England).—Prize, D. Ward.

Horse or mare that shall jump in the best form.—First prize, J. H. A. King; second, A. R. Mason.

Pony that shall jump in the best form.—First prize, H. J. A. King; second, R. K. Porter.

Horse or mare, not having been awarded a prize, that shall jump in the best form.—First prize, T. Carpenter; second, N. R. Holmes and R. Piggott, equal.

Pony, not exceeding 13½ hands, not having been awarded a prize, that shall jump in the best form.—Prize, H. J. A. King.

The horse that shall jump in the best form, carrying a lady.—Prize, H. J. A. King.

Lady Riders.—Miss Bradley, Mrs. Williams, Miss A. K. King.

CATTLE.

Bull any age.—Prize, C. W. Griffin.

Bull not exceeding two years.—First prize, R. K. Porter; second, T. Gunnell.

Bull not exceeding one year.—Prize, J. Morton.

Cow in calf or in milk.—First prize, T. Gunnell; second, T. Chalk.

Heifer not exceeding three years, in calf or in milk.—First prize, J. R. Chaplin; second, C. W. Griffin.

Heifer not exceeding two years.—First prize, C. W. Griffin; second, T. Chalk.

Heifer not exceeding one year.—First prize, C. W. Griffin; second, T. Gunnell.

Alderney or Guernsey cow in calf or in milk.—First prize G. Jonas; second, T. W. Bland.

Heifers any breed, under three years.—Prize, T. Gunnell.

Pair of fat steers or heifers, any age, the property of a tenant farmer of Cambridgeshire.—Prize, C. Ambrose and A. M. Robinson equal.

Shorthorn cow, the property of a tenant farmer in Cambridgeshire.—Prize, T. Gunnell.

Cow or heifer, any breed, in calf or in milk, best adapted for dairy purposes.—First prize, T. Gunnell; second, Right Hon. Lord Strathnairn.

Bull not exceeding three years.—Prize, R. K. Porter.

Bull, cow and offspring.—Prize, C. Ellis.

SHEEP.

Shearling Leicester or Lincoln ram.—First and second prize, T. Gunnell.

Five Leicester or Lincoln ram lambs.—First prize, R. C. Catling; second, F. Ellis.

Five Leicester or Lincoln ewes.—First prize, C. Sell; second, R. G. Catling.

Five shearling or Leicester or Lincoln ewes.—First prize, T. Gunnell; second, C. Sell.

Five Leicester or Lincoln ewe lambs.—First and second prize, R. C. Catling.

Shearling Southdown ram.—First and second prize, Lord Braybrooke.

Five Southdown ram lambs.—First prize, G. Jonas; second, F. M. Jonas.

Five Southdown ewes.—First prize, F. M. Jonas; second, G. Jonas.

Five shearling Southdown ewes.—First prize, F. M. Jonas; second, G. Jonas.

Five Southdown ewe lambs.—First prize, F. M. Jonas; second, G. Jonas.

Shearling short-woolled ram (not Southdown).—First prize, H. Lambert; second, F. Street.

Five short-woolled ram lambs (not Southdowns).—First and second prize, F. Street.

Five short-woolled ewes, each to have brought up a lamb this year (not Southdowns).—First prize, H. Lambert; second G. Cooke.

Five shearling short-woolled ewes (not Southdowns).—First prize, H. Lambert; second, F. Street.

Five short-woolled ewe lambs (not Southdowns).—First prize, H. Lambert; second, F. Street.

Five cross-bred lambs.—First prize, Mrs. Cornwell; second, A. Spencer.

Ten Lincoln wether lambs, bred by exhibitor.—Prize, T. Gunnell.

Ten Lincoln ewe lambs, bred by exhibitor.—Prize, R. C. Catling.

Ten short-woolled or cross-bred wether lambs, bred by exhibitor.—H. Lambert.

Ten short-woolled or cross-bred ewe lambs, bred by exhibitor.—Prize, Mrs. Cornwell.

Three fat wethers, any age, any breed (open to all England).—First prize, H. Lambert; second (by Cambridge and neighbourhood).—Prize, T. Gunnell.

Three Leicester or Lincoln fat wethers (open to all England).—Prize, C. Sell.

Three Leicester or Lincoln fat shearling wethers.—First prize, T. Gunnell; second, C. Sell.

Pen short-woolled fat shearling wethers.—First and second prizes, H. Lambert.

Five shearling Leicester or Lincoln ewes.—Prize, T. Gunnell.

Pen of not less than 5 sheep (not rams).—Prize, F. M. Jonas.

Shearling Leicester or Lincoln ram (open to all England).—Prize, T. Gunnell.

Shearling short-woolled ram (not Southdown).—Prize, H. Lambert.

Southdown ram.—Prize, G. Jonas.

PIGS.

Boar, large breed.—First prize, J. P. Miller, Fenstanton; second, S. Spencer, Holywell. Reserve, J. P. Miller, Fenstanton.

Boar, small breed.—First prize, S. Spencer, Holywell; second, C. Sell, Bassingbourn.

Sow, in pig or sucking, large breed.—First prize, J. P. Miller, Fenstanton; second, S. Spencer, Holywell. Reserve J. P. Miller, Fenstanton.

Sow, in pig or sucking, small breed.—First prize, S. Spencer, Holywell; second, S. Spencer, Holywell. Reserve, C. Sell, Bassingbourn.

Pen of 3 Yelts, not 6 months old, large breed.—Prize, S. Spencer, Holywell.

Pen of 3 Yelts, not 6 months old, small breed.—Prize, S. Spencer, Holywell. Reserve, C. Sell, Bassingbourn.

Pen of 3 fat pigs.—Prize, S. Spencer, Holywell.

LINCOLNSHIRE.

MEETING AT LOUTH.

This Society, which is a year older than the Royal, was fortunate in having a site which was not only suitable but convenient. The arrangements were excellent and well carried out, and nothing was left undone that could be done to secure a successful meeting, either by the Secretary, or the public, who tried their utmost to make the town attractive and otherwise to further the objects of the Society.

Of agricultural horses there were, altogether, about 85 entries, and the merit was not a whit behind the standard one would expect to find in a Lincolnshire show. But a great drawback to this division was the absence of the whole of the Earl of Ellesmere's entries, amongst which are some of the best horses of the day. This very unfortunate circumstance was the result of the fatal accident which occurred at Bristol, the Earl having in consequence intimated to the Secretary of the Society his intention not to exhibit horses again this year. The first class to come into the ring was that of the yearling fillies, of which seven made their appearance. The first place was given to a brown by The Banker, belonging to Mr. Byrou,

a well made and well furnished filly, that will, likely, see many a showyard. The second prize went to a rather slight and leggy black of Mr. Freshney's, upstanding and stylish, by Young Le Bon, and Mr. Byron obtained third place with another of The Banker's get. In the two-year-old class there was only one plain one out of eight. Mr. Robinson's Ginger Brandy by Honest Tom 2nd, a very handsome bay, with grand quarters and strong loin, well ribbed, and good all over was first, a very useful brown of Mr. Blankley's, likely to make a good brood mare, came second; and a roan by Emperor, bred by Mr. Parish, and exhibited by Mr. Bancroft, with plenty of bone but a slovenly walker, took third place. Mr. Hopper's bay, by Prince of the Isle, was rather too fat, and Mr. Epton's Flower covers a lot of ground. There were six absentees in this class, including three of the Earl of Ellesmere's entries. There were some very useful mares and foals which took considerable time to judge. The first place was at length given to Mr. Torr's Jessie Wilson, and her foal Fanny Wilson, by Ronald McDonald, was awarded third prize in the cart foal class. Messrs. Freshney's roan mare Diamond, a rather short but very compact mare was second. It is almost a pity to find fault with such a useful stamp of mare as this, yet, with all her substance, her arms are scarcely as great as they should be. The foal—a black—by Rival, obtained second place in the foals' class. Mr. Horn's Diamond, a very handsome eight-years-old bay was third on the list, but scarcely better than Mr. Hopper's brown mare, by Wiltshire Champion, although the rather slight hind quarters of the latter told against her. Mr. Markham's black mare was no use in her class, but her very capital foal took first prize in the cart foals' class, and has been sold, we are told, to the Stand Stud Company at a long price. Although there was nothing extraordinary about this class it was a very useful one.

In the stallion classes the yearlings were only four in number, and the quality was not very grand. Three two-year-olds came into the ring. Mr. Brook's Young Lofty, by Lofty, will be a useful horse no doubt, and Mr. Crosby's Comet, by Wiseman's Luck, though not very taking, is a good mover, with the right sort of legs under him. In the open class for draught stallions there were eleven competitors and among them some well-known animals. The list was headed by W. Crowther's Topsman, by Wonderful, a magnificent horse, which was first at Bristol. Nonpareil, by King of the Valley, Mr. Wynn's horse, was rightly placed second. This is another grand horse, who has furnished himself well since the close of the season; in fact he is in rather too good condition. The Stand Stud Company obtained third place with the old white-stocking chestnut Young Champion, by Stokes' Champion. All these are too well known to need description. Royal Albert, by Young John Bull, obtained a high commendation, but he is a leggy horse, with an apparent want of muscle in his thighs; he has a good forehead. Major, Mr. Murfet's horse, by Weisler's Honest Tom, with his great loin and quarters, would by many be considered a better horse. Young Wiltshire Champion was another good horse, not noticed. There was a class for pairs of draught horses, mares or geldings, and some of the entries were very good indeed. The classes for hunters, roadsters, ponies, &c., were quite a show by themselves, demanding more time than we had at our disposal; nor indeed were the classes all judged when we left the showyard.

Shorthorns were the only breed of cattle for which prizes were offered; the entries were numerous, and the classes tolerably well filled, yet there were many empty stalls. Many of the animals were entered in more than one class to compete for the various prizes offered by private individuals in addition to those of the Society.

The double numbers and prize cards relating to two classes—generally of unequal value—made reference to the catalogue somewhat difficult, but this trifling inconvenience was of little consequence, and the local prizes certainly added considerably to the interest of the show. In several of the classes the value of the first prize was disproportionate to the others, being more than three times as great, but by such an arrangement the chief awards are worth competing for by the best of our show animals; thus in the open class for bulls three years old and upwards several well known prize takers made their appearance. Mr. Linton's Sir Arthur Ingram and the Earl of Ellesmere's Attractive Lord came once more into competition, and here the award was given as at Bristol in favour of Attractive Lord, which, as we remarked of the Royal, was in our opinion sounder judgment than that at Oxford. At all events, the lines upon which the judging at Bristol and Louth was laid down were more in the direction of what we consider to be the interest of rent-paying stock-breeders than those at Oxford; the difference being as between quality and handling on the one hand and style and fashion on the other. Attractive Lord also won the Challenge cup given by the Marquis of Ripon for the best bull of any age in the show—the cup to be won three years, or two years in succession. The third prize was given to Lieutenant-General Fytche's Royal Charmer's Duke, a very useful animal with not a very good hide on him, and the Marquis of Exeter's Telemachus 9th obtained the reserve. There were five animals in this class. For the best two-years-old bull there were also five competitors, all of them well known animals. Kalamazoo was of course put at the head of the list, and then came Mr. Torr's Fitzwilliam—the despised at Bristol. One of our contemporaries considers the passing over of this bull at the Royal to be a "noxious" form of judging; but the judges passed him over simply because there were better animals to place before him, and if we are not greatly mistaken he would have shared about the same fate at Louth had he met the same company as he did at Bristol. His back and loin are good enough, but his rump is not his only fault; his handling would not do for the Bristol judges. Flag of France, a bull we do not care for, and which never will be a show animal, was put third, and the Marquis of Exeter's Count Milcote took the reserve number. There were three absentees, and Kalamazoo was the only first-rate animal in the class. The entries in these two classes to which a first or second prize had not been awarded (in those classes) were eligible to compete for prizes offered for the best bull, over two years old, bred by or the property of a member of the Society: General Wharfedale (commended in the old bulls class) was first, Baron Aston second, and Lord Rose Spencer—a rather nice quality but badly furnished bull—reserved. Five yearling bulls out of seven entries, came into the ring: Mr. John Lynn's Cambridge Duke 10th was placed first—a level and rather taking bull, with a rather plain head and horn; Mr. Frudd's Prince Cambridge, a nice quality-red bull, was second; Mr. Dudding's Royal Pluto was third—a stylish but badly ribbed bull—and Colonel Hutton's Garrick, a decent roan, held the reserve. This was not a bad class by any means, although there was nothing of extraordinary merit in it. Eight bull calves were in their places, two only being absent. Here Mr. Garritt's Southern Butterly 2nd (which was third at Bristol) won easily; Mr. Pears' second prize calf Lamplighter is leggy; and neither Mr. Brown's third prize Vespasian nor Mr. Pard's William Torr—the reserve number—are at present anything beyond mediocrity. Mr. Linton's Lord Arthur is a nice calf, but he is too young to show against eleven months old calves, and probably that is why he did not get noticed either at Louth or at Bristol. The

class altogether was a very middling one. Entries in the yearling and calf classes which had not received a first or second prize in those classes were eligible to compete for the prizes offered to members of the Society, which accordingly fell to Mr. Brown's Vespasian, and Mr. Dudding's Royal Pluto (third prizes in the calf and yearling classes respectively) which we rather preferred of the two, but the merit was far from high in either. In the female classes a few good animals made their appearance, as, for instance, the Earl of Ellesmere's Lady (second at Bristol) amongst the heifers in milk or in calf, and Mr. Hutchinson's Grateful, a three year and six months old heifer which was fourth in her class at Oxford and at Bristol; both these easily secured first place in their respective classes at Louth. Blooming Bridesmaid, the property of the Stand Stud Company (fourth at Bristol) was second. Two very nice yearling heifers, the Marquis of Exeter's Coralina and Mr. Foljambes' Azucena (the latter commended at Bristol) were first and second. The heifer calves were a very creditable show indeed, Mr. Garfit taking first prize with Blanche Rosette 4th (fourth at Bristol); then came Mr. Hutton's Clio, a very stylish, level roan; and Mr. Linton's Charlotte, which was passed over at Oxford and at Bristol, obtained the third place. Mr. Pears' Anastasia came in for first place under the conditions of being the property of a member of the Society farming in the county of Lincoln.

Two prizes were offered for cottagers' cows, but only one entry, a very creditable one, was made. There were also two classes for fat bullocks, which excited as much interest as anything in the showyard. One pair of heifers and six pairs of bullocks made their appearance, and certainly better Short-horn bullocks it would be difficult to find. We may likely see some of them again at Islington or Bingley Hall next Christmas. For the best pair of bullocks Mr. R. Wright took the first prize, and one of the animals is of such scale and quality that he will do his breeder and feeder credit go where he may. Mr. Thomas Bond's second prize pair are also excellent, and one of them defeats Mr. Wright's bullock in a class for "the ox or heifer which, from early maturity, quality, and fitness for the butcher, appears to have brought the greatest profit to the exhibitor," and the award is perfectly correct when the difference in the ages of the two beasts (eleven months) is taken into consideration.

The sheep were, as might have been expected, a good show of Lincolns. Twenty-eight entries of shearling rams, nearly all in their places, were headed by Mr. Robert Wright, who also takes first prize for two shear rams with a capital sheep—good quality wool and mutton, and a good walker. Messrs. Duddings' second prize shearling is a very pretty sheep, with capital forehand, and a good handler; they are also second with a two-shear ram. Mr. Smith and Mr. Pears were also amongst the prize takers, the former taking first prize and the £15 challenge cup with an excellent old ram, and the latter being first with a very beautiful pair of shearling ewes, of the finest possible quality, and the best of wool. Mr. Sell also showed a good pen, for which he was awarded the second prize. There was a small show of Leicesters, in which Mr. Hutchinson and Mr. Marris were the chief prize-takers, Mr. Marris' pen of shearling ewes being of very nice quality—almost too fine. The pig classes were tolerably well filled, and the usual breeders' names will be found in the prize list.

There was a small show of wool and also of butter. Many of the most well-known implement makers had well-filled stands, amongst whom may be mentioned Messrs. Hornsby and Sons, Messrs. Clayton, Shuttleworth, and Co., Messrs. Ruston, Proctor, and Co.,

Messrs. Tuxford and Sons, Messrs. John Fowler and Co., and Messrs. Woods, Cocksedge, and Co., besides local firms, whose exhibits have recently and on several occasions been carefully described in these columns. Messrs. Fowler's steam cultivating tackle was working near the show-yard, and Mr. Hornsby's hedge-clipping machine was tried in the yard, to the great interest of looker's-on, who formed various opinions as to its efficacy. There were two stands for collections of seeds and roots, namely, Messrs. Carter, of London, and Messrs. Sharpe, Charles, and Co., of Sleaford, whose stand was a very good one; but Messrs. Carter had one of the best stands we have ever seen them put up in a show-yard, easily securing first prize. The exhibition throughout was one of great interest both to visitors and exhibitors.

PRIZE LIST.

JUDGES.—SHORTHORN CATTLE: W. Sanday, Nottingham; W. Parker, Penrith; J. Topham, Wragby. LEICESTERSHIRE SHEEP AND PIGS: R. Fisher, Beverley; L. Borman, Grimsby; J. Culshaw, Burnley. LINCOLNSHIRE LONGWOOL SHEEP: E. Davy, Brigg; H. Mackinder, Spilsby; J. W. Scorer, Bedford. HUNTERS AND ROADSTERS: C. W. Nainby, Barnoldby-le-Beck; Colonel Wilkinson, Lincoln; A. Trenbull, Coldstream. AGRICULTURAL HORSES: J. Plowright, Spalding; B. Spraggon, Nafferton; V. B. Watts, Dorehester. BUTTER: Mrs. R. Chafferton, Tathwell; Mrs. Robinson, Tathwell; Mrs. Fieldsend, Market Rasen.

CATTLE.

SHORTHORNS.

Bulls, three years old or upwards.—First prize, £25, The Earl of Ellesmere, Worsley Hall, Manchester; second, £7, W. Linton, Sheriff Hutton, York; third, £3, Lieut.-Gen. Albert Fytche, Pyrgo Park, Essex.

Two-year-old bulls.—First prize, £20, W. Tennant, Barlow, Selby, Yorks; second, £7, J. Torr, Aylesby Manor; third, £3, F. J. S. Foljambes, Osberton Manor, Worksop.

Yearling bulls.—First prize, £20, J. Lynn, Struxton, Grantham; second, £7, J. M. Etudd, Bloxholm Moor, Sleaford; third, £3, Messrs. W. and H. Dudding, Pantou House, Wragby.

Bull calves under a year old.—First prize, £15, A. Garfit, Southern, Lincoln; second, £7, T. Pears, Hackthorn; third, £3, P. Brown, Glentworth Hall, Lincoln.

Bulls, two years old or upwards, bred by or the property of members of the Society residing or farming in Lincolnshire, and for which a first or second prize has not been awarded in any other class.—First prize, £10, R. Moss, Whisby, Lincoln; second, £5, J. Webb, Melton Ross, Cleebby; third, R. Wyles, Little Ponton, Grantham.

Bulls, under two years old, bred by or the property of members of the Society residing or farming in Lincolnshire, and for which a first or second prize has not been awarded in any other class.—First prize, £7, P. Brown; second, £3, Messrs. Dudding.

Bull of any age.—The Marquis of Ripon's challenge cup, value 20 gu. [Award not received.]

Cows, above four years old, in milk or in calf.—First prize, £25, Colonel G. M. Hutton, Gate Burton, Gainsborough; second, £7, S. T. Gooseman, Bradley, Grimsby; third, £3, W. T. Wells, Withern, Alford.

Heifers, three years old, each having produced a calf.—First prize, £15, T. H. Hutchinson, Catterick; second, £7, A. Blanshard, Welton, Lincoln.

Two-year-old heifers, in milk or in calf.—First prize, £15, The Earl of Ellesmere; second, £7, Stand Stud Company, Whitefield, Manchester; third, £3, Col. Hutton.

One-year-old heifers.—First prize, £15, The Marquis of Exeter, Burgley House; second, £7, F. J. S. Foljambes; third, £3, Messrs. Dudding.

She calves, one year old.—First prize, £10, A. Garfit; second, £5, Col. Hutton; third, £2, W. Linton.

Cows or heifers, in milk or in calf, bred by or the property of members of the Society residing or farming in Lincolnshire, and for which a first or second prize has not been awarded in any other class.—First prize, £10, T. Pears; second, £5, Col. Hutton.

Heifers under two years old, bred by or the property of members of the Society residing or farming in Lincolnshire, and for which a first or second prize has not been awarded in any other class.—First prize, £7, T. Pears; second, £3, H. Sharpley, Aethorpe, Louth.

Pair of bullocks.—First prize, a piece of plate or £10, R. Wright, Nocton Heath; second, £5, T. Bond, North Thoresby.

Pair of heifers (not less than three entries).—Second prize, £5, H. Freshney, Grimoldby.

Oxen or heifers which, from early maturity, quality, and fitness for the butcher, appear to have brought the greatest profit to the exhibitor.—Prize, £10, T. Bond.

FOR COTTAGERS.—Milk cows or heifers, in milk or in calf.—Prize, £4, J. Reeson, Keddington.

EXTRA STOCK.—Prize, £2, W. Nell, Louth, for Alderney calf.

HORSES.

Thoroughbred stallions for hunters.—First prize, £50, J. Jackson (Bondsman), Great Hayton, Northallerton; second, £10, W. R. Marshall's (Paladin), Great Grimsby.

Stallions for roadsters.—First prize, £10, Stand Stud Company's Star of the East; second, £5, J. F. Crowther's Charley (Merrylegs), Knowl Grove, Mirfield.

Stallions for draught horses.—First prize, £100, J. F. Crowther (Top-man); second, £20, W. Wynn (Nonpareil), Ryon Hill, Stratford-on-Avon; third, £5, Stand Stud Company's (Young Champion).

Stallions for draught horses two years old.—First prize, £15, C. Brookes, Claxby (Young Lofly); second, £7, J. Crosby, Coleby (Comet).

Entire cart colts one year old.—First prize, £10, T. Horry, Boston West; second, £4, T. Blankley; third, J. W. Bancroft.

HUNTERS.

Mares for breeding hunters.—First prize, £15, G. F. Statter, Whitefield, Manchester; second, £7, S. Spencer, Housham, Brigg; third, H. Chaplin, M.P., Blaukuey Hall, Lincoln.

Hunting foals.—First prize, £10, G. F. Statter; second, £7, J. Winttingham, The Abbey, Great Grimsby; third, £4, W. Dudding, Howell, Sleaford; fourth, £5, J. R. King, North Ormsby, Louth.

Hunting geldings or mares five or six years old.—First prize, £30, J. E. Davy, Tathwell; second, £15, J. Haaland, Norwood, Beverley; third, £5, J. R. King, North Ormsby.

Geldings or mares four years old, calculated to make hunters. First prize, £50, J. E. Davy; second, £15, J. T. Jefferson, Dunington, York; third, £5, A. I. Brown, North Elmshall Hall, Pontefract.

Hunters, four years old or upwards, up to carrying not less than 13st.—First prize, £15, J. E. Davy; second, £5, J. E. Davy.

Hunting gelding or fillies, three years old.—First prize, £25, J. W. Parker, Lodborough; second, £10, W. Chatterton, Hallington, Louth.

Hunting colts, two years old.—First prize, £5 and an additional prize of £5, E. J. Davy, Owersby, Market Rasen; second, £5, W. Dudding, Howell.

Hunting colts, one year old.—First prize, £10, Mr. Howard, Temple Bruer, Lincoln; second, £5, G. Walker, Digby, Brigg.

Hunting fillies, two years old.—First prize, £10, G. Walker; second, £5, F. Bartholomew, Waddington Heath.

Hunting fillies, one year old.—First prize, £7, J. Greenman, Blankley Fen; second, £3, R. Graves, jun., Linwood, Sleaford.

Gelding mares for jumping.—First prize, £16, T. W. Ayswykeham, Market Rasen; second, £5, J. H. Sardeson, Kirby, Lythorpe, Sleaford.

ROADSTERS.

Mares for breeding roadsters.—First prize, £10, G. Willows, Tetney; second, £5, J. Byron.

Horses in harness with particular action.—First prize, £10, Stand Stud Company; second, £5, E. H. Marfleet, Bassingham.

Horses with best action in harness, especial consideration being given to pace. (Awards not received.)

Weight-carrying cobs, not exceeding eight years old, and not under 14 hands nor above 15 hands high, quality and action being specially considered.—First prize, £10, J.

Robinson, Hull; second, £5, T. Everett, North Croke, Fakenham.

Hacks about 14 hands and not exceeding 15 hands 2 in. high.—First prize, £10, J. Martin Wainfleet; second, £5, N. Long, Louth; third, £3, R. Surliff, Gainsboro'

Ponies not exceeding 14 hands high.—First prize, £10, J. W. Rowland, East Ville, Boston; second, £5, G. W. Stokes, Cossington Hall, Loughboro'; third, £3, G. Clarke, Lutton Marsh, Long Sutton.

AGRICULTURAL.

Mares for breeding draught horses.—First prize, £21, J. Torr, Grimsby; second, £15, T. and J. B. Freshney, South Somercotes; third, £7, G. Horn, Sutton St. James; fourth, £3, R. Hopper, Whittlesey.

Cart foal.—First prize, £10, R. Markham, Old Leake; second, £7, T. and J. B. Freshney; third, £5, J. Torr; fourth, £2, F. Bartholomew, Waddington Heath, Lincoln.

Cart gelding two years old.—Prize, £10, E. Baumber, Harrington.

Cart fillies two years old.—First prize, £10, W. F. Robinson, North Somercotes; second, £5, T. Blankley, Aunby; third, £2, J. W. Bancroft, South Somercotes.

Cart fillies, one year old.—First prize, £8, J. Byron, Kirkby Green; second, £4, T. and J. B. Freshney; third, £3, J. Byron.

Pair of draught horses under eight years old.—First prize, £10, H. Freshney; second, £7, H. Freshney, third £3, H. Freshney.

SHEEP.

LEICESTERS.

Shearling rams.—First prize, £15, T. H. Hutchinson, Catterick; second £5, to ditto.

Two-shear or older rams.—First prize, £10, T. H. Hutchinson, Catterick; second, £5, T. Marris, Croxton.

Five ewes having suckled lambs to 10th of July, 1878.—No award.

Five shearling gimmers.—First prize, £8, T. Marris, Croxton; second, £4, G. Turner, jun., Thorpolds, Northampton

LINCOLNSHIRE LONGWOOLS.

Shearling rams.—First prize, £20, R. Wright, Nocton Heath, Lincoln; second, £15, W. and H. Dudding, Wragby, third, £10, H. Smith, Cropwell Butler, Bingham; fourth, £5, to ditto; fifth, £2, J. Pears, Mere, Lincoln.

Two-shear rams.—First prize, £10, R. Wright, Nocton; second, £5, W. and H. Dudding; third, £3, W. Ghest, Barlings, Lincoln, fourth, C. Sell, Bassingbourne.

Three-shear or older rams.—First prize, £15, H. Smith, Cropwell Butler; second, £10, R. Wright, Nocton Heath, £5, C. Sell.

Five ewes, having suckled lambs to 10th of July, 1878.—First prize, £10, W. Roe, Newark; second, £5, H. Smith, Cropwell Butler.

Five shearling gimmers.—First prize, £10, J. Pears; second, £5, C. Sell; third, £2, J. Byron.

Ten she lambs.—First prize, £5, W. and H. Dudding.

Five shearling wethers.—First prize, £7, C. Sell; second, £3, J. P. Clarke, Deepdale, Barton-on-Humber.

Long-wool ram (not being a Leicester) exhibited at the Society's show.—Prize, challenge cup, value 15 guineas, H. Smith, Bingham.

PIGS.

Boars, large breed, not less than 12 months old.—First prize, £10, and second, £5, R. E. Duckering and Son, Northorpe, Kirton Lindsey.

Ditto, not exceeding 12 months old.—First prize, £5, and second, £2, R. E. Duckering and Son.

Boars, small breed, not less than 12 months old.—First prize, £10, S. Spencer, Holywell, St. Ives; second, £5, R. E. Duckering and Son.

Ditto, not exceeding 12 months old.—First prize, £5, S. Spencer; second, £2, R. E. Duckering and Son.

Berkshire Boars.—First prize, £5, C. E. Duckering, Whitehoe, Kirton Lindsey; second, £2, W. H. Tyson, Louth.

Sows, large breed.—First prize, £5, and second, £3, R. E. Duckering and Son.

Ditto, small breed.—First prize, £5, S. Spencer; second, £3, R. E. Duckering and Son.

Ditto, Berkshire.—First prize, £5, J. C. Bentley, Louth; second, £2, C. E. Duckering.

Three breeding pigs of the same litter, not exceeding six months old, large breed.—Prize, £5, R. E. Duckering and Son.

Ditto, ditto, small breed.—Prize, £5, S. Spencer.

Ditto, ditto, Berkshire breed.—Prize, £5, C. E. Duckering.
Extra stock.—Prize, £1, to G. Brown, Cleethorpes, for large breed sow.

WOOL.

Five fleeces of hog wool.—First prize, £5, T. W. Ayscough, Wykeham, Market Rasen; second, £1, W. T. Wells, Withern, Alford.

Five fleeces of ewe or wether wool.—First prize, £5, T. W. Ayscough; second, £1, W. Everington, Skegness.

Heaviest clean-washed fleece, clipped in 1878.—Prize, £5 5s., T. Bond, North Thoresby.

BUTTER.

Six pound of butter, exhibited by occupiers of more than 10 acres.—First prize, £3, M. Pickwell, Thorpe-on-the-Hill, Lincoln; second, £2, Mrs. Smalley, Falstow; third, £1, —Strawson, Tetney Grange, Grimsby.

Two pound of butter, exhibited by occupiers of not more than 10 acres.—First prize, £3, R. Plaskett, Louth; second, £2, Mrs. Scoles, Louth.

SEEDS AND ROOTS.

Collection of seeds and roots.—First prize, piece of plate or £10, J. Carter and Co., London; second, £5, Sharpe and Co., Sleaford.

WORCESTERSHIRE.

The annual exhibition of this Society opened on July 21 at Bromsgrove. The entries were more numerous than those of last year, when the show was held at Kidderminster, being 416 against 280. There was a good show of cattle, sheep, and pigs, and a fair one of horses. The Marquis of Exeter was first in the old Shorthorn bull class open to all comers, and Mr. T. Harris in the class open to tenant farmers only. For bulls above one and under two years Mr. G. Garne was first, Mr. Hopkins winning both first and second prizes in the tenant farmers' class. The first prizes for cows were taken by Messrs. St. John Ackers, Harris, and Ashby. In Herefords Mr. W. Taylor carried off two first prizes; the Earls of Coventry and Beauchamp, and Messrs. Carwardine, Lutley, and Gibbs gained the rest. Mrs. H. Smith and Mr. Graham were the principal prize-takers for Shropshire sheep, and Mr. Treadwell for Oxfordshires. There was not a large show of agricultural horses. Mr. S. Davis and Mr. W. Coney were first in the stallion classes, Mr. E. Pease for mare and foal, and Messrs. Coney and Groves for mares or geldings. Messrs. R. Tommas and R. E. Duckering were the principal exhibitors of pigs.

PRIZE LIST.

CATTLE.

SHORTHORNS.

Bulls above two years old.—First prize and special, The Marquis of Exeter; second, W. Handley.

Bulls above two years old, the property of a tenant farmer resident in Worcestershire.—First prize, T. Harris; second, V. O. Walmsley.

Bulls above one and under two years old.—First prize, G. Garne; second, W. Handley.

Bulls under two years old, the property of a tenant farmer resident in Worcestershire.—First and second prizes, T. M. Hopkins.

Cows.—First prize, B. St. John Ackers; second, G. Garne. Cows, the property of a tenant farmer in Worcestershire.—First and second prizes, T. Harris.

Two-year-old heifers.—First prize and special, G. Ashby; second, B. St. John Ackers.

Heifers, two years old, the property of a tenant farmer in Worcestershire.—First and second prizes, T. Harris.

Yearling heifers.—First prize, B. St. John Ackers; second, W. Handley; third, J. J. Sharp.

HEREFORDS.

Bulls above two years old.—First prize, W. Taylor; second, J. B. Lutley.

Bulls above one and under two years old.—First prize, J. T. Carwardine; second, J. Slatter; third, J. B. Lutley.
Cows.—Prize, The Earl of Coventry.

Two-year-old heifers.—Prize, J. B. Lutley.

Yearling heifers.—First prize, W. Taylor; second, F. Platt; third, J. T. Carwardine.

Dairy cows, in milk.—First prize, Earl Beauchamp; second, H. Allsopp, M.P.

Cows of any breed, without pedigree.—First prize, Messrs. T. and M. Dixon; second, E. Hailes.

Heifers under three years old.—First prize, J. Gibbs; second, S. Davis.

Pairs of yearling heifers.—Prize, Baron D. Webster.

SHEEP.

SHROPSHIRES.

Five breeding ewes.—First prize, Mrs. H. Smith; second, H. Lovatt; third, S. C. Pilgrim.

Five theaves.—First prize, Mrs. H. Smith; second, G. Graham; third, S. C. Pilgrim.

Shearling rams.—First prize, Mrs. H. Smith; second, G. Graham; third, Mrs. H. Smith.

Rams of any age.—First prize, S. C. Pilgrim; second, H. Lovatt; third, Mrs. H. Smith.

Pen of five Shropshire ewes.—First prize, G. Graham; second, C. Randell.

Pen of five Shropshire theaves.—First prize, G. Graham; second, C. Randell.

Pen of five Shropshire ewe lambs.—First prize, G. Graham; second, C. Randell.

Shearling Shropshire lambs.—First prize, G. Graham; second, C. Randell.

OXFORD DOWNS.

Five breeding ewes.—Prize, J. Treadwell.

Five best theaves.—Prize, J. Treadwell.

Shearling rams.—First and second prizes, J. Treadwell.

Rams of any age.—First and second prizes, J. Treadwell.

CROSS-BREDS.

Five breeding ewes.—First prize, C. P. Noel; second, H. Tovey.

Ten lambs.—Prize, C. P. Noel.

LONGWOOLS.

Five breeding ewes.—First and second prizes, T. W. D. Harris.

Five theaves.—Prize, J. Gillett.

Shearling rams.—First prize, J. Gillett; second, R. Swanwick.

Rams of any age.—Prize, R. Swanwick.

PIGS.

Boar, of large breed.—First prize, R. Tommas; second, R. E. Duckering.

Breeding sows of large breed.—First prize, W. Wheeler; second, R. Tommas.

Two hils of large breed.—First prize, W. Wheeler; second, R. Thomas.

Boar of small breed.—First and second prizes, Lord Moreton.

Breeding sows of small breed.—First prize, R. Tommas; second, R. E. Duckering.

Two best hils of small breed.—First prize, W. Wheeler; second, Lord Moreton.

Boar pigs of the Berkshire breed.—First prize, H. Humfrey; second, A. Stewart.

Breeding sows of the Berkshire breed.—First prize, H. Humfrey; second, R. Swanwick.

Two hils of the Berkshire breed.—First prize, R. Tommas; second, A. Stewart.

Breeding sows of any breed.—Prize, C. Wright.

HORSES.

Stallion cart horses for agricultural purposes.—Prize, S. Davis.

Stallion cart horses for agricultural purposes, serving within the county or within a radius of twenty miles from Bromsgrove.—First prize, W. Coney; second, W. Wyan.

Cart geldings or mares, three years old.—First prize, G. Groves; second, R. Smith.

Cart geldings or fillies, two years old.—First prize, W. Coney; second, T. A. Parry.

Agricultural mares and foals.—First prize, E. Pease; second, W. Wynn.
 Thoroughbred stallions.—First prize, W. E. Everitt; second, T. E. Walker, Esq., M.P.
 Hunters above five years old, equal to 15 stone.—First prize, T. Holland; second, E. Bowly.
 Hunters equal to 12 stone.—First prize, J. Goodwin; second, C. P. Noel.
 Hunters equal to 15 stone.—Prize, W. Hillis.
 Hunting mares or geldings, under five years old.—First prize, J. Goodwin; second, The Earl of Coventry.
 Geldings or mares by a thoroughbred horse, three years old.—First prize, The Earl of Coventry; second, J. A. Bridges.
 Geldings or fillies by a thoroughbred horse, two years old.—First prize, E. W. Haywood; second, T. Harris.
 Colts or fillies by a thoroughbred horse, one year old.—First prize, W. E. Everitt; second, T. Harris.
 Weight-carrying colts, not exceeding 15 hands.—First prize, G. Careless; second, Mrs. H. Walker.
 Hacks, not exceeding 15 hands.—Prize, W. E. Everitt.
 Ponies, under 14 hands.—First prize, J. Tustin; second, S. Whitehouse.
 Brood mares for producing hunters.—First prize, W. E. Everitt; second, E. W. Haywood.

OUR FOOD SUPPLIES.

A valuable return, just printed by the Board of Trade, on the motion of Sir G. Balfour, gives the number of cattle, sheep, and pigs in the United Kingdom, and in Great Britain and Ireland separately, in each of the years 1856 to 1877; number and value of cattle, sheep, and pigs imported into the United Kingdom in each of the years 1858 to 1877; quantities and value of various kinds of dead meat and provisions imported into the United Kingdom in each of the years 1858 to 1877; average prices of various kinds of animals, dead meat, and provisions imported into the United Kingdom in each of the years 1854 to 1877; average prices of butchers' meat at the Metropolitan Cattle Market in each of the years 1858 to 1877; number of cattle, sheep, and pigs brought in the Metropolitan Cattle Market and into the Foreign Market, distinguishing the home from the foreign supply, in each of the years 1868 to 1877; acreage under corn and green crops, and under permanent pasture respectively in Great Britain and Ireland, and in the United Kingdom, in each of the years 1868 to 1877; quantities of British wheat, barley, and oats, returned as sold in various market towns in England and Wales, with the average prices (per imperial quarter) in each of the years 1858 to 1877; and quantities and value of wheat, and of other kinds of grain and flour imported into the United Kingdom in each of the years 1858 to 1877. We give the last table, which sets forth the population (estimated at the middle of each year), the value and imports of live stock, corn and grain, and various kinds of dead meat and provisions in each of the years 1858 to 1877, and proportion per head of population:—

CLIMATE OF CYPRUS.—To the meteorologist all but the whole of the recent discussions in Parliament and out of it regarding the salubriousness or insalubriousness of the climate of Cyprus have been, if not instructive, at least amusing, the amusement arising from the circumstance that positive information was not forthcoming in support of the strong statements made on both sides. Thanks, however, to the Scottish Meteorological Society we have trustworthy information on the subject, that Society having established there one of its foreign climatological stations in 1866, where, for about four years, observations were made by Mr. J. B. Sandwith, Her Majesty's Vice-Consul, and the results regularly published in the Society's *Journal*. Summarizing these results, we learn that the annual rainfall is about 14 inches, nearly the whole of which falls from November to April, notably in November and December, that no rain falls in June, July, and August, and but in trifling amounts occurring rarely in May and September. There are thus practically five rainless months in the year in Cyprus, a feature in its climate common, as we have recently had occasion to remark, to the climates of the Mediterranean regions south of latitude 43 deg. (*Nature*, vol. xviii, p. 287). Comparing it with the coasts of Syria opposite, its winters are milder and its summers cooler. The decidedly insular character of its climate is further apparent from the fact that the coldest month is February, with a mean temperature of 52 deg. 8 min., being about equal to that of London in the middle of May, and that the mean temperature of August is nearly as high as that of July, both being about 81 deg., which is approximately the summer temperature of Algiers, Alexandria, Athens, and Constantinople. During these four years the highest recorded temperature of any of the months was 96 deg., except June, 1869, when from the 21st to the 24th the mean temperature at Alethriko, 3½ miles in land from Larnaka, reached 95 deg. 5 min., being about the average summer temperature of the Punjab, rising on one of these days to a maximum of 105 deg. On the same day the temperature rose to 100 deg. at Larnaka, and to 103 deg. 5 min. at Jerusalem, 2,500 feet above the sea, the period being characterized as one of unprecedented heat and drought over the whole of the regions bordering the Levant. It is obvious to remark that much may be done in mitigation of the effects of the summer heat, just as has been done in countries similarly circumstanced, by the establishment of sanatoria among the mountains, and by carrying through agricultural improvements and engineering works, which would at the same time contribute to the material prosperity of the island.—*Nature*.

SAGO FLOUR.—“W. R. S.” in a letter says:—“May I suggest to mothers of children that, instead of using violet powder or silicate of magnesia, they should make use of ordinary sago flour, which is largely imported into this country, and is now selling in Mincing-lane at 17s. per cwt., or under 2d. per pound.”—*Echo*.

Years.	Population* of the U.K.	IMPORTS.				Total.
		Live Cattle, Sheep, and Pigs.	Corn, Grain, and Flour.	Dead Meat and Provisions†		
		£	£	£	£	
1858	28389770	1390068	20164811	4343592	25898471	
1859	28590224	1634766	18044203	4680629	24359598	
1860	28778411	2117860	31676353	8076304	41879517	
1861	28974362	2211969	34922095	9151078	46285142	
1862	29255015	1883236	37774148	10630734	58006063	
1863	29433918	2655072	25956520	10841324	39452916	
1864	29628578	4275322	19882181	15189933	378311513	
1865	29861908	6548413	20725483	12667838	39941731	
1866	30076812	5839058	30049655	13483715	49372428	
1867	30354999	4148382	41565349	12489331	58006063	
1868	306177118	2698496	39132624	13277683	55108802	
1869	30913513	52993513	37351089	15189933	57840109	
1870	31205444	4654905	34172221	14773712	53598838	
1871	31513442	5663150	42691464	16593668	64948282	
1872	31835757	4394850	51228816	18604273	74227939	
1873	32124598	5418584	51737811	23854967	81011362	
1874	32426369	6265041	51070202	25224958	81560201	
1875	32749167	7326288	53086601	25880806	86293785	
1876	33093439	7260119	51812438	29851647	88924204	
1877	33444119	6012564	63836822	30144013	99692899	

Years.	Value per head of population.	Years.	Value per head of population.
1858	0 18 3	1868	1 16 2
1859	0 17 0	1869	1 17 5
1860	1 9 1	1870	1 14 4
1861	1 11 11	1871	2 1 3
1862	1 14 5	1872	2 6 8
1863	1 6 10	1873	2 10 5
1864	1 4 6	1874	2 10 4
1865	1 6 9	1875	2 12 8
1866	1 12 10	1876	2 13 9
1867	1 18 3	1877	2 19 7

*Exclusive of the Army, Navy, and Merchant Seamen abroad.

†Beef, mutton or fresh, meat preserved otherwise than by salting pork, bacon, and hams, butter, cheese, eggs, and potatoes.

REVIEW OF THE CORN TRADE,

FROM *THE MARK LANE EXPRESS* FOR THE WEEK ENDING JULY 29.

With the exception of a few thunderstorms, such as are frequently experienced at this season of the year, the weather during the past week has been fine, and the temperature normally high. Wheat-cutting, which in the earlier districts commenced last week, is now becoming general, and reports as to yield which will be received during the next ten days will probably afford a fair criterion as to the outcome of the season's produce. To judge from recent agricultural advices, wheat seems to have improved wonderfully in many parts of the country during the past month, and the sunshine of July has repaired the injury caused by the excessive rainfall of May to an unlooked-for extent, except in districts where the drought has been too severe, causing premature ripening. To what extent the grain has been affected by the prevalence of wet before earing remains to be seen, but there can be no doubt that should any compensation be needed, some will at least be found in the luxuriant growth of straw. The prospects of the barley crop are variable and generally unpromising, particularly on the lighter soils, where the grain has matured badly, and the yield will certainly be light. A little rain would do no harm to roots and favour the aftermath, but any considerable quantity would do more harm than good to cereals at the present moment. Oats and beans promise fairly, although there are some complaints of blight in the latter crop. The grain trade, both in London and the provinces, has been devoid of any special feature of interest during the past week, but prices have been well maintained, considering the proximity of harvest and the consequent increase in the offerings of home-grown wheat which millers will have to work upon shortly. Were it not that the price of wheat has already fallen to a very low point, there can be no doubt that the trade would at the present moment require all the support that extraneous influences could afford, to avert a decline being caused by continued liberal arrivals from abroad and the probability of the home-growth turning out better than was anticipated a short time since. There is, however, an under-current of steadiness observable, and the opinion pretty generally obtains that, whether bought for consumption or speculation, wheat at the present prices ruling in our market, cannot do much harm either to miller or speculator. There has also been another strengthening influence at work, and one which invariably increases the firmness of holders, namely, the continued continental demand which has been going on for some weeks past. White wheat on spot and cargoes off coast have alike been taken for continental account, and the fact that prices have remained stationary in face of liberal imports and improved crop prospects is in a great measure due to this legitimate increase in the demand. The arrivals of wheat cargoes off coast, especially from America, appear likely to be

small for the next few weeks, but as brilliant prospects are entertained of the crop on the other side of the Atlantic, the probability of any material rise in price here must be regarded as more or less remote. The utmost that can be said is that, thanks to the continental inquiry, prices have remained nearly if not quite stationary, and with that sellers are for the present content to rest satisfied. With moderate arrivals at ports of call during the past week, the floating cargo trade for wheat has ruled steady, without quotable change in values. The demand for the Continent still continues and helps to support prices. Maize dull at 3d. per qr. decline, whilst barley has been unchanged in value. The sales of English wheat noted last week were 26,432 quarters, at 44s. 7d., against 21,134 quarters, at 64s. 6d. in the previous year. The London averages for the week ending July 27th were 47s. 2d. on 1,224 quarters. The imports into the kingdom for the week ending July 20th were 878,737 cwt. wheat, and 86,701 cwt. flour. Last Monday's market was fairly attended, but a quieter tone prevailed throughout all branches of the trade, owing to the depressing influence exercised upon the course of business by the continuance of fine summer weather. Buyers, however showed no signs of apathy, and although purchases were not made so freely as on the previous Monday a fair consumptive demand was nevertheless met for most articles at former currencies. The week's arrivals of English wheat amounted to 2,500 qrs., and the supply fresh up to market was again small. Sales progressed somewhat slowly, but factors were able to obtain the full prices of the preceding week for all freshly-thrashed samples. The imports of foreign were fair, in all 55,982 qrs., Russia being the largest contributor with 20,273 qrs. The United States and Canada furnished 18,978 qrs., and Australia 7,333 qrs., the remainder of the supply being from Germany and the East Indies. There was a fair inquiry at the opening of the market, but millers held off purchasing until late in the day, and at one time it seemed as if a reduction would be necessary to effect sales. Holders, however, held out, and eventually a quiet consumptive demand was satisfied at about former rates. Fine American descriptions were most sought after, but there was also a fair amount of attention paid to white sorts from Australia and New Zealand. The exports were 4,189 qrs. against 3,610 qrs. in the previous week. The supply of barley consisted of 727 qrs. of home grown and 9,650 qrs. of foreign. A slow sale was experienced for both malting and grinding varieties, but without any quotable alteration in values. The imports of maize were heavy, both from American and Black Sea ports, in all 66,500 qrs., under pressure of which prices were the turn lower for round and flat corn. A liberal arrival of oats was also reported, and the pressure to sell ex-ship resulted in a decline of 6d. per qr., but the

Reduction chiefly affected inferior descriptions. On Wednesday the return showed 200 qrs. of English wheat and 10,860 qrs. of foreign. A fair amount of business was done for a mid-week market in wheat and Spring corn at Monday's currencies. Maize was also saleable on former terms, but the demand was not brisk. On Friday there was no further arrival of home-grown wheat, but 16,860 qrs. of foreign were reported. The moderate imports and steady milling inquiry caused the wheat trade to rule firm, and Monday's prices were maintained. Spring corn was dull, but not notably lower. The imports of flour into the United Kingdom for the week ending July 20th were 86,701 cwts. against 93,890 cwts. in the previous week. The receipts in London were 10,352 sacks of English, and 4,820 sacks and 301 barrels of foreign. Business has ruled dull, with only a light retail demand, and although without quotable depreciation values have been the turn against sellers for both sacks and barrels. The week's imports of beans were 853 cwts., and of peas 66,314 cwts., showing a decrease of 12,982 cwts. on the former, and an increase of 30,288 cwts. on the latter. Beans, owing to scarcity, have been in good request, and prices still tend upwards. Peas have also met a steady demand, and last week's quotations have been fully maintained. The deliveries of malt were 17,814 qrs., and the exports 473 qrs. Prices remain nominally unchanged, but the trade has been dull, and maltsters would in some instances accept rather lower rates to effect sales. Business in agricultural seeds has been of a very limited and uninteresting character throughout the past week, as consumptive wants have been of the most insignificant description, and no tendency to speculate has yet been shown. Cloverseed remains inanimate, as crop prospects are encouraging both at home and abroad. Trifolium has been in some request for export to France, but there has been nothing doing in trefoil. The supply of new rape has increased, and prices have dropped about 15s. per qr. since the new seed has appeared on the market. With fine weather some samples of new white mustard may be looked for in a week or ten days. Hemp and canary have sold very slowly at about late rates. Supplies of wheat and spring corn from the growers have alike been light at the country markets, and provincial trade has ruled quiet but fairly steady at unaltered prices. At Liverpool, on Tuesday, there was a moderate consumptive demand for wheat and flour, and the previous week's currencies were repeated. Barley was slow, but beans maintained the recent advance while maize, although a shade weaker, was still quoted at last week's price of 22s. 9d. per qr. for mixed American. The week's imports included 27,000 qrs. of wheat and 64,000 qrs. of maize. At Newcastle, Hull, Peterborough, and most of the principal centres, wheat, maize, and spring corn have sold slowly at previous currencies. At Edinburgh on Wednesday the market was poorly supplied with grain from the farmers, and wheat was inactive, although offered at a reduction of 6d. to 1s. per qr. Barley was in fair request at former prices, but oats ruled dull. At Leith the weather has been, generally speaking, fine and warm, but

towards the middle of the week some sharp thunderstorms accompanied by heavy rain, occurred. With light imports of grain during the past week the trade has been firm but quiet, and there has not been much business passing in any article. Scotch wheat receded 1s. per qr. at Wednesday's market, and foreign met a retail demand at unaltered values. Beans and peas were fully as dear, but flour gave way 1s. per sack. At Glasgow the arrivals from abroad have been heavy of flour and maize, but very light of wheat. Dulness has prevailed in the grain trade, as the fine weather has depressed the market. Towards the end of the week there was, however, a firmer feeling in wheat and flour. At Dublin brilliant weather has been experienced, and very little activity has been observable in the grain trade. Tuesday's market was thinly attended, and no material alteration was observable in the price of either wheat or maize. At Cork a steady tone has prevailed in Wheat, although the fine weather has caused business to move within very narrow limits, but prices have been fairly maintained both for wheat and feeding corn.

The following are the reports from Mark Lane during the past five weeks.

Monday, July 1.

The arrivals during the past week have been : English Wheat, 2,041 qrs. ; foreign, 58,855 qrs. Exports, 3,307 qrs. There was a very small supply of English Wheat fresh up to market this morning, and the trade ruled very dull, at a decline of 1s. per qr. Of foreign the arrivals were good, and with a moderate attendance of millers a fair consumptive demand was experienced, at a reduction of fully 1s. per qr. on last Monday's prices.

Country Flour, 9,438 sacks ; foreign, 2,768 sacks and 8,741 brls. A slow trade, at a decline of 1s. per sack and 6d. per brl. on the week.

English Barley, 1 qr. ; Scotch, 62 qrs. ; Irish, 25 qrs. ; foreign, 12,551 qrs. Malting sorts were unaltered in value, but grinding descriptions gave way 6d. per qr., with very little doing at the decline.

Malt : English, 15,733 qrs. ; Scotch, 145 qrs. Exports, 26 qrs. There was no alteration in value, but the trade retained the increased steadiness noted last week.

Maize, 51,552 qrs. Old corn was about 6d. per qr. cheaper, and new, under pressure of heavy arrivals, also gave way slightly.

English Oats, 1,383 qrs. ; Scotch, 120 qrs. ; foreign, 49,090 qrs. Exports, 385 qrs. There was a moderate inquiry for all descriptions, but at rather less money than was obtainable on Monday last.

English Beans, 183 qrs. A quiet trade at unaltered quotations.

Linseed, 7,154 qrs. A slow sale at about late rates.

Monday, July 8.

Arrivals during the past week have been : English Wheat, 1,267 qrs. ; foreign, 46,014 qrs. Exports, 961 qrs. The supply of English Wheat fresh up to market this morning was again very small, and the trade ruled dull, at about late rates ; of foreign the arrivals were fair, and with a somewhat scanty attendance of millers, a quiet consumptive demand was experienced at last Monday's currencies, the intervening firmness of the mid week having been lost.

Country Flour, 9,581 sacks ; foreign, 1,003 sacks, and 4,538 barrels. Business was dull, and sacks and barrels moved off slowly at unaltered prices.

English Barley, 175 qrs.; foreign, 10,523 qrs. Malting sorts were unchanged, while grinding were neglected and the turn cheaper to sell.

Malt, English, 18,251 qrs.; Scotch, 192 qrs. Exports, 1,215 qrs. In moderate request and without quotable alteration.

Maize, 25,138 qrs. In better demand and 6d. per qr. dearer for both old and new corn.

English Oats, 1,985 qrs.; Scotch, 113 qrs.; Irish, 150 qrs.; foreign, 75,856 qrs. In spite of large arrivals from abroad, a steady demand was experienced at an improvement of 6d. per qr. on the week.

English Beans, 69 qrs.; foreign 11 qrs. Steady, at fully late rates.

Linseed, 3,821 qrs. Dull, and unaltered in value.

Monday, July 15.

The arrivals during the past week have been: English Wheat, 2,075 qrs.; foreign, 102,632 qrs. Exports, 3,610 qrs. The supply of English Wheat fresh up to market this morning was again very small, and the trade ruled quiet at an advance of 1s. per qr. on the week; of foreign the arrivals were heavy, and, with a moderate attendance of millers and fine weather, sales progressed slowly at a similar improvement, the tone of the trade being scarcely so firm as on Friday last.

Country Flour, 11,621 sacks; foreign, 2,260 sacks and 17,955 brls. There was a somewhat improved inquiry for both sacks and barrels, at fully last Monday's prices.

English Barley, 323 qrs.; Scotch, 48 qrs.; foreign, 14,112 qrs. Both malting and grinding qualities were in fair request, at the extreme currencies of this day week.

Malt: English, 12,976 qrs.; Scotch, 550 qrs. Exports, 840 qrs. There was a fair amount of business doing for the time of year, but no quotable change occurred in prices.

Maize, 27,852 qrs. Round corn was no dearer, but flat found buyers at 6d. per qr. more money than was obtainable on Monday last.

English Oats, 352 qrs.; foreign, 87,267 qrs. There was a fair all-round demand in spite of the heavy supplies from abroad at an advance of 6d. per qr.

English Beans, 155 qrs. Steady, and occasionally 1s. per qr. dearer.

Linseed, 9,152 qrs. Without alteration.

Monday, July 22.

The arrivals during the past week have been: English Wheat 2,500 qrs., foreign 55,982 qrs. Exports 4,189 qrs. There was again a very short supply of English Wheat at market this morning, and fresh thrashed samples maintained last Monday's prices; of foreign the arrivals were fair, and with a moderate attendance of millers, a quiet consumptive demand was experienced at barely late rates.

Country Flour 10,352 sacks, foreign 4,820 sacks, and 301 brls. The trade ruled dull for both sacks and barrels at about former currencies.

English Barley, 675 qrs.; Scotch, 52 qrs; foreign, 9,650 qrs. A slow sale at last week's prices for both malting and grinding descriptions.

Malt: English, 17,214 qrs.; Scotch, 600 qrs. Exports, 473 qrs. In moderate request, at late rates.

Maize, 66,500 qrs. The large arrivals depressed the trade and prices ruled the turn against sellers for round and flat corn.

English Oats 1,633 qrs.; foreign 64,092 qrs. Exports 1,098 qrs. There was only a moderate inquiry and dealers were enabled to supply their wants at 3d. to 6d. per qr. less money.

English Beans 219 qrs., foreign 18 qrs. A steady trade at an improvement of 1s. per qr. on the week.

Linseed 2,590 qrs. Firm, and occasionally 1s. per br. dearer.

Monday, July 29.

The arrivals during the past week have been:—English Wheat, 2,971 qrs.; foreign, 35,163 qrs. Exports, 3,033 qrs. With a moderate supply of English Wheat on offer at market this morning the trade ruled quiet but steady at last Monday's prices; of foreign the arrivals were also moderate, and with a large attendance of millers, a somewhat improved demand was experienced at fully late rates. As far as could be ascertained there were no samples of new English Wheat on offer.

Country Flour, 12,200 sacks; foreign, 6,169 sacks and 6,249 barrels. There was rather more inquiry, and last Monday's currencies were repeated for both sacks and barrels.

English Barley, 460 qrs.; Foreign, 20,816 qrs. Malting descriptions were firm, but grinding sorts met a very slow sale, although not quotably lower.

Malt, English, 17,894 qrs.; Scotch, 50 qrs. Exports, 804 qrs. In quiet demand, and unaltered in value.

Maize, 32,932 qrs. The inquiry was rather less active, and an occasional decline of 3d. per qr. was submitted to.

English Oats, 217 qrs.; foreign, 39,494 qrs. There was a steady but rather slow trade for all varieties at previous quotations.

English Beans, 537 qrs.; foreign, 22 qrs. Firm and fully as dear.

Linseed, 11,065 qrs. Exports, 703 qrs. 6d. to 1s. per qr. dearer on the week.

LONDON AVERAGES.

Wheat	1,224 qrs.	47s.	2d.
Barley	—	—	—
Oats	—	—	—

IMPERIAL AVERAGES

For the week ending July 27, 1878.

Wheat	26,432½ qrs.	44s.	7d.
Barley	34	37s.	4d.
Oats	313½	28s.	5d.

COMPARATIVE AVERAGES.

Years.	WHEAT.			BARLEY.			OATS.		
	Qrs.	s.	d.	Qrs.	s.	d.	Qrs.	s.	d.
1874...	19,705½	59	8	296½	46	1	870½	30	9
1875...	35,483½	51	0	90½	31	4	249½	30	7
1876...	18,279½	47	5	259½	31	4	409½	31	2
1877...	21,134½	64	6	394½	39	0	1,273½	27	10
1878...	26,432½	44	7	34	37	4	313½	28	5

AVERAGES

FOR THE SIX WEEKS ENDING	Wheat.		Barley.		Oats.	
	s.	d.	s.	d.	s.	d.
June 22, 1878.....	46	9	30	9	26	2
June 29, 1878.....	46	1	35	2	26	10
July 6, 1878.....	46	0	37	2	27	11
July 13, 1878.....	44	8	39	10	26	4
July 20, 1878.....	44	5	35	5	27	6
July 27, 1878.....	44	7	37	4	28	5
Aggregate Avg. of above.	45	5	35	11	27	2
The same period in 1877....	62	10	35	5	27	11

FLUCTUATIONS in the AVERAGE PRICE OF WHEAT

PRICE.	June 22,	June 29,	July 6,	July 13,	July 20,	July 27.
46s. 9d.	—	—	—	—	—	—
46s. 1d.	—	—	—	—	—	—
46s. 0d.	—	—	—	—	—	—
44s. 8d.	—	—	—	—	—	—
44s. 7d.	—	—	—	—	—	—
44s. 5d.	—	—	—	—	—	—

THE FARMER'S MAGAZINE.

C O N T E N T S .

AUGUST, 1878.

PLATE.—LINCOLN FAT EWES.

	Page
DESCRIPTION OF PLATE	81
FARM PONDS, AND HOW TO UTILIZE THEM	81
LIVE STOCK NOTES	83, AND 106
NOTES FROM NEW ZEALAND	84
HEREFORDS <i>versus</i> SHORTHORNS IN AMERICA	85
SHEEP MANAGEMENT	85
LOSSES FROM FOOT-AND-MOUTH DISEASE	86
LONDON CORN TRADE ASSOCIATION	86
AGRICULTURAL SOCIETIES	87, 97, 138, AND 149
FARMERS' CLUBS	92
CHAMBERS OF AGRICULTURE	92
SUBSTITUTE FOR BEER IN THE HARVEST FIELD	93
THE IMPLEMENTS, &C., AT BRISTOL	94
DAIRY FARMING	100
MR. M'COMBIE AT TILLYFOUR	112
LAND SHARKS IN MANITOBA	113
ROYAL AGRICULTURAL SOCIETY OF ENGLAND	114
FREE TRADE IN LAND	142
LIFE IN NEW ZEALAND	145
AN ILLINOIS BREEDING FARM	148
OUR FOOD SUPPLIES	155
REVIEW OF THE CORN TRADE	156

IMPORTANT TO FLOCKMASTERS.

THOMAS BIGG,
Agricultural & 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
8 lb. 30 " " " "	0	3	0
8 lb. 40 " " " "	0	4	0
10 lb. 50 " " " "	0	5	0
20 lb. 100 " " (Cask and measure included)	0	10	0
30 lb. 150 " " " "	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. HERAPATH, the celebrated Analytical Chemist:—
Bristol Laboratory, Old Park, January 15th, 1861.
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 "yolk") in the skin, the

dece, or the carcass. I think it deserves the number of testimonials published. I am, Sir, yours respectfully,

WILLIAM HERAPATH, Senr., F.C.S., &c., &c.
To Mr. Thomas Bigg, Professor of Chemistry,
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.

"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 400 sheep were all dressed in August last with 34 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 sweetest and best remedy now in use.
"I remain, dear Sir,

"For JOHN TINGEY, Esq.,
"R. RENNEY.

"To Mr. Thomas Bigg,"
New 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..... £4, £5, £4, & £3.

GENERAL ADVERTISING.

C. H. M A Y & C O.,

ADVERTISING OFFICES,

78, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1846.

APPOINTED AGENTS TO THE ADMIRALTY, TRINITY HOUSE, &c., &c.

ADVERTISEMENTS INSERTED

IN ALL BRITISH, FOREIGN, AND COLONIAL PAPERS.

TRANSLATIONS IN ALL LANGUAGES.

THE

ROYAL FARMERS' & GENERAL INSURANCE OFFICE.

ESTABLISHED 1840
TO INSURE AGAINST LOSSES BY
FIRE AND HAIL STORMS,
AND TO GRANT
INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.
Deputy-Chairman—B. P. SHEARER, Esq., 47, Gloucester-place, Portman Square.

Thomas Henry Burrenghes, Esq., 17, Lower Berkeley Street.	Richard L. Loveland, Esq., 4, Hare Court, Temple.
William Clutton, Esq., 7, Clifton Villas, Penge.	John Reddish, Esq., 9, Highbury New Park.
A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury.	Major F. Anderson Stebbing, 4, Cleveland Gardens, Castle Hill, Ealing.
E. J. Hawker, Esq., 37, Cadogan Place, Sloane Street.	

FIRE.—Insurances at moderate rates.
LIFE.—Insurances on equitable terms. Profits divided every five years.
HAIL.—Crops insured against Hail Storms at 5d. per acre.
LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand London, W.C., or of the Agents.

THE

MARK LANE EXPRESS

AND

AGRICULTURAL JOURNAL.

IS THE
LARGEST AND THE LEADING FARMER'S AND GRAZIER'S NEWSPAPER.
PUBLISHED EVERY MONDAY EVENING, IN TIME FOR POST.
Office of Publication and for Advertisements, 265, Strand, London. May be had of all Booksellers
and Newsmen throughout the Kingdom, price 7d., or £1 10s. 4d. per annum.

J. C. Nesbit and Son,

Analytical, Agricultural, and Consulting Chemists.

LABORATORY—
38, GRACECHURCH STREET, LONDON, E.C.

A LIST OF FEES SENT ON APPLICATION.

No. 3, Vol. LIII.]

SEPTEMBER, 1878.

[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.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

PORT	...	...	24s.,	30s.,	36s.,	42s.	per dozen & upwards.
SHERRY	...	...	18s.,	24s.,	30s.,	36s.	„ „
MADERA	...	...	30s.,	36s.,	42s.,	48s.	„ „
<small>(As supplied to the wounded in the East.)</small>							
MARSALA	...	...	20s.,	24s.,	28s.,	32s.	„ „
CHAMPAGNE	...	...	30s.,	36s.,	42s.,	50s.	„ „
CLARET	...	...	12s.,	15s.,	18s.,	24s.	„ „
BURGUNDY	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)	...	36s.,	42s.,	48s.,	54s.	„ „
MOSELLE	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)	...	32s.,	38s.,	44s.,	50s.	„ „
HOCK	...	...	20s.,	24s.,	30s.,	36s.	„ „
HOCK	(Sparkling)	...	32s.,	38s.,	44s.,	50s.	„ „
SAUTERNE	...	...	18s.,	24s.,	30s.,	36s.	„ „
BRANDY	...	...	38s.,	42s.,	48s.	„	„
WHISKY	...	...	38s.,	42s.	„	„	„
RUM	..	...	40s.,	42s.	„	„	„
GIN	...	...	30s.,	32s.	„	„	„

PORT in Quarter Casks of 28 gallons, from £14 14s.

SHERRY in Quarter Casks of 27 gallons, from £10 10s.

Sole Agent for Rousseau & Cie Reims Champagne,
Rivaz & Cie Cognac Brandies.

TUXFORD & CO.,

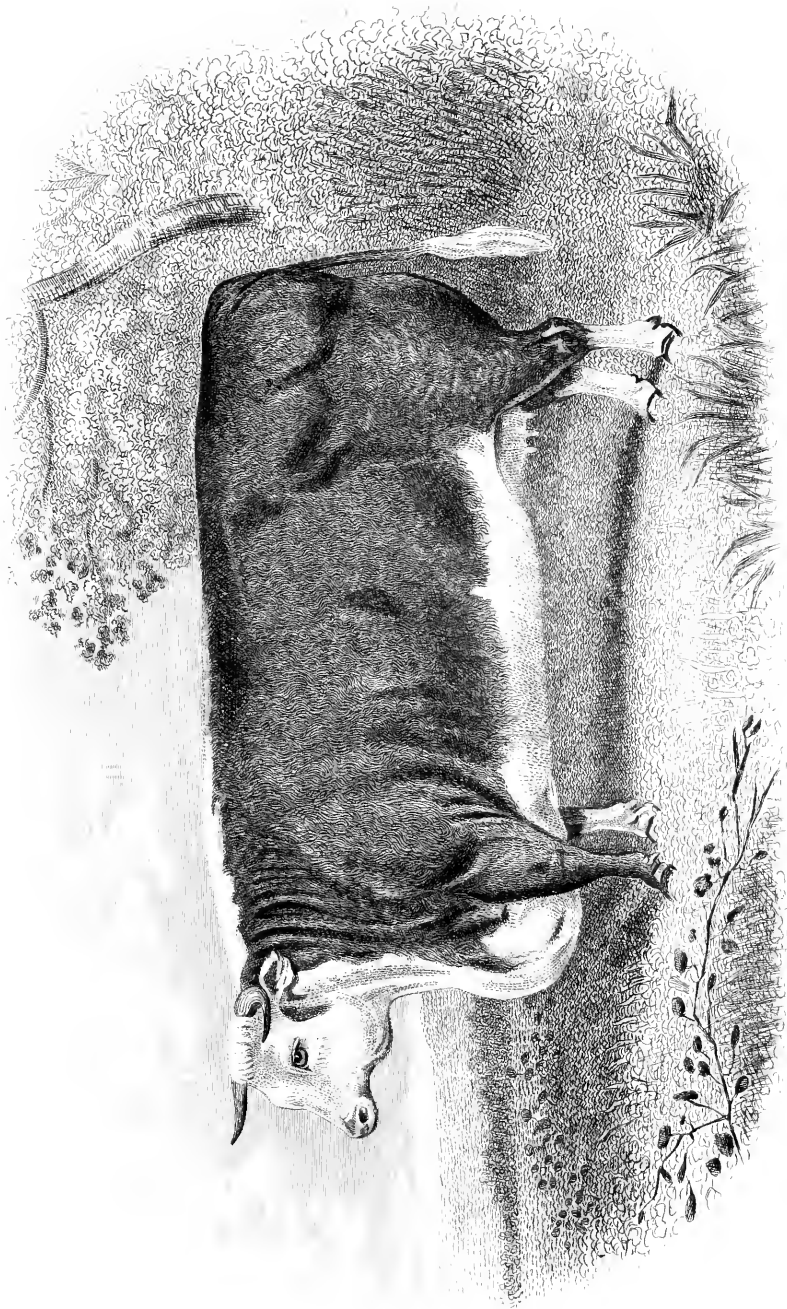
Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

SAMPLES ON APPLICATION.

ALL GOODS FORWARDED CARRIAGE PAID.



Acacia

Acacia

THE FARMER'S MAGAZINE,

SEPTEMBER, 1878.

PLATE.

LEONORA.

A PRIZE HEREFORD HEIFER, THE PROPERTY OF MRS. SARAH EDWARDS, WINTERCOTT, LEOMINSTER

Leonora, by Winter de Cote (4253) her dam Lovely by Tomboy (3546) was bred by Mrs. Edwards, who is famous for her Herefords, is a heifer under three years old, and all that an admirer of animated beef could desire with a rotundity in every "joint" from the cheek to her cut-and-come-again looking round, and with that mellowness of touch which *communicates a pleasurable and delightful sensation to judicial fingers and valuable pairings for the tallow tub*, and which costs in getting up a sum annually that is likely to make the roast beef of Old England as rare a dish as the Porcus Trojanus of the Romans, a dish that was so costly and expensive that sumptuary regulations were passed respecting it. The Yorkshire Agricultural Society is trying to induce breeders to show their animals in a natural state, and not made up for exhibition;

but, while touch alias quality is a test, we fear it has very little chance of succeeding. Leonora, with Beatrice by Winter de Cote, her dam Brown-maid 2nd by Tomboy for her second—also bred by Mrs. Edwards—was first at the Royal meetings at Liverpool and Bristol, and at the Bath and West of England meeting at Oxford, where she was elected the best female of any breed of cattle exhibited. She takes somewhat after Winter de Cote in her markings—which was also bred by Mrs. Edwards—having

"That beauty truly blent, whose red and white
Nature's own sweet and cunning hand has laid on."

but with horns not laid back like her sire, which, with a knowing eye, gives him a very leery and wicked look.

THE CATTLE DISEASES ORDERS, 1878.

We have now before us "The Animals Order of 1878," of which we give a re-print herewith. To the Act itself we need not now allude, as an opportunity of commenting on it will be taken as soon as it is printed. We have now to do simply with the Orders which have been made and issued under its provisions. They are to take effect "from and immediately after the 30th day of September 1868," and are to apply to Great Britain only. Here, then, to begin with, is a direct violation of one of the vital principles of the Bill as originally drawn—everyone of which has been destroyed—namely, that there should be uniformity in the restrictions, rules, and regulations throughout the United Kingdom. Without uniformity

there is little reasonable prospect of success; and with uniformity of home restrictions, whilst the country is exposed to infection from foreign cattle diseases, the game would not be worth the candle. The position we take in respect to these Orders, as a whole, is one of indifference so long as they do not cause inconvenience to farmers and others engaged in the stock-producing industry and inland cattle traffic of the country; and one of opposition whenever such shall prove to be the case. We think the country cannot be expected to incur losses and inconvenience under a code of restrictions which are based on a half-measure like the Contagious Diseases (Animals) Act of 1878. We shall not be surprised, nor sorry, if the machine breaks down; with

a policeman for a driving-wheel, and local authorities for cylinders, there yet remains the motive power, the steam, without which our figurative engine cannot be made to travel. And this motive power must be nothing less than the hearty goodwill and co-operation of the entire agricultural interest and all parties connected with cattle transits; this the Act does not deserve, and will not secure.

We are entering on a phase of local government, police espionage, and veterinary inspection which may prove intolerable when it is remembered that the conditions under which farmers consented to endure it have been changed; the contract has been broken, and we are charged with an obligation to pay a heavy premium on a bogus insurance. All security from foreign infection is gone, and therefore we think farmers will very reasonably be unwilling to submit to any restrictions beyond those which common sense may approve under any circumstances—those by which they will unmistakably be gainers. The Government may pass a half measure to quiet Mr. Forster and his party; but whether the farmers will submit to it remains to be proved.

The details of the Order, or rather of the several Orders, will not require much comment. Those relating to Cattle Plague need not be discussed. We are glad to see that a more adequate provision has been made for dealing with that terribly dangerous disease, Glanders, amongst horses, and that it will be incumbent on the owners or others in charge of horses, asses, or mules, diseased with Glanders or Farcy, to give notice of the fact to a constable, and that it will be unlawful to expose such animals for sale or otherwise. Power is given to deal with carcasses of diseased animals according to the local circumstances of the cases, which in itself is an excellent arrangement. With the original scheme of isolating diseases by declaring the immediate locality to be infected—in other words, by drawing a cordon round it—we entirely concur; and the Order provides that in respect of both Pleuro-pneumonia and Foot-and-Mouth Disease there shall be an infected "place" in an infected "area," a circle within a circle, and that unaffected animals may be moved for all necessary and convenient purposes, under supervision, within the outer zone. This, as we understand it, is a most practical and useful basis on which to deal with home diseases; it is isolating disease in a reasonable and effective way. To this we think the farmers will submit cheerfully and heartily; for, under any circumstances—whether we import foreign diseases or whether we do not—this will be clearly to their interest, and to the interest of the

country. As we have so frequently reminded our readers, the interests of producers and those of consumers are identical, and here is a case in point. With regard to animals in transit, the sum of the regulations amounts to this, that the affected animals may be seized and dealt with by slaughter or otherwise as circumstances may require, whilst the infected animals, or in other words those which have been directly or indirectly in contact with such affected animals, may pass on. Now, this is the foundation-stone of the Animals Order of 1868. To the uninitiated it may appear contrary to the principle on which foreign animals are dealt with; but even a superficial knowledge of the subject will show, on reflection, that if only one affected foreign animal be found in a cargo of 500—we repeat an old argument, not unknown to the Duke of Richmond—the remaining 499 must be considered infected, and not allowed inland. They are, therefore, slaughtered at the port of debarkation. But, with respect to the home traffic, the same superficial knowledge will suffice to show that if animals which have been in contact with disease, directly or indirectly—say the 499 out of the 500, as in the previously quoted hypothetical case—are to be detained or interfered with in any way, whether they be fat cattle or stores, then the wheels of our inland traffic are stopped directly, and the whole system of our cattle industry, from the breeder to the butcher, comes to a dead lock. The Veterinary Department of the Privy Council knows this; it knows, too, that port inspection is powerless to deal with infection, or, in other words, with any incubatory stage of disease; and the result is that in this attempt to deal with what is called the Cattle Disease question it is obviously unable to detect or control infected animals on the one hand unless they are accompanied by actual and apparent disease, or to detect or control them on the other hand when they are accompanied by actual and apparent disease. Here, then, the whole thing breaks down. When foreign diseases are shut out and kept out, then, and not until then, can we afford to allow the Veterinary Department of the Privy Council to set our house in perfect order for us. Under present circumstances we hold that for farmers to submit to anything beyond that which is clearly and obviously to their own interests would be simply ridiculous. We wish the Department every success in cleansing trucks and ships, in improving lairage and markets, and in everything which tends to the comfort, health, and safety of the animals, and consequently to the benefit of their owners and all parties concerned, down to the consumer: but directly the inland movement

of animals is interfered with outside actual disease centres we say that such interference should be resisted until a real Cattle Disease Prevention Act has been passed

THE CATTLE DISEASES ORDERS, 1878.

The *Gazette* of Aug. 20 contains the following regulations consequent upon the recent legislation on this subject:—

THE ANIMALS ORDER OF 1878.

At the Council Chamber, Whitehall, the 16th day of August, 1878. By the Lords of Her Majesty's Most Honourable Privy Council. Present—Lord Chancellor, Lord President, Mr. Secretary Cross, Mr. Chancellor of the Exchequer. 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, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows:—

PRELIMINARY.

1. This order may be cited as the Animals Order of 1878.
2. This order shall take effect from and immediately after the 30th day of September, 1878.
3. This order extends to Great Britain only.
4. In this order the Act of 1878 means the Contagious Diseases (Animals) Act, 1878; other terms have the same meaning as in the Act of 1878.

CATTLE PLAGUE.

5. (1.) The constable to whom notice of the fact of an animal being affected with cattle plague, or with disease supposed to be cattle plague, is given under Section 31 of the Act of 1878 shall forthwith give information thereof to his superior officer, who shall immediately transmit the information by telegraph or other rapid means to the Clerk of the Privy Council, Whitehall, London.

(2.) The constable shall also forthwith give information of the notice to an inspector of the local authority, and to the local authority.

6. The following rules shall, pending the arrival of an inspector or other officer of the Privy Council, have effect in relation to cattle plague, namely:—

(a) No animal shall be moved alive out of a place infected with cattle plague.

(b) No animal, horse, ass, or mule, and no dogs shall be moved alive out of a building or enclosed space in which cattle plague exists or has within ten days existed.

(c) No carcase, and no dung of animals, horses, asses, or mules, and no litter, manure, or fodder, shall be moved out of a place infected with cattle plague.

7. Where by virtue of the declaration of an inspector of a local authority (under Section 10 of the Act of 1878), a cowshed, field or other place has become a place infected with cattle plague, the local authority shall take all necessary and proper measures, pending the arrival of an inspector or other officer of the Privy Council, to enforce the observance of the rules with respect to cattle plague, including the placing of constables or other proper officers at the entrances of that cowshed, field, or other place, and generally the local authority and all constables and police-officers shall assist the inspector or other officer of the Privy Council to carry into effect and enforce the rules applicable in the case, and shall do or cause to be done all things from time to time necessary for the effectual execution of the same.

HORSES.

8. Horses, asses, and mules shall be deemed to be animals and glanders and farcy to be diseases, for the purposes of the following sections of the Act of 1878, namely:—

- Section 31 (notice of disease);
- Section 32 (Orders of Council);
- Section 50 (powers of police);
- Section 51 (power of entry);
- Section 52 (detention of vessels);
- Section 53 (carcases washed ashore);

and of all other sections of the Act containing provisions relative to or consequent on the provisions of those sections, including such sections as provide for offences and procedure.

9. The constable to whom notice of the fact of a horse, ass, or mule being affected with glanders or farcy, or with disease

supposed to be glanders or farcy, is given under Section 31 of the Act of 1878 shall forthwith give information thereof to an inspector of the local authority, who shall forthwith report the same to the local authority.

10. The local authority shall publish notice by placards, handbills, or otherwise of the existence of glanders or farcy in any stable, building, or other place, and shall continue such publication during the existence of the disease, and until that place has been cleansed and disinfected.

11.—(1.) Where a person having a horse, ass, or mule in his possession or under his charge gives notice to a constable that the horse, ass, or mule is affected with glanders, or any person is convicted of an offence against the Act of 1878 by reason of his having failed to give such a notice, then, if at any time thereafter it appears to the local authority, on a special report of a veterinary inspector, that the horse, ass, or mule is affected with glanders, and the horse, ass, or mule is alive at the end of fourteen days after the receipt by the local authority of that special report, the local authority may serve on the owner of the horse, ass, or mule a notice in writing requiring him to slaughter it, or to permit them to slaughter it, within a time specified in the notice.

(2.) If in any case the owner fails to comply with the requisition of the notice of the local authority, he shall be deemed guilty of an offence against the Act of 1878, unless he shows to the satisfaction of the court of summary jurisdiction before which he is charged that the horse, ass, or mule is not affected with glanders, or that the slaughter thereof is for any reason unnecessary or inexpedient.

(3.) The provisions of this article may be put in force from time to time, as often as occasion requires, in relation to the same horse, ass, or mule on a further special report as aforesaid.

12. Nothing in this order applies to horses, asses, or mules kept in stables of military barracks or camps under the care and supervision of the Army Veterinary Medical Department.

SHEEP-POX.

13.—(1.) Where it appears to an inspector of a local authority that sheep-pox exists, or has within ten days existed, in a shed, field, or other place, he shall forthwith make and sign a declaration thereof.

(2.) He shall serve a notice signed by him of the declaration on the occupier of that shed, field, or other place.

(3.) Thereupon that shed, field, or other place shall become and be a place infected with sheep-pox subject to the determination and declaration of the local authority.

(4.) The inspector shall with all practicable speed inform the local authority of his declaration and notice, and shall send his declaration and a copy of his notice to the local authority.

(5.) The local authority shall forthwith on receipt of that information inquire into the correctness of the inspector's declaration, with the assistance and advice of a veterinary inspector, or of a person qualified according to the Act of 1878 to be such.

(6.) If the local authority are satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease, they shall by order determine and declare accordingly, and prescribe the limits of the place infected with sheep-pox, and may, if they think fit, include within those limits any lands or buildings adjoining or near to the shed, field, or other place to which the inspector's declaration relates.

(7.) The local authority may include in a place infected with sheep-pox any adjoining part of the district of another local authority, with the previous consent, in writing, of that authority, but not otherwise.

(8.) If the local authority are not satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease, they shall by order determine and declare accordingly; and thereupon, as from the time specified in that behalf in their order, the shed, field or other place to which the inspector's declaration relates shall cease to be a place infected with sheep-pox.

(9.) The local authority shall forthwith report to the Privy Council the declaration of the inspector, and the proceedings of the local authority thereon.

14. The following rules shall have effect in relation to a place infected with sheep-pox, viz. :—

(a) No sheep shall be moved alive out of a place infected with sheep-pox.

(b) No carcase of a sheep shall be moved out of a place infected with sheep-pox, except either with a licence of an inspector of the local authority for the purpose of being buried or destroyed, or with a certificate of an inspector of the local authority certifying that the carcase moved did not belong to a sheep affected with sheep-pox.

15.—(1.) The local authority shall cause all sheep affected with sheep-pox to be slaughtered.

(2.) The local authority may, if they think fit, cause any sheep being or having been in the same shed or stable or flock, or in contact with a sheep affected with sheep-pox, to be slaughtered.

(3.) The local authority shall, out of the local rate, pay compensation for sheep slaughtered under this article as follows :—

(a) Where the sheep slaughtered was affected with sheep-pox, the compensation shall be one-half of its value immediately before it became so affected, but so that the compensation do not in any such case exceed forty shillings.

(b) In every other case the compensation shall be the value of the sheep immediately before it was slaughtered, but so that the compensation do not in any case exceed four pounds.

16. Where a local authority have declared a place to be infected with sheep-pox, they may, if they think fit, at any time after the expiration of twenty-eight days from the date of the cessation therein of that disease, but not sooner, declare by order that place to be free from sheep-pox.

SHEEP-SCAB.

17. A person having in his possession or under his charge a sheep affected with sheep-scab, shall treat that sheep, or cause it to be treated, with some dressing or dipping or other remedy for sheep-scab.

MOVEMENT OR EXPOSURE OF DISEASED ANIMALS AND HORSES.

18.—(1.) It shall not be lawful for any person to do any of the following things :—

(a) To expose a diseased or suspected animal, horse, ass, or mule in a market or fair, or in a sale-yard, or other public or private place, where animals or horses are commonly exposed or sale.

(b) To place a diseased or suspected animal, horse, ass, or mule in a fair or other place adjacent to or connected with a market or a fair, or where animals or horses are commonly placed before exposure for sale.

(c) To send or carry, or cause to be sent or carried, a diseased or suspected animal, horse, ass, or mule on a railway, canal, river, or inland navigation, or in a coasting vessel.

(d) To carry, load, or drive, or cause to be carried, led, or driven, a diseased or suspected animal, horse, ass, or mule on a highway or thoroughfare.

(e) To place or keep a diseased or suspected animal, horse, ass, or mule on common or unenclosed land or in a field or place insufficiently fenced, or on the side of a highway.

(2.) But this Article shall operate subject to the special provisions of the Diseased Animals (in transit) Order of 1878, and the Infected Places and Areas (Movement) Order of 1878.

19.—(1.) Where an animal, horse, ass, or mule is exposed, or otherwise dealt with in contravention of the last foregoing Article, the inspector or other officer of the local authority appointed in that behalf shall seize and detain the same, and shall be dealt with as follows :—

(a) If affected with cattle plague or sheep-pox the animal shall be slaughtered in accordance with the provisions of the Act of 1878 and of this Order ;

(b) If affected with pleuro-pneumonia or foot-and-mouth disease the animal shall be dealt with in accordance with the provisions of the Diseased Animals (in transit) Order of 1878 ;

(c) If affected with sheep-scab the sheep shall be removed to some convenient and isolated place, and shall be there kept for such time as the local authority think expedient ; and

(d) If affected with glanders or farcy the horse, ass, or mule shall be forthwith slaughtered, and, if not slaughtered

at the place where seized, it may be moved under the direction and in charge of the inspector or other officer to the nearest available horse-slaughterer's or knacker's yard, to be there slaughtered, and the inspector or other officer shall report the fact of the slaughter to the local authority.

(2.) The local authority may recover the expenses of the execution by them or by their inspector or other officer of the foregoing provisions of this article from the owner of the animal, horse, ass, or mule, or from the consignor or consignee thereof, who may recover the same from the owner.

(3.) In the case of a diseased animal, horse, ass, or mule being seized in accordance with the provisions of this Article, it shall not be lawful for the market authority or any person to again use or allow to be used for animals, horses, asses, or mules that portion of the market or place where the diseased animal, horse, ass, or mule was found unless and until a veterinary inspector of the local authority has certified that that portion has been, as far as practicable, cleansed and disinfected.

MOVEMENT OR EXPOSURE OF DUNG OR OTHER THINGS.

20. It shall not be lawful for any person to send or carry, or cause to be sent or carried, on a railway, canal, river, or inland navigation, or in a coasting vessel, or on a highway, or thoroughfare, any dung, or any fodder or litter which has been in a place infected with pleuro-pneumonia, foot-and-mouth disease, or sheep-pox, or which has been in contact with or used about a diseased animal, horse, ass, or mule, except with a licence of the local authority, to be given on a certificate of an inspector certifying that the thing moved has been, as far as practicable, disinfected.

CARCASSES.

21.—(1.) Every local authority shall cause the carcase of every animal, horse, ass, or mule that has died of pleuro-pneumonia, foot-and-mouth disease, sheep-pox, sheep-scab, glanders, or farcy, or has been slaughtered in consequence of being affected with sheep-pox, glanders, or farcy, to be buried as soon as possible in its skin in some proper place, and to be covered with a sufficient quantity of quicklime or other disinfectant, and with not less than six feet of earth, and, with a view to the carrying out of the provisions of this article, the local authority may, from time to time, make regulations for prohibiting or regulating the removal of any such carcase or for securing the burial of the same.

(2.) Or the local authority may, if authorised by licence from the Privy Council, cause the carcase to be destroyed, under the inspection of the local authority, in the mode following :—

The carcase shall be disinfected, and shall then be removed in charge of an officer of the local authority, to a horse-slaughterer's or knacker's yard approved for the purpose by the Privy Council, or other place so approved, and shall be there destroyed by exposure to a higher temperature, or by chemical agents.

(3.) In every such case the local authority shall report to the Privy Council the fact and mode of destruction.

(4.) Where under this article a local authority cause the carcase of an animal, horse, ass, or mule to be buried they shall cause its skin to be first so slashed as to make it useless.

22. It shall not be lawful for any person, except with the licence of the Privy Council, to dig up, or cause to be dug up, the carcase of an animal, horse, ass, or mule buried under a regulation of a local authority or under the direction of the Privy Council or of a receiver of wreck.

GENERAL PROVISIONS.

23. The constable to whom notice of the fact of an animal being affected with pleuro-pneumonia, foot-and-mouth disease, sheep-pox, or sheep-scab, or with disease supposed to be pleuro-pneumonia, foot-and-mouth disease, sheep-pox, or sheep-scab is given under section 31 of the Act of 1878, shall forthwith give information thereof to an inspector of the local authority, who shall forthwith report the same to the local authority.

24. Any person having in his possession or under his charge an animal affected with disease, or with any illness, or suspected of being affected, besides giving such notice to a constable as he is required by Section 31 of the Act of 1878 to give, may, if he thinks fit, give notice of the fact of the animal being so affected, or suspected, to the inspector of the local authority.

25. An inspector of a local authority on receiving in any

manner whatsoever information of the supposed existence of disease, or having reasonable ground to suspect the existence of disease, shall proceed with all practicable speed to the place where the disease, according to the information received by him, exists, or is suspected to exist, and shall execute and discharge the power and duties by or under the Act of 1878, and any Order or Council, conferred and imposed on him as inspector.

26. The forms given in the first schedule, with such variations as circumstances require, may be used by an inspector for the purpose of the Act of 1878, and of this Order.

27. Where an inspector of a local authority finds in his district pleuro-pneumonia, foot-and-mouth disease, sheep-pox, glanders, or farcy, he shall forthwith make a return thereof to the local authority and to the Privy Council, on a form provided by the Privy Council, with all particulars therein required, and shall continue to so make a return thereof on the Saturday of every week until the disease has ceased.

28. Where an inspector of a local authority finds in his district sheep-scab he shall forthwith make a return thereof to the local authority and to the Privy Council, on a form provided by the Privy Council, with all particulars therein required, and shall continue to so make a return thereof on the last day of every month, unless the last day of the month is Sunday, and then on the Saturday previous, until the disease has ceased.

29. An inspector, officer, or constable detaining an animal, horse, ass, or mule under the Act of 1878, or any Order of Council, shall cause it to be supplied with requisite food and water during its detention, and the expenses incurred by him in respect thereof may be recovered for the person having charge of the animal, horse, ass, or mule, or from its owner.

30. Every local authority shall publish notice by placards, handbills, or otherwise, in the immediate neighbourhood of every place or area declared infected, of the fact of such declaration, and shall continue such publication until the place or area has been declared free from disease.

31. A local authority declaring by an order a place to be free from disease shall forthwith report to the Privy Council the fact of such declaration having been made.

32. A local authority may require the value of an animal slaughtered by their order to be ascertained by their officers or by arbitration.

33. Every local authority shall keep in the form given in the second schedule, or a form to the like effect, a record relative to animals slaughtered by their order, stating the particulars indicated in the form given in the said schedule, with such variations as circumstances require.

34. A local authority may, from time to time, revoke or alter any order, prohibition, or regulation made by them under the Act of 1878 or any Order of Council.

35. Every local authority shall send to the Privy Council a copy of every order, prohibition, or regulation made by them.

36. If the Privy Council are satisfied, on inquiry, with respect to any prohibition or regulation made by a local authority under the Act of 1878 or under any Order of Council, that the same is of too restrictive a character, or otherwise objectionable, and direct the revocation thereof, the same shall thereupon cease to operate.

37. Whenever an inspector is appointed under Section 42 of the Act of 1878, or there is any change in the name or address or district of such inspector, the local authority shall forthwith report the same to the Privy Council.

38. Except where otherwise provided for in any Order of Council, a local authority shall provide and supply, without charge, printed copies of documents or forms requisite under the Act of 1878 or any Order of Council.

[The various forms of declaration are appended in the schedules].

THE CLEANSING AND DISINFECTION ORDER OF 1878.

At the Council Chamber, Whitehall, the 16th day of August 1878. By the Lords of Her Majesty's Most Honourable Privy Council. Present:—Lord Chancery, Lord President, Mr. Secretary Cross, Mr. Chancellor of the Exchequer.

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, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows:—

1. This Order may be cited as the Cleansing and Disinfection Order of 1878.

2. This Order shall take effect from and immediately after the 30th day of September, 1878.

3. This Order extends to Great Britain only.

4. In this Order—

The Act of 1878 means the Contagious Diseases (Animals) Act, 1878.

Master includes a person having the charge or command of a vessel.

Loading-pen means a stationary pen or other inclosed space being in or about a station, building, or land of a railway company, and used or intended for the reception or keeping of animals before, after, or in course of their transit by railway.

Truck means a vehicle used or intended for carrying animals on a railway.

Van means a vehicle used or intended for carrying animals on land otherwise than on a railway.

Other terms have the same meaning as in the Act of 1878.

5. Every vessel used for carrying animals by sea, or on a canal, navigation, or river, shall, after the landing of animals therefrom, and before the taking on board of any fresh animals or other cargo, be cleansed and disinfected in the mode following:—

(1) By the scraping or sweeping of all parts of the vessel with which animals or their droppings have come in contact;

(2) Then by the thorough washing or scrubbing or scouring of the same parts of the vessel with water;

(3) Then by the application to the same parts of the vessel (except those parts ordinarily used for passengers) of a coating of lime-wash containing in each gallon of lime-wash four ounces of chloride of lime; and

(4) By the application to the same parts of the vessel ordinarily used for passengers of lime-wash or of water containing in each gallon of lime-wash or of water four ounces of chloride of lime.

(5) The scrapings or sweepings of the vessel shall not be landed until well mixed with quicklime.

6. Every loading-pen shall be cleansed and disinfected, either on each day on which it is used and after the using thereof, or at some time not later than 12 o'clock at noon of the next following day, unless the following day is Sunday, and then of the Monday following, and before the using thereof.

7. Every truck and every van shall, on every occasion after an animal is taken out of the same, and before any other animal is placed therein, be cleansed and disinfected.

8. A loading-pen, truck, and van shall be cleansed and disinfected in the mode following:

(1) By the scraping or sweeping of all parts of the loading-pen, truck, or van with which animals or their droppings have come in contact, and the effectual removal from the loading-pen, truck, or van of all dung, litter, and other matter;

(2) Then by the thorough washing of the same parts with water;

(3) Then by the application to the same parts of a coating of lime-wash, containing in each gallon of lime-wash four ounces of chloride of lime.

(4) The sweeping of the loading-pen, truck, or van shall forthwith be well mixed with quicklime, and be effectually removed from contact with animals.

9. Every moveable gangway or passage-way, cage, or other apparatus, used or intended for the loading or unloading of animals on or from a truck or vessel, or otherwise used in connection with the transit of animals, shall, as soon as practicable after being so used, be cleansed in the mode following:

(1) By the scraping or sweeping and the effectual removal therefrom of all dung, litter, and other matter;

(2) Then by the thorough washing thereof with water.

10. Where an animal at a place of landing or place adjacent thereto is affected with disease, that place and every other place where the animal is or has been shall not be used for any animals other than animals brought thereto with it.

animal (in the same vessel or otherwise) unless and until the place has been cleansed and disinfected.

11. A local authority shall cause the cowshed, field or other place in which an animal affected with pleuro-pneumonia, foot-and-mouth disease, or sheep-pox has been kept while so affected, or has died or been slaughtered, to be, as far as practicable, cleansed and disinfected, and all litter, dung, or other thing that has been in contact with or used about any such animal to be disinfected, burnt, or destroyed.

12. A local authority may, from time to time, make regulations for providing for the cleansing and disinfection of places used by diseased animals, and may prescribe the mode in which such cleansing and such disinfections are to be effected.

13. Where a local authority exercise the power of causing a place to be cleansed and disinfected the occupier thereof shall give all reasonable facilities for that purpose.

14. If anything is done or omitted to be done in contravention of any of the foregoing provisions, the owner and the master of the vessel in which—and the railway company carrying animals on or owning or working the railway on which—and the owner of the gangway or passage-way, cage, or other apparatus in respect of which—and the owner and the occupier of the place of landing or place adjacent thereto or other place in which—and the occupier of any other place in respect of which (as the case may be) the same is done or omitted shall each be deemed guilty of an offence against the Act of 1878.

15. A local authority may, from time to time, make regulations for the following purposes, or any of them:—

For requiring the owners, lessees, or occupiers of markets, fairs, sale-yards, places of exhibition, lairs, or other places used for animals, to cleanse those places, from time to time, at their own expense;

For requiring the owners, lessees, or occupiers of those places to disinfect the same, or any specified part thereof, from time to time at their own expense, where in the judgment of the local authority, the circumstances are such as to allow of such disinfectant being reasonably required;

For prescribing the mode in which such cleansing and such disinfection are to be effected.

If the owner, lessee, or occupier of any such place does any act in contravention of the regulations of a local authority under this Article, or fails in any respect to observe the same, it shall not be lawful for him or any other person at any time hereafter, until further order of the Privy Council, to hold a market, fair, sale, or exhibition of animals in that place, or to use that lair or place for animals, and the holding therein of any market, fair, sale, or exhibition of animals, and the use of that lair or place for animals shall be and the same is hereby prohibited accordingly.

C. L. PEEL.

THE DISEASED ANIMALS (IN TRANSIT) ORDER OF 1878.

At the Council Chamber, Whitehall, the 16th day of August, 1878. By the Lords of Her Majesty's Most Honourable Privy Council. Present—Lord Chancellor, Lord President, Mr. Secretary Cross, Mr. Chancellor of the Exchequer.

The Lords and others of Her Majesty's Most Honourable Privy Council, by virtue and exercise of the powers in them vested under the Contagious Diseases (Animals) Act, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered as follows:—

1. This Order may be cited as the Diseased Animals (in transit) Order of 1878.

2. This Order shall take effect from and immediately after the 30th day of September, 1878.

3. This Order extends to Great Britain only.

4. In this Order the Act of 1878 means The Contagious Diseases (Animals) Act of 1878:

Other terms have the same meaning as in the Act of 1878.

5. By virtue of Section 27 of the Act of 1878, where an animal is found to be affected with pleuro-pneumonia or foot-and-mouth disease—

(1.) While exposed for sale or exhibited in a market, fair, sale-yard, place of exhibition, or other place; or

(2.) While placed in a lair or other place before exposure for sale; or

(3.) While being in or on a landing-place or wharf or other place during transit, or while in course of being moved by and or by water; or

(4.) While being on common or unenclosed land; or generally

(5.) While being in a place not in the possession or occupation or under the control of the owner of the animal;

Then the following special regulations shall apply in case of—

A.—PLEURO-PNEUMONIA.

(a.) Where pleuro-pneumonia is found to exist, the inspector of the local authority shall seize and detain all the diseased cattle.

(b.) The diseased cattle so seized shall, if not slaughtered at the place where they are seized, be moved to the nearest available slaughter-house with a licence of the inspector; and that licence shall be in force for twelve hours and no longer, and shall specify the slaughter-house to which the cattle are to be moved for slaughter; and they shall be there slaughtered in accordance with the provisions of the Act of 1878:

And the following special regulations shall apply in case of

B.—FOOT-AND-MOUTH DISEASE.

(c.) Where foot-and-mouth disease is found to exist, the inspector of the local authority shall seize and detain all the diseased animals.

(d.) The diseased animals so seized may be slaughtered by or at the request of the owner or person in charge thereof either at the place where they are seized, or at the nearest available slaughter-house; in which latter case they may be moved for the purpose of being there slaughtered, with a licence of the inspector; and that licence shall be in force for twelve hours and no longer, and shall specify the slaughter-house to which the animals are to be moved for slaughter; or the diseased animals, if not slaughtered as aforesaid, shall be moved in charge of the inspector or other officer of the local authority appointed in that behalf, to some convenient and isolated place, and shall be there kept for such time as the local authority think expedient, subject however, to their being there slaughtered at any time by or at the request of the owner or person in charge thereof;

And the following regulations shall apply in case of—

C.—ANIMALS NOT DISEASED.

(e.) All animals in the market or other place referred to in this Article, other than the diseased animals so seized, may be moved in all respects as if no disease had been found in that market or other place.

6. In the case of an animal being found to be affected with pleuro-pneumonia or foot-and-mouth disease in a market or other place referred to in the last foregoing Article, it shall not be lawful for the market authority or any person to again use or allow to be used for animals that portion of the market or other place where the diseased animal was found, unless and until a veterinary inspector of the local authority has certified that that portion has been as far as practicable cleansed and disinfected.

7. Notwithstanding anything in the Act of 1878, or any Order of Council, a market or other place aforesaid, or any part thereof, shall not be declared to be an infected place, or be made part of an infected place, except by the Privy Council; and a slaughter-house, or any part thereof, to which a diseased animal is moved for slaughter under this Order shall not, by reason thereof, be declared to be an infected place.

8. The inspector of the local authority acting under this Order shall forthwith report to the local authority the action taken by him hereunder, and the local authority shall forthwith report the same to the Privy Council.

9. The local authority may recover the expenses of the execution by them, or by their inspector or officer, of this Order from the owner of the animals seized, or from the consignee or consignee thereof, who may recover the same from the owner.

10. Nothing in this Order shall apply to a foreign animals wharf or to a foreign animals' quarantine station.

C. L. PEEL.

THE INFECTED PLACES AND AREAS (MOVEMENT) ORDER OF 1878.

At the Council Chamber, Whitehall, the 16th day of August, 1878. By the Lords of Her Majesty's Most Honourable Privy Council. Present: Lord Chancellor, Lord President, Mr. Secretary Cross, Mr. Chancellor of the Exchequer.

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, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows:—

1. This Order may be cited as "The Infected Places and Areas (Movement) Order of 1878."

2. This Order shall take effect from and immediately after the 30th day of September, 1878.

3. This Order extends to Great Britain only.

4. In this Order—

The Act of 1878 means "The Contagious Diseases (Animals) Act," 1878.

Other terms have the same meaning as in the Act of 1878.

PLACES INFECTED WITH PLEURO-PNEUMONIA.

5. Cattle not affected with pleuro-pneumonia may be moved into a place infected with pleuro-pneumonia, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that all the cattle in the infected place have died or been slaughtered, and that the cowsheds or other places where the diseased cattle were kept have been, as far as practicable, cleansed and disinfected.

6. Cattle affected with pleuro-pneumonia may, by Order of Council to be made on the application of a local authority, be moved out of places infected with pleuro-pneumonia for slaughter, in the manner and on the conditions in that Order specified, where the Privy Council are satisfied, on the representation of a local authority, that the slaughter of diseased cattle in infected places in the district of that local authority is impracticable or would be highly inconvenient.

7. Cattle not affected with pleuro-pneumonia may be moved out of a place infected with pleuro-pneumonia:—

(1.) To a slaughter-house, for the purpose of being slaughtered, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the cattle moved are not affected with pleuro-pneumonia. That licence shall be available for twelve hours, and no longer, and shall specify the slaughter-house to which the cattle are to be moved for slaughter. The cattle so moved shall be moved under the direction and in charge of an inspector or other officer of the local authority appointed in that behalf, who shall report the fact of the slaughter to the local authority, or

(2.) To other premises, for purposes of feeding, or other ordinary purposes connected with the breeding or rearing of cattle, or for the purpose of isolation, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the cattle moved are not affected with pleuro-pneumonia. That licence shall specify the place from which, and the place to which, and the person to whom, they are to be moved, and the time for which the licence is available, and the purposes and conditions for and on which the movement and keeping are allowed; and the cattle moved thereunder shall be kept at the place specified for the time, and according to the conditions specified in the licence. The cattle moved in pursuance of the licence shall be moved under the direction and in charge of an inspector or other officer of the local authority appointed in that behalf.

But nothing in this article shall be deemed to authorise the granting of a licence by a local authority for the movement of cattle into the district of another local authority, or to a market, fair, sale-yard, or place of exhibition.

AREAS INFECTED WITH PLEURO-PNEUMONIA.

8. Cattle not affected with pleuro-pneumonia may be moved into or in such parts of an area infected with pleuro-pneumonia as are not comprised in a place infected with pleuro-pneumonia, with a licence of the local authority, to be granted on a certificate of a veterinary inspector, certifying that the cattle to be moved are not affected with pleuro-pneumonia, and have not, to the best of his knowledge and belief, been exposed to the infection of pleuro-pneumonia.

9. Cattle not affected with pleuro-pneumonia may be moved out of such parts of an area infected with pleuro-pneumonia as are not comprised in a place infected with pleuro-pneumonia, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the cattle are not affected with pleuro-pneumonia, and have not to the best of his knowledge and belief been exposed to the infection

of pleuro-pneumonia. That licence shall specify the place to which, and the person to whom, they are to be moved, and if the cattle are to be moved into the district of another local authority there shall also be requisite a licence of the local authority of the district into which they are to be moved endorsed on or referring to such first mentioned licence; and the cattle, after they are received at the place specified in the licence, are not to be moved in the district of that local authority except with the further licence of that local authority.

PLACES INFECTED WITH FOOT-AND-MOUTH DISEASE.

10. Animals may be moved into a place infected with foot-and-mouth disease with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that all the diseased animals have died or been slaughtered, and that the cow-sheds or other places where the diseased animals were kept, have been, as far as practicable, cleansed and disinfected.

11. Animals not infected with foot-and-mouth disease may be moved out of a place infected with foot-and-mouth disease:—

(1.) To a slaughter-house, for the purpose of being slaughtered, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the animals are not affected with foot-and-mouth disease. That licence shall be available for twelve hours, and no longer, and shall specify the slaughter-house to which the animals are to be moved for slaughter. The animals so moved shall be moved under the direction and in charge of an inspector or other officer of the local authorities appointed in that behalf, who shall report the fact of the slaughter to the local authority; or

(2.) To other premises, for purposes of feeding, or other ordinary purposes connected with the breeding or rearing of animals, or for the purpose of isolation, with a licence of the local authority, to be granted on the certificate of a veterinary inspector certifying that the animals moved are not affected with foot-and-mouth disease. That licence shall specify the place from which, and the place to which, and the person to whom, they are to be moved, and the time for which the licence is available, and the purpose and conditions for and on which the movement and keeping are allowed; and the animals moved thereunder shall be kept at the place specified for the time and according to the conditions specified in the licence. The animals moved in pursuance of the licence shall be moved under the direction and in charge of an inspector or other officer of the local authority appointed in that behalf.

But nothing in this article shall be deemed to authorise the granting of a licence by a local authority for the movement of animals into the district of another local authority, or to a market, fair, sale-yard, or place of exhibition.

AREAS INFECTED WITH FOOT-AND-MOUTH DISEASE.

12. Animals not affected with foot-and-mouth disease may be moved into or in such parts of an area infected with foot-and-mouth disease as are not comprised in a place infected with foot-and-mouth disease, with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the animals to be moved are not affected with foot-and-mouth disease, and have not, to the best of his knowledge and belief, been exposed to the infection of foot-and-mouth disease.

13. Animals not affected with foot-and-mouth disease may be moved out of such parts of an area infected with foot-and-mouth disease as are not comprised in a place infected with foot-and-mouth disease with a licence of the local authority, to be granted on a certificate of a veterinary inspector certifying that the animals are not affected with foot-and-mouth disease, and have not, to the best of his knowledge and belief, been exposed to the infection of foot-and-mouth disease. That licence shall specify the place to which, and the person to whom, they are to be moved, and, if the animals are to be moved into the district of another local authority there shall also be requisite a licence of the local authority, of the district into which they are to be moved, endorsed on or referring to such first-mentioned licence, and the animals after they are received at the place specified in the licence are not to be moved in the district of that local authority except with the further licence of that local authority.

C. L. PEEL.

S H E E P P O I S O N I N G .

Accounts have from time to time been received from Australia of sheep poisoning, generally from causes unknown, though in some instances a clue has been found, as for example the rapid growth of a wild plant of the pea tribe—the “indigo plant”—which, springing up in great numbers after rain following severe drought, has been freely partaken of by the animals when in its young and succulent state, causing death. The circumstance has already been noticed in our columns. But the most interesting case which has yet come to our knowledge was recently recorded in *Nature*, by which it appears that a minute water plant, related to the green scum or water-flannel which is to be found on the surface of most of our ponds in summer time, has been produced in excessive quantities in the lakes forming the estuary of the Murray river in Southern Australia. These lakes, during the unusually severe drought, were very low, and the water contained in them was of an abnormally high temperature. Consequently, the plant of which mention has been made—one of the indigenous Confevæ—finding circumstances so peculiarly adapted to its growth, multiplied with excessive rapidity, and formed a scum “like green oil paint” several inches thick on the surface of the water, especially when wafted by strong breezes to the lee shores of the lakes. Much of this scum has been carried out to sea by the river Murray, and washed back again by the tides to the shore, where it has formed green crusts many inches thick. It is stated that cattle will not drink of the pools or from the margins of lakes where this scum has decomposed, as it quickly does under those circumstances, giving off a putrid stench; but the fresh scum which was abundant everywhere on the surface of the water was taken up by animals when drinking, and death was usually the result. The writer of this account, Mr. George Francis, thinks, from post-mortem appearances, that the plant “is rapidly absorbed into the circulation, where it must act as a ferment and cause disorganisation;” and this opinion is based on the fact of the stomachs on examination containing none of the green scum. The symptoms of this poisoning are, “stupor and unconsciousness, falling and remaining quiet, as if asleep—unless touched, when convulsions come on—with head and neck drawn back by rigid spasm, which subsides before death.” It will be noticed that the writer attributes death in these cases to the absorption of the plant itself into the blood of the animal, and that it acts when there as a “ferment;” that is to say, is produced and reproduced in a somewhat similar manner to the yeast plant in a decoction of malt, or to the *Bacillus anthracis* or Anthrax fungus, in the case of Splenic fever. But Mr. G. Francis gives no evidence whatever that this is so, nor does he appear to have made any microscopic investigation at all; and therefore we do not wish to draw any inference beyond the act that the swallowing of this Confevæ by horses,

cattle, sheep, pigs, and dogs, with drinking water, caused death, during stupor and unconsciousness.

In a recent number of *The Veterinary Journal* there appeared a most interesting account of the experiments of Professor Toussaint, by which he arrives at the conclusion that death by asphyxia from Anthrax fever is the direct result of purely mechanical obstruction in the capillary vessels, caused by a matting together of the rod-shaped bodies which constitute one stage of the growth of *Bacillus anthracis*, one of the numerous forms of Bacteria organisms, low down in the scale of life, which must be sought for at or beyond that vanishing point, where, to the naked eye of science, all distinction between plant life and animal life is lost. In the same issue of *The Veterinary Journal* an equally interesting and instructive account is given of the investigations of Professor Feser in Bavaria, who examined attentively the localities in which Anthrax fever most frequently made its appearance, wherein he discovered that in the damp, hot, marshy pastures, a vast number of low organisms existed, and amongst them rusts, smuts, moulds, and bacteria of the most varied characters, together with the ordinary bacterium of putrefaction. It is stated that Professor Feser's attention has long been directed to the white mucilaginous masses, resembling the honey-dew of barley, which are to be found at the proper season in the marshy places and damp pastures of Upper Bavaria, and which have been proved—as confirmed by Koch and Cohn—to consist of *Bacillus subtilis* which is almost identical with the *Bacillus anthracis* of splenic fever. *The Veterinary Journal* says that “as these marsh bacilli, so like those of Anthrax, are developed, multiply and infest damp, hot, and marshy pastures, it is admitted as probable that the same happens with the Anthrax bacteria, and that the white mucilaginous masses before mentioned should be suspected as masses of the latter until there is proof to the contrary;” although no positive identity has yet been set up.

Now, in thus calling attention to scientific matters of this kind we are not attempting anything beyond the pointing out of certain sources of danger. The Confevæ of the Australian lakes, and the Bacteria of damp marshy places, are both low forms of organic life, not very distantly related, which may be described broadly as consisting of cells of varied forms, and growing by the elongation and subdivision of these cells within which spores or “germs” are formed, sometimes by conjugation of the cells, and set free by the division or disintegration of the cells; the spores of Confevæ and the rod-shaped Bacteria being endowed with considerable locomotive power when in suitable media. We read in *Nature* that a Confevæ taken into the animal system has caused death; we know that a Bacterium is the cause of Splenic fever; we know that Ergot—and possibly other parasitical fungi, especially rusts and moulds—

will cause abortion, and other injurious effects when taken into the systems of animals; and we know, too, that the *habitat* of all these low organisms is primarily moisture; they are to be found in wet, marshy places, and their development is usually vastly accelerated by an increase of temperature. Therefore it is evident that every wet place in an undrained field which remains so during the heat of summer, every choked-up ditch, every shallow pond which is seldom or never cleaned out, all marshes, bogs, and peat-mosses, are sources of danger to the agriculturist. We have urged this on former occasions, and we may bring it again before the notice of our readers as a matter which greatly concerns their interests. Not only the low forms of simple cell life of which we have been speaking, together with some of the more highly organised parasitical fungi, but certain of the simpler forms of animal life proper—such as the sheep fluke for example—undergo the elementary stages of their existence in stagnant moisture; and as the presence of such conditions and elements of danger are, on other counts, quite inconsistent and incompatible with good farming, we may confidently urge a consideration of these matters on our readers and friends, as being likely to prove to their advantage.

AGRICULTURAL RETURNS FOR 1878.

The summary of the Agricultural Returns for Great Britain, issued on the 20th of last month and printed herewith, shows that the acreage under wheat is 3,218,579 acres, an increase of 50,039 acres over the crop last year; under barley, 2,469,694 acres, an increase of 52,106 acres; and under oats, 2,699,077 acres, a decrease of 55,102 acres. The increase in the area under wheat is fully accounted for by the high prices which prevailed last year, and the favourable seed-time last autumn. Barley has also been grown in increased quantity in the place of oats. Altogether we have about 47,000 acres more under cereals than we had last year. Probably when the complete Returns are published we shall see that the cereals to the extent named have been substituted for pulse crops, as we cannot suppose that the area under grasses or feeding crops has materially decreased. There are, however, 4,020 acres less of potatoes this year than last. It is satisfactory to find that the decrease in the number of our live stock, which has been going on for three years, has received a check, and that we have 40,543 more cattle, and 236,110 more sheep than we possessed last year. The increase is very slight—no more than a healthy or prolific season would fully account for—and we have still a decrease of cattle below our stock in 1876 of 105,665. Still, it is something to have turned the tide of continuous decrease, and if we had any hope that foreign disease can be kept out of the country by the hap-hazard system about to be inaugurated we should expect to see a considerably greater increase than that now recorded before many years are past. Of pigs the number is a little less than that of last year, and a little greater than that of the year before last. The enormous quantity of imported hams and bacon cannot fail to tell upon the home pork trade, and

the prices that have ruled during the past year have been hardly remunerative to the graziers of pigs in this country. On the whole the Returns are more cheering than they have been for the past two years.

So far we had written before the Returns for Ireland were published, late on Friday evening; and we regret to state that these statistics take away nearly all reason for whatever amount of congratulation those previously commented on may have given rise to. The area under crops of all kinds is 62,196 acres less than it was last year, there being a decrease of 31,174 acres of cereals, 37,249 acres of green crops, and 11,572 acres of flax, against an increase of 17,799 acres of clovers and sown grasses, called "meadow" in Ireland. There is an increase of the waste lands of the country to the extent of 81,492 acres, a circumstance which is of serious import, as is also the decrease in the area under potatoes by 26,306 acres. Of horses and mules it is gratifying to record an increase to the number of 9,953, and of sheep there are 106,721 more than in 1877; but cattle are fewer by 12,847, and pigs by 199,372.

Putting together the figures on which we have commented for Great Britain and Ireland we find that for the United Kingdom there is an increase in the area under cereals of 15,826 acres, and a decrease in that under potatoes of 30,326 acres. The net increase of cattle amounts to 27,696, and of sheep the total increase is 342,831, the decrease in pigs being augmented by the Irish figures.

NOTE.—The Returns were collected on 25th June in the year 1876, and on 4th June in the years 1877 and 1878.

EXTENT OF LAND IN GREAT BRITAIN UNDER—

	WHEAT.	BARLEY.	OATS.	POTATOES.	HOPS.
	Acres.	Acres.	Acres.	Acres.	Acres.
1876	2,995,957	2,533,109	2,798,430	502,719	69,999
1877	3,168,510	2,417,588	2,754,179	512,471	71,239
1878	3,218,579	2,469,694	2,699,077	508,451	71,791

INCREASE (+) OR DECREASE (—).

1878 over 1877	16 per cent.	2.2 per cent.	2.0 per cent.	0.8 per cent.	0.8 per cent.
1878 over 1876	7.4 per cent.	2.5 per cent.	3.6 per cent.	1.1 per cent.	2.6 per cent.

TOTAL NUMBER OF LIVE STOCK IN GREAT BRITAIN.

	CATTLE.	SHEEP.	PIGS.
	No.	No.	No.
1876	5,844,141	28,182,951	2,293,620
1877	5,697,933	28,161,164	2,198,725
1878	5,738,476	28,397,274	2,183,437

INCREASE (+) OR DECREASE (—).

1878 over 1877	0.7 per cent.	0.8 per cent.	0.6 per cent.
1878 over 1876	1.8 per cent.	0.8 per cent.	8.3 per cent.

Statistical and Commercial Department, Board of Trade, August 20th, 1878. R. GIFFEN.

AGRICULTURE IN TURKEY.

The condition and prospects of the Roumelian province of Turkey from an agricultural point of view do not appear so forlorn or hopeless as might have been anticipated from the devastating war which has swept over that fair country. Vice-Consul Wrench gives some information upon the subject, wherein we learn that the trade in cereals, which has its headquarters at Constantinople, had naturally suffered severely during the eventful years 1876-77, especially in Europe, the producing districts being the *villets* of the Danube and Adrianople. The wheat of the Danube is shipped from Kustendje, Balchik Varna, Achielo, and Bourgas direct to France, England, and Italy, instead of, as formerly, being used for transshipment, and a goodly portion is sent to the Capital, where it is highly appreciated. The crops of the Adrianople *villet*, intended for local consumption, are forwarded likewise to Constantinople by rail, enjoying, since the abolition of the eight per cent. Customs duty on goods sent by land, the privilege of arriving at the Capital duty free; they are also shipped to Europe from Dédé-Agatch, the terminus, on the Egean Sea, of the Roumelian Railway. In France Adrianople grain finds a ready sale, but having only occasionally been sent to England it is less known there by the trade in general. The establishment of the railway terminating at Dédé-Agatch will, it is expected, increase the export of cereals, especially to England, because cargoes are now shipped in good condition, whereas, formerly, being sent down the river Maritza on open rafts, with no protection but the hair bags in which the grain was contained, the wheat often arrived at Enos in a condition to disqualify it for a long voyage such as that to the United Kingdom.

The cargoes of cereals for 1877, both in the Danube and Adrianople *villets*, having been exceptionally abundant and of excellent quality, the growers were further favoured by decree of the Government. For many years the sale of the tithes was delayed until dangerously near harvest time, and as the collector did not permit farmers to collect their crops from the thrashing floors until the sheaves had been counted and the tithe deducted, precious time was lost, and often the grain was seriously damaged, sometimes partially destroyed, by the storms usual in the beginning of autumn. The authorities, however, last year granted the oft-repeated demand of merchants and farmers, to the effect that they should be allowed to thrash and house their crops so soon as it should be convenient to themselves. It thus happened that a good proportion of the crops of cereals was gathered in. In many instances grain which was abandoned and irretrievably lost to the original proprietor was yet saved from total destruction: for after the inhabitants of districts threatened with invasion had fled from their homes, leaving their crops in the fields, the new-comers collected these crops, more or less damaged, but still fit for

use, and it is supposed that considerable quantities of cereals thus recovered are still unconsumed. It is generally considered, therefore, that large stocks of cereals exist in the country, especially in the Adrianople *villet*, and this supposition is strengthened by the fact that long before the country fell into the power of the Russians exportation not only to Europe but even to the Capital was prohibited.

The districts of Asia Minor which supply cargoes of cereals for Europe are comprised within the *villets* of Angora, Konia, Castamouni, Sivas, and Adana. The cereals in these districts were in 1876 average crops, and were rather better than average in 1877, with the exception of those of the Adana province, which were very small, hardly being sufficient for local requirements. The Asia Minor trade was seriously affected by the war, although not in so direct a manner as that of Roumelia. Cereals and other goods are retained in the interior for want of beasts of burden, the authorities having requisitioned them for the requirements of the armies of Asia. It has not unfrequently happened that camels, mules, and horses, while in the employ of merchants and conveying goods to the sea-coast, have been so requisitioned, the loads being left on the road. As the carriers were therefore exposed to lose their pay when employed for commerce, and as they received small remuneration from Government—as, further, when once impressed into the service they are forcibly detained for an indefinite time, they have long since quitted the districts where they were accustomed to find employment and have fled to parts of the country furthest from the seat of war; merchants, therefore, must await a return to the normal condition of affairs before they will be able to transport their property to the shipping ports.

With regard to the prospects of the current year 1878, the opinion of well-informed persons is that in Roumelia a greater extent of land has been sown in autumn, and is being still sown, than would be considered possible under conditions of war and anarchy, and in Anatolia it is said that the lack of hands absorbed by the conscription will be less felt than one would imagine, provided the weather prove favourable to the crops. It is estimated that the men who have remained at home, assisted by the old, the women, and the children, are cultivating nearly the average extent of land, and no great falling-off in yield need be apprehended if the rains are propitious, and we may predict results by the returns of the opium crop of last year. It was confidently asserted that this crop would be nearly lost for want of sufficient hands to gather it; nevertheless, the peasants, assisted by their families, made an extraordinary effort, and the yield turned out to be unusually productive. We trust, for the sake of the inhabitants, that these anticipations may be realised in their fullest extent.

AGRICULTURAL SOCIETIES.

CHESHIRE.

The thirty-seventh annual exhibition of this society was opened on Aug. 23 in Toft Park, Knutsford. The weather was miserable—rain falling all day. Knutsford is inconveniently situated, and the train arrangements were defective. In addition to this an alteration in arrangements for the show, by which cattle and horned stock are exhibited on the second day, materially affected the attendance. The great attraction of Friday's show was the cheese classes. These were not numerous, but this is in a degree accounted for from the circumstance that the date of the show is fully a month too early for the representative show cheese, as the best Cheshire makes, which are those of June and July, are not sufficiently ripe for exhibition. The Prize Dairy cheese, exhibited by Mrs. Williamson, Nantwich, was extraordinarily ripe for the season of the year. Mr. Podmore, Middlewick, secured the first prize for dairy new cheeses not less than 20 and not more than 50 pounds in weight; Mr. Midlington, Macclesfield, took first prize for dairy cheese averaging above 10lb. each; and Mr. Barry, Northwich, first prize for dairy cheeses not on an average exceeding 50lb. Butter, as a class, was small, but the quality particularly rich, Mr. Dawson Hargrave securing premier honours for six full dishes. The judges for farms and cottages sent in their awards, and they gave first prize for resident tenant, principally dependant on farming, and farming not less than 150 acres, to Mr. Henry Sanderson, Wallerscote, Northwich; and the second prize, for farms not exceeding 100 acres, to Mr. Charles Thornhill, Sandbach. There were prizes given to agricultural labourers for the best kept cottages, &c. There were twenty-nine stands only in the implement class, but most of the great makers were represented. A luncheon was held in the show ground during the afternoon, presided over by Lord De Tabley, the president of the society.

The show of horses, cattle, sheep, and pigs held on August 24 was inferior to previous years' exhibitions. In open classes the Duke of Westminster took the first prize for hunter stallions, and the Stand Stud Company first for cart stallions. Lieutenant-Colonel Cornwall Leigh was first in the class for young cart stallions, and Mr. Wilson, Coddington, took the Duke of Westminster's prize for brood mares for hunters. In the open class for cattle the Stand Stud Company took the prize for old Shorthorn bulls and for Shorthorn cows. Mr. Ackers Painswick, Gloucestershire, took the first prize for Shorthorn heifers. Mr. Ackers was also successful in the pig class, along with Sir Philip Egerton. All the prizes for sheep went to Mr. Cooke and Mr. Bowdage Mold, who showed some really magnificent animals. In the class restricted to tenant farmers in the county there was a moderate show of cattle, of which the principal feature was the bull class. There was also a good show of horses, especially agricultural horses.

DURHAM.

The thirty-eighth annual show of the Durham County Agricultural Society was held at South Shields, on August 21 and 22. The show was favoured with delightful weather, and the occasion being one of rare occurrence to the inhabitants, there was an immense attendance from noon until the close of the show in the evening.

The entries made a total, exclusive of implements, of 857, an increase of upwards of 300 on those of West Hartlepool Show last year. There were: cattle, 97;

sheep, 37; horses, 248; pigs, 3; dogs, 197; poultry, 89; pigeons, 127; rabbits and cats, 24. The prizes amounted in value to £1,100, being an increase of £400 on the premiums of last year, and included 18 cups of the value of £350.

The Alderney and Guernsey class was the first to be brought before the judges, about ten o'clock. There were only two shown, one of the three entered being absent. The first prize was awarded to a dun Alderney, owned by Mr. J. Graham, Beech House, Whickham. There were only two absentees from the class of dairy cows, which were an excellent lot, and occupied the judges over half an hour. The first prize and cup was deservedly won by May Bloomer, a six-year-old, belonging to Mr. Henderson, Aycliffe, Darlington. In the class of dairy cows, open to tenant farmers, resident in East Chester Ward, three were entered and shown, and the first prize (a five guinea cup and £6) was awarded to a five-year-old, exhibited by Mr. R. Dryden, Harton, South Shields. The fat cattle, of which 10 out of an entry of 13 appeared, included some very fine beasts, and altogether made a splendid show. The first prize, a 10-guinea cup, from the butchers of South Shields, and £5, was won by a two-year-old belonging to Mr. R. Jaycock, Winkton; and the second prize was gained by a three-year-old cross-bred bullock, owned by Mr. T. Gray, Spital Hill, Morpeth.

A long delay took place before the Shorthorn cattle were judged, and it was after two o'clock when the aged bulls were brought into the ring. In that class there were ten entries, but half of the number were absent. The celebrated prize winner Sir Arthur Ingram was at once set aside for first honour, and the other places then lay between Mr. Handley's Royal Irwin, Mr. Brown's famous Pioneer, and the no less celebrated Duke of Chambergh. After a few minutes, deliberation, the second place was assigned to Mr. Handley's fine animal, and Pioneer came in third; Mr. Mitchell's beautiful roan not receiving a place. There was only one absentee from the yearling class of bulls, of which there were eight entered. They were a very fine lot indeed, and gave the judges some trouble. There could be little question as to the justice of assigning the first position to Mr. Handley's St. Vincent. He is a son of Sir Arthur Windsor. At the Highland Society's Show at Dumfries the other week he took precedence of about a dozen superior yearlings. The Duke of Northumberland's Snowdrift, a white one of Fitz Rowland's numerous and splendid progeny, was placed second. He is well made, evenly fleshed, has a good carriage, and altogether promises well. He was first prize winner at the Coquetdale Show at Morpeth. Half-a-dozen bull calves were shown—all that were entered making an appearance. They were all by good sires and looked well. Mr. Browne's Northern Hero took the first prize; and Suliman Pasha, another of Fitz Roland's sons, bred and exhibited by the Duke of Northumberland, which was first at the Northumberland Show, at Alnwick, was placed second; a roan son of Alfred the Great shown by Mr. Handley being commended. The three first prize bulls—Sir Arthur Ingram, Lord St. Vincent, and Northern Hero—were then brought into the ring to compete for the silver cup value 20 guineas presented by the Mayor and Corporation of South Shields, for the best Shorthorn bull in the yard. Without much hesitation the judges gave the cup to Mr. Linton's bull. There was an excellent, though not very large, show of cows. The two-year-old heifer class was represented by only

wo animals. Half a dozen yearling heifers (all that was entered) appeared and made an excellent show. The four bulls shown in the Durham County tenant farmers' section were a very creditable show. Mr. E. Young, Bromholme, Chester-le-Street, gained the first prize (a silver cup and £10) with his British Prince. Some good cows and heifers were also exhibited in the same section, the winners being Mr. J. Vickers, Mown Meadows, Crook; 30, E. J. Weighman, North Ford; and Mr. W. Nimmo, Castle Eden.

The horses proved, as we expected, a great feature of the show. The animals exhibited were nearly all agricultural horses, and as a whole they were as fine a show as could possibly have been seen. In the class for agricultural brood mares and foals the Marquis of Londonderry carried off first honours—a cup value 10 guineas and £15—with a five-year-old by Mr John Thompson's (Baillie Knowe, Kelso) well-known prize winner Kelso Maggie, which, indeed, has seldom been beaten, and which was first at the Northumberland Society's Show at Alnwick, being second; whilst the third prize was awarded to a brown six-year old belonging to Mr J Waddell of Edinburgh, who purchased the animal at the Northumberland Society's Show last year, at the very high figure of 1,000 guineas. This was an exceedingly good class, and the judges had considerable difficulty in deciding as to which animals they should give the awards. The class for draught mares was first-class, the first prize, a cup value ten guineas and £15, going to Mr Waddell of Edinburgh. In the class for farm mares and foals, owned by a member of the East Chester Ward Agricultural Association, Mr John Henderson, Horsley Hill, succeeded in obtaining a first prize of a piece of plate value 5 guineas (presented by Major Briggs), and £3; the second prize being taken by Mr John Potts, Barnston. The latter gentleman also carried off a silver cup, value 5 guineas, given by Colonel Joicy, and £5 for the best pair of draught horses, belonging to a tenant farmer in the county of Durham, as well as a piece of plate (worth 5 gs.) presented by Major Briggs, and £4 for a pair of farm horses owned by a member of the East Chester Ward Agricultural Association. Mr. Waddell carried off a cup, value 5 gs. presented by Mr. Matthew Wood, and £5 for a pair of dray or relay horses, the Harton Coal Company taking second honours. In the agricultural classes, the Marquis of Londonderry was awarded first prize for a three-year-old filly, second for a three year old gelding, and a silver cup, value 10 gs, given by the grocers of South Shields, as well as a silver cup, value 5 gs. presented by Ald. Williamson. The Marquis of Londonderry also took first prize for two-year-old geldings. His lordship also won a silver cup value five guineas, presented by Ald. Williamson for a two-year-old gelding or filly, and a five guinea silver cup, presented by Messrs. Day, Son, and Hewitt, London, for yearling geldings or fillies. Mr. John Henderson, Horsley Hill, took first and second prizes for yearling geldings. The Marquis of Londonderry was again first for yearling fillies and for foals.

The sheep, though not numerous, were of superior quality, and included several prize-takers at the leading shows. The show of pigs was almost nil.

LIST OF PRIZES.

JUDGES.—CATTLE, SHEEP, AND PIGS: T. Barber, Spoutly Rise, near Hull; M. Stephenson, Helhasley, Thirsk; W. Parker, Carleton, Penrith. AGRICULTURAL AND RELIABLE HORSES: W. R. Monney, Lowther Newton, Penrith; R. Wade, Darlington; M. Clark. FIELD, HARNESS, RIDING, AND DRIVING CLASSES: J. Stowell, Favendale, Darlington; R. Clark, Lutz Green House, Newcastle-upon-Tyne; R. Wade, Darlington. IMPLEMENTS: T. Scott, Grantley, Ripon; G. Barnett, Washington; T. M. Cleasby, Wilton Grange, Redcar. BUTTER AND EGGS:

Lady Williamson, Mrs. G. May, Mrs. Dale. POULTRY, FIDGONS, RABBITS, AND CATS: Mr. Enoch Hutton, Pilsbury.

CATTLE.

SHORTHORNS.

A silver cup, value 20 guineas, Shorthorn bull.—Prize, W. Linton, Sheriff Hutton, York (Sir Arthur Ingram).

Bulls of any age over two years.—First prize, £15, W. Linton, Sheriff Hutton, York (Sir Arthur Ingram); second, £10, W. Handley, Green Head, Milnthorpe, Westmoreland (Royal Irwin); third, £5, A. H. Browne, Callaly Castle, Alnwick, Northumberland (Pioneer).

Bulls over one and under two years old.—First prize, £15, W. Handley, Green Head, Milnthorpe (Lord St. Vincent); second, £10, Duke of Northumberland, Alnwick (Snowdrift); third, £5, W. Burnip, Duncomb Moor, Haswell (Ushaw Lord).

Bull calves under 12 months old.—First prize, £5, A. H. Browne, Callaly Castle, Alnwick (Northern Hero); second, £2, the Duke of Northumberland, Alnwick Castle (Suliamau Pacha); commended, W. Handley, Green Head, Milnthorpe (Master Harbinger).

A silver cup, value 15 guineas, cow or heifer in the show.—Prize, the Duke of Northumberland, Alnwick Castle (Lady Jane).

Cows in calf or milk.—First prize, £10, H. Fawcett, Old Bramhope, Otley (Maggie Mildred); second, £5, T. H. Hutcheson, Manor House, Catterick (Grateful); third, W. A. Mitchell, Auchmagathle, Keig, White House, Aberdeen (Alma).

Two-year-old heifers, in calf or milk.—First prize, £6, J. Angus, Broomley (Daisy's Gem); second, £3, W. Handley, Green Head, Milnthorpe (Rose Mary).

One-year-old heifer.—First prize, £5, the Duke of Northumberland, Alnwick Castle (Lady Jane); second, £2, J. Angus, Broomley (Gaiety); commended, W. Handley, Greenhead, Milnthorpe (Princess Rose).

Heifer calves, under 12 months.—First prize, £3, T. H. Hutcheson, Manor House (Gainful); second, £1, W. A. Mitchell, Auchmagathle, Keig, Whitehouse, Aberdeen (Almona).

TENANT FARMERS' CATTLE.

Bulls under four years old, belonging to a tenant farmer in the county of Durham.—First prize, a silver cup value five guineas, and £10, E. Young, Broomholme, Chester-le-Street (British Prince); second, £5, W. Burnip, Duncomb Moor, Haswell (Ushaw Lord); third, £2, P. Bastow, Har Mill, Castle Eden (Cherry Blossom).

Cows of any age, belonging to a tenant farmer in the county of Durham.—First prize, a silver cup, value 10 guineas, and £10, W. Nimmo, Castle Eden, Durham (Red Rose); second, £5, J. Vickers, Mown Meadows, Crook (Rose of the Meadows).

Two-year-old heifer, belonging to a tenant farmer in the county of Durham.—First prize, a silver cup, value five guineas, and £5, E. J. Weightman, North Ford (Abbot of St. Albans); second, £3, J. Vickers, Mown Meadows, Crook (Red Rose).

DAIRY COWS.

Alderney or Guernsey cows.—First prize, £5, J. Grabham, Beech House, Wickham, Gateshead; second, £2, J. Scott, Ford Hall, Sunderland.

Cows of any breed for dairy purposes, the property of the exhibitor two months prior to the day of show.—First prize, a silver cup value 10 guineas, and £10, J. Henderson, Aycliffe, Darlington (May Flower); second, £5, A. Bell, Stony Gate; third, £3, J. Bellwood, Northalerton.

Cows of any breed for dairy purposes, belonging to a tenant farmer residing in the district of the East Chester Ward.—First prize, a silver cup value 5 guineas and £6, R. Dryden, Harton, South Shields; second, £4, the Jarrow Chemical Company, Dean's Farm, South Shields.

FAT.

Ox or heifer, fit for the stall.—First prize, a silver cup value 10 guineas and £5, R. Laycock, Winton, Blythdon-on-Tyne; second, £2, T. Gray, St. Leonard's, Spital Hill, Morpeth. Highly commended: R. Laycock.

SHEEP.

LEICESTER OR LONGWOOL.

Rams, two shear or upwards.—First prize, £5, T. H.

Hutchinson, Manor House, Catterick; second, £2, J. and D. Linton, Low Street, Bedale.

Shearing rams.—First prize, £5, and second, £2, T. H. Hutchinson.

A silver cup, value 5 guineas, Border Leicester ram.—Prize, R. Tweedie, The Forest, Catterick.

Border Leicester rams, two shear or upwards.—First prize, £5, and second, £2, R. Tweedie.

Border Leicester shearing rams.—First prize, £5, and second, £2, R. Tweedie. Commended: G. T. Dickinson, Wheelbirks.

A silver cup, value 5 guineas, pen of Leicester ewes.—Prize, J. Green and Son, Low House Farm.

Pen of five Leicester ewes.—First prize, £3, J. Green and Son; second, £1, J. and D. Linton.

Pen of five Border Leicester ewe.—First prize, £3, and second, £1, R. Tweedie.

A silver cup, value 5 guineas, gimmers.—Prize, J. and D. Linton.

Pen of five Leicester gimmers.—First prize, £2, J. and D. Linton; second, £1, J. Green and Son. Commended: T. Stiekland, Thirsk.

Border Leicester gimmers.—First prize, £3, and second, £1, R. Tweedie.

A silver cup, value 5 guineas, wethers or gimmers owned by tenant farmers.—Prize, R. H. Cleasby, Brownside House, Durham.

Pen of high-bred shearing wethers, of any distinct cross, belonging to a tenant farmer in the county of Durham.—First prize, £3, R. H. Cleasby; second, £1, J. Henderson, Horsley Hill, South Shields.

Pen of five H.B. shearing gimmers, of any distinct cross, belonging to a tenant farmer of the county of Durham.—Prize, £3, J. Henderson, Horsley Hill.

PIGS.

Sows, small breed.—Prize, £3, Messrs. Finny and Daws, Winton, Blaydon-on-Tyne.

Best pig, the property of a cottager, whose rent does not exceed £10.—First prize, £2, J. Wood, 21, High Street, Sunderland; second, 15s., R. Johnson, 67, Maxwell Street, South Shields.

HORSES.

AGRICULTURAL BROOD MARES AND FOALS.

Mares for breeding draught horses, with foal at foot.—First prize, a silver cup, value 10 guineas, and £15, Marquis of Londonderry, Wynyard Park, Stockton; second, £10, J. Thompson, Bailie Knowe, Kelso (Maggie); third, £5, J. Waddell, St. Andrew Square, Edinburgh.

Draught mares, not having produced a foal in 1878, but to produce a living foal in 1879.—First prize, a silver cup, value 10 guineas, and £15, J. Waddell, Edinburgh; second, £10, C. W. Wilson, High Park, Kendal (Mrs. Muir); third, £5, E. J. Weightman, North Ford (Damsel).

Farm mares and foals, owned by a member of the East Chester Ward Agricultural Association.—First prize, a piece of plate, value 5 guineas, and £3, J. Henderson, Horsley Hill (Damsel); second, £1, J. Potts, Barnston (Jip).

DRAUGHT.

Pair of draught horses, either sex, belonging to a tenant-farmer in the county of Durham.—First prize, a silver cup, value 5 guineas, the gift of the High Sheriff of the county of Durham (Colonel Joicey), J. Potts, Barnston (Jip and Dick); second, £3, J. Henderson, Horsley (Damsel and Jolly).

Pair of farm horses, mares owned by a member of the East Chester Ward Agricultural Association to have a preference.—First prize, piece of plate, value 5 guineas, the gift of Major Briggs, Hyton Castle, and £4, J. Potts, Barnston; second, £1, J. Henderson, Horsley Hill.

Pair of dray or rolley horses, either sex, exhibited with harness.—First prize, a silver cup, value 5 guineas, the gift of Matthew Wood, Esq., and £5, J. Waddell, Edinburgh; second, £3, Harton Coal Company, Harton Collieries, South Shields.

Dray or rolley horses, either sex, exhibited with harness.—First prize, £3, W. Morrison, Eusham, Gateshead; second, £1, J. Waddell, Edinburgh.

AGRICULTURAL.

Four years old mares or geldings, belonging to a tenant-farmer in the county of Durham.—First prize, a silver cup,

value 5 guineas, and £5, W. Love, Redgate House, second, £3, J. Henderson, Horsley Hill (Jolly).

A special prize of a silver cup, value 10 guineas, agricultural colt or filly, Marquis of Londonderry.

A silver cup, value 5 guineas, agricultural three-year-old gelding or filly, Marquis of Londonderry.

Three year old geldings.—First prize, £5, J. Potts, Barnston, Washington (Dick); second, £2, Marquis of Londonderry.

Three year old fillies.—First prize, £5, Marquis of Londonderry; second, £5, Messrs. Spiggon, Nafferton.

A silver cup, value 5 guineas.—Two year old gelding or filly.—Marquis of Londonderry.

Two year old gelding.—First prize, £5, Marquis of Londonderry; second, £2, Major Briggs, Hyton Castle (Barker).

Two year old fillies.—First prize, £3, Marquis of Londonderry; second, £3, T. Daws, Old Axwell Farm, Wickham, Gateshead (Henty).

A silver cup, value 5 guineas.—Yearling gelding or filly.—Marquis of Londonderry.

Yearling geldings.—First prize, £4, and second, £2, J. Henderson, Horsley Hill.

Yearling fillies.—First prize, £5, Marquis of Londonderry second, J. Henderson.

Foals, colts, and fillies, with a yearling of 2s. 6d. each.—First prize, sweepstakes, and £2, Marquis of Londonderry; second, £1, Messrs. Spiggon.

LEAPING.

Horses of any age, mares, or geldings, equal to 12 leap over the country and to carry not less than 1000, and over the leaps.—First prize, a silver cup, value 10s., and £15, Messrs. King and Gillespie, Newcastle (Spec); second, £10, R. Applegarth, Farlows, Bishop Middleham (Carbuncle); third, £5, E. Walker, Bridge-street, Peterborough, Northampton (Ravely).

BROOD MARES AND FOALS.

Mares for breeding hunters, with foal at foot.—First prize, a silver cup, value 5 guineas and £10, R. F. Trenholme, Butterwick, Sedghead (Countess); second, £5, T. Bradley, Newton, Great Ayton, Yorks.

Mares for breeding roadsters, with foal at foot.—First prize, a silver cup, value 5 guineas and £10, R. Martin, Scoreby, Flaxton, York (Lady Mary); second, £5, R. Brydon, The Dene, Seaham Harbour (Flora).

Mares for breeding harness horses, with foal at foot.—First prize, a silver cup and £10, J. Kirby, Burton Fields, Stamford Bridge, York (Cleaveland Lady); second, £5, H. Herdman, High Horton, Cramlington, Northumberland (Daisy).

HUNTING.

Hunter.—A silver cup, value 15 guineas, J. L. D. Jefferson, York (Golden Drop).

Hunters, five years old and upwards, mares or geldings.—First prize, £15, and second, £5, Sir W. Eden, Windlestone Hall (Herdman and Castania). Commended: W. Briggs, Moorlands, Sunderland (Falcon).

Hunters, four years old, mares or geldings.—First prize, £10, J. L. D. Jefferson, Thicket Priory, York (Golden Drop); second, £5, J. O. Stephenson, Norton, Stockton-on-Tees.

Hunters, exceeding four years old, mares or geldings, belonging to a tenant farmer in the county of Durham.—First prize, silver cup, value 5 guineas, and £10, A. Stephenson, Hart Manor, Castle Eden (Fete Day); second, £5, J. Pallister, Hardwick, Castle Eden (Denelome).

Hunting gelding or filly in Classes 52, 53, 54, and 55.—A silver cup, value 5 guineas, C. Emmerson, Low Dinsdale, Darlington.

Three-year-old hunting geldings.—Second prize, £2, W. Graham, Lasenby, Redcar.

Three-year-old hunting fillies.—Second prize, £2, P. Hagg's, Cleadon Park, South Shields.

Two-year-old hunting geldings.—First prize, £4, C. Emmerson, Low Dinsdale, Darlington; second, £2, W. Duglass, Jarrow.

Two-year-old hunting fillies.—First prize, £4, J. Hedley, Bellingham, Northumberland; second, £2, J. Barnes Sunnyside Farm, South Shields.

HARNESSES.

Harness gelding or filly in Classe, 56, 57, 58, 59.—A silver cup, value 5 guineas, T. Plummer, Birdforth, Easingwold, Yorks.

Three-year-old harness gelding.—Second prize, £2, T. Plummer, Birdforth, Easingwold, Yorks.

Three-year-old harness filly.—Second prize, £2, Marquis of Londonderry.

RIDING.

Gentleman's col, mare or gelding, not exceeding seven years old, and not above 15 hands; equal to 12 stone on the saddle.—First prize, silver cup, value 5 guineas, and £5, C. W. Wilson, High Park, Kendal (Queen of the Fairies); second, £3, J. L. D. Jefferson, Thicket Priory, York (Firefly); third, J. Pallister, Hardwick, Castle Eden (The Duchess).

Gentleman's hack, mares or geldings, not exceeding 15½ hands.—First prize, silver cup, value 10 guineas, and £5, C. W. Wilson, High Park, Kendal (Lady Wilton); second, £3, J. Merryweather, Guisborough, Yorkshire. Highly commended: Major Briggs, Hylton Castle (Tom Peel).

Lady's hackney, mare or gelding.—First prize, £5, and silver cup, value 5 guineas, C. W. Wilson, High Park, Kendal (Fadella); second, £2, G. May, Simonside Hall, South Shields (La Favorita). Highly commended: J. W. Foster, Southburn, Driffield, Yorks (Interest).

PONIES.

Mares or geldings not exceeding 14 hands.—First prize, £3 and silver cup value 5 guineas, F. Holsworth, Shipton, Market Weighton (The Swell); second, £2, W. Askew, Ash Meadow, Arnside (Lady Isabel); third, W. Forster, Grove Villas, Pontefract, Yorks (Young Bosco).

Mares or geldings not exceeding 12 hands.—First prize, £3 and silver cup value 5 guineas, W. M. Angus, Saltwell Hall, Gateshead-on-Tyne (Toby); second, £1, J. W. Pease, Hutton Hall, Guisborough; third, Master W. T. Wallis, Old Ridley, Stocksfield-on-Tyne (Donald).

DRIVING.

Pair of carriage horses (either sex) to be driven in harness.—First prize, £6 and silver cup value 10 guineas, J. W. Pease, Hutton Hall, Guisborough (McGregor and Melvor); second, £4, M. Wiener, Sunderland (Great Heart and May).

Single harness (either sex).—First prize, £5 and silver cup value 5 guineas, J. B. Hodgkin, Elm Bridge, Darlington (Cumberland); second, £2, W. Askew, Ash Meadow, Arnside (Countess); third, J. Coxon, Barmstone, Washington.

Cobs or ponies not exceeding 14 hands, to be shown in trap.—First prize, £5 and silver cup value 5 guineas, W. Askew, Ash Meadow (Lady Isabel); second, £2, W. Forster, Grove Villas, Pontefract (Young Bosco).

LEAPING.

Mares or geldings of any age that shall leap the artificial fences best, and to carry not less than 10st.—First prize, a silver cup value 10 guineas and £10, H. Rastall, Ruswarp, Whitby, Yorkshire (Maid of the Hills); second, £5, R. Gibson, Houghton House, Toft Hill, Bishop Auckland (Gipsy Queen); commended, W. Atkinson, Waldron House (Miss Whip).

Mares or geldings not exceeding 14 hands high and to carry not less than 8st over the leaps.—First prize, a silver cup value 5 guineas and £5, W. Atkinson, Waldron House, Bishop Auckland (Miss Whip); second, £3, J. Harris, Jarrow, (Thos. Cawthorn's Hobson Lad).

DAIRY PRODUCE.

Four pounds of butter in half-pound prints or rolls.—First prize, piece of plate value 5 guineas and £1 5s, Mrs S. Dodd Wallin Hill, Rowlands Gill; second, 10s, Mrs J. Henderson, Horsley Hill; third, 5s., Mrs Usher, Harton, South Shields.

Four pounds of butter, one pound to be shown in half-pound prints, three pounds in not less than six fancy devices.—First prize, piece of plate value 5 guineas and £15, Mrs. J. Henderson, Horsley Hill; second, 10s., M. E. Edgwell, Wolviston, Stockton; third, Mrs J. A. Waller, Amerside, Law, Chatton.

Basket of hens' eggs, not less than one dozen.—First prize, 10s., Mrs S. Dodd, Wallin Hill; second, 7s. 6d., Mrs Usher, Harton, South Shields; third, 2s. 6d., Mrs Batey, Moor House Leamside.—Abridged from *The Newcastle Courant*.

NORTHUMBERLAND.

The annual show of the Northumberland Society was held on August 9th in the grounds of Alwrick Castle, granted for the occasion by the Duke of Northumberland. There was a falling off in the number of entries as com-

pared with those at the show at Newcastle last year, which was an unusually successful one.

The following comparative statement will show the total decrease in the number of entries this year compared with last:—

	1878.	1877.
Cattle	107	108
Sheep	90	158
Horses	197	240
Pigs	10	46
Shepherds' dogs.....	83	54
Wood	6	—
Poultry	97	79
Implements	430	987
	1,020	1,672

The exhibition, however, was a successful one, the quality of the stock being generally quite up to an average. One feature of the Show which detracted somewhat from its interest was the unusual number of absentees. In the class for bulls above three years of age, for instance, only about half the entries put in an appearance. Sir Arthur Ingram took the first prize in this class, Rear Admiral being second, and Mr. Mitchell's Duke of Chambergh third. In the next class, for bulls between two and three years of age, only four competitors appeared, Kalumazoo, the Royal winner, being one of the absentees. There was a good lot of cows, and the show of sheep, although not large, was a pretty good one. The agricultural horses were a fine lot; but here again the absentees were numerous. There was a capital show of hunters.

PRIZE LIST.

JUDGES.—CATTLE.—Shorthorns; J. Deans, J. C. Toppin, and E. Cruickshank. Channel Isles and Ayrshire: J. Patten and A. Allen. SHEEP.—Border Leicesters: J. Clark, W. C. Thompson, and J. Dickenson. Cheviots and Blackfaced Mountain: W. Henderson, H. Thompson, and J. Hedley. HORSES.—Agricultural Purposes: J. Turnbull, R. Brydon, and J. Henderson. For the Field: G. Bolam, G. Dove, and R. Calder. Hackneys and Ponies: W. Turnbull, W. Forster, jun., and A. Calder. PIGS.—J. Huggup and F. Jackson. WOOL.—P. Hall.

CATTLE.

SHORTHORNS.

Bull, above three and under seven years.—First prize, £20, W. Lintott; second, £10, T. Willis, jun.; third, £5, W. A. Mitchell.

Bull, above two and under three years.—First prize, £15, J. Elwell; second, £6, H. Richardson; third, £3, T. Wilson.

Bull, above one and under two years.—First prize, £15, T. Willis, jun.; second, £6, Duke of Northumberland; third, £3, Duke of Northumberland.

Bull calf, under twelve months.—First prize, £3, Duke of Northumberland; second, £2, Lord Polwarth.

Family of Shorthorns, to consist of cow of any age and two or more of her offspring.—First prize, £20, Marquis of Exeter; second, £10, J. Angus.

Cow.—First prize, £15, T. H. Hutchinson; second, £6, J. J. Sharp; third, £3, W. A. Mitchell.

Heifer, above two and under three years.—First prize, £10, G. A. Ashby; second, £5, Sir W. C. Trevelyan, Bart.

Heifer, above one and under two years.—First prize, £7, Duke of Northumberland; second, £3, Duke of Northumberland.

Heifer calf, under twelve months.—First prize, £3, T. H. Hutchinson; second, £2, Sir J. Swinburne, Bart.

CHANNEL ISLES.

Cow or heifer, any age.—First prize, £6, Sir J. Marjoribanks; second, £3, Sir M. W. Ridley, Bart.; third, £1, Sir G. Grey, Bart.

AYRSHIRE.

Cow or heifer, any age.—First prize, £6, Duke of Buccleuch; second, £3, Duke of Buccleuch; third, £1, Duke of Buccleuch.

SHEEP.

Border Leicester ram, of any age.—First prize, £10, and cup, J. Nisbett; second, £5, A. Smith.

Shearling ram.—First prize, £15, R. Fender; second, £8, J. S. Foster.

Pen of five ewes.—First prize, £5, J. Nisbett; second, £3, R. Calder.

Pen of five gimmers.—First prize, £5, R. Tweedie; second, £3, J. Nisbett.

Border Leicester ewe and twin lambs.—Prize, silver cup, value £5 5s., G. T. Dickinson.

Cheviot ram, of any age above two shear.—First prize, £6, T. Elliot; second, £4, T. Elliot.

Two shear rams.—First prize, £6, J. Robson, jun.; second, £4, T. Elliot.

Shearling ram.—First prize, £6, T. Elliot; second, £4, T. Elliot.

Pen of five ewes.—First prize, £4, T. Elliot; second, £2, T. Elliot.

Pen of five gimmers.—First prize, £4, J. Robson, jun.; second, £2, T. Elliot.

Blackfaced mountain ram, above two-shear.—First prize, £6, R. Thornton; second, £4, J. McCracken.

Ram, two-shear.—First prize, £4, J. McCracken; second, £2, J. McCracken.

Pen of five ewes or gimmers.—First prize, £4, J. McCracken; second, £2, J. McCracken.

HORSES.

AGRICULTURAL.

Brood mare, with foal at foot.—First prize, £10, J. Thompson (Kelso Meggie); second, £5, B. and G. Spraggon.

Brood mare, in foal at time of show.—First prize, £10, J. Waddell (Jessie); second, £5, T. Hall (Janet).

Three-year-old gelding or filly.—First prize, £10, J. Waddell (Melitta); second, £4, J. Laycock.

Two-year-old gelding or filly.—First prize, £8, J. Robertson, jun. (Bet); second, £4, T. Laws (Beauty).

One-year-old colt, gelding, or filly.—First prize, £8, J. Robertson (Jean); second, £4, G. Laurie.

Pair of geldings or mares.—First prize, silver cup, value £10, J. Thompson (Darling and Gipsy); second, £4, J. Waddell (Harry and Willie).

FOR THE FIELD.

Brood mare, with foal at foot, or in foal at the time of show.—First prize, silver cup, value £10, and £25, G. Leighton (Snowflake); second, £5, G. F. Statter (Lady Lyunc); third, £2, J. B. Lee (Flying Seud).

Three-year-old gelding.—First prize, £5, L. C. Chrisp; second, £3, E. Lawson (Major).

Three-year-old filly.—First prize, £5, J. Dand (Miss Jane); second, £3, T. Parker (Lollypop).

Two-year-old gelding.—First prize, £5, J. Chrisp (The Beden); second, £3, J. Chrisp (The Lark).

Two-year-old filly.—First prize, £5 Rev. C. Thorpe (Surity); second, F. A. Thew (Nell).

Yearling colt or gelding.—First prize, £5, Mr. Snowball (Eolus); second, £3, Mr. Wilson (Honey Dew).

Yearling filly.—First prize, £5, Lord A. Percy; second, £3, Mr. Dand (Bird's Eye).

Hunter, of any age.—First prize, silver cup, value 25 gs., and one-half of a sweepstakes, Mr. Blencowe (Old Boy); second, £5, and one-half of a sweepstakes, Mr. Ord (Blackthorn).

Hunter, five and not exceeding seven years, qualified to carry at least 15 st. with hounds.—First prize, silver cup, value £25, and one-half of a sweepstakes, Mr. Booth (Baldersby); second, £5, and one-half of a sweepstakes, Mr. Forster (King John).

Hunter, five and not exceeding seven years, qualified to carry at least 12 st. with hounds.—First prize, silver cup, value £20, and one-half of a sweepstakes, Mr. Legard (Black lock); second, £5, and one-half of a sweepstakes, Mr. Snowball (Candidate).

Gelding or mare, four years.—First prize, silver cup, value £20, and one-half of a sweepstakes, Mr. Durrington-Jefferson (Golden Drop); second, £5, and one-half of a sweepstakes, Mr. Jack (Royal Duke).

HACKNEYS.

Gelding or mare, any age, not exceeding 15 hands, and qualified to carry 14 st.—First prize, silver cup, value £20, Mr. Robinson (Charlie II.); second, £5, and a sweepstakes, Mr. Durrington-Jefferson (Firefly).

Mare or gelding, any age, not exceeding 14 2 hands.—First prize, silver cup, value £20, Mr. Blackman (Queen of Fairies); second, £5, and a sweepstakes, Mr. Hollesworth (The Swell).

PONES.

Gelding or mare, any age, not exceeding 13 2 hands.—First prize, silver cup, value 10 gs., and a sweepstakes, Mr. Forster (Young Bosco); second, £4, Mr. G. Maw, jun. (Robin); third, £2, Master Davison (Colin).

Gelding or mare, any age, not exceeding 12 hands.—First prize, silver cup, value £10, Mr. Angus (Toby); second, £4, Mr. Neweomen (Jet Black); third, £2, Mr. Ferguson (Robin).

PIGS.

Boar of the large white breed, any age.—Prize, £3, E. Hodgkinson.

Boar of the small white breed, any age.—First prize, £3, Mr. Spencer; second, £1, Mr. Spencer.

Sow of the large white breed, any age.—Prize, £3, Mr. Hodgkinson.

Sow of the small white breed, any age.—First prize, £3, Mr. Spencer; second, £1, Mr. Spencer.

Pen of three sow pigs of the small breed, any colour, under sixteen weeks old.—Prize, £2, The Earl of Ravensworth.

WOOL.

Five fleeces of Border Leicester wool.—Prize, £2, W. Thompson.

Five fleeces of Cheviot wool.—Prize, £2, G. Thompson.

Five fleeces of blackfaced wool.—Prize, £2, Mr. McCracken.

TIVYSIDE.

The Tivyside Agricultural Show, since its revival some years ago, has been attended with greater success than perhaps any of our country exhibitions of stock. Its latest annual exhibition of cattle, horses, sheep, pigs, donkeys, and butter, which took place August 23, in a field belonging to the proprietor of the Emlun Arms Hotel, Newcastle-Emlun was beyond comparison the best it has ever had. There were over 450 entries, and nearly all the animals entered were brought into the field; but it was not so much in this respect as in the quality of the exhibits that the great improvement of the show was manifested. The judges emphatically declared the stock was equal to that of any local show they had yet visited; and their praise was not confined to a few superior animals to be seen here and there, for in very many classes the quality was pretty even all round, and the number of decidedly inferior animals was comparatively few. Perhaps the greatest advance noticeable was in the quality of the black cattle, but a goodly collection of first rate Shorthorns was also shown. In the horses too, we are glad to say, there was a striking improvement, though several classes in this department have plenty of room for bettering the breed and condition. Among the winners of numerous prizes will be found some names different from those who figured prominently at former shows, and this is a good sign, but in most cases they are familiar to us—Col. Lewis, Clyntew; Mr. D. G. Davies, Cardigan; Mr. Philipps, Giltfachjesty; Mr. Davies, Giffallen; Mrs. A. Lort Phillips; Mr. Owens, Gelligatti; Mr. E. C. L. Fitzwilliams; Mr. Philipps, Carleon; Mrs. Colby, Plynone; Mr. Griffiths, Llwyndyrus; Mr. Jones, Rhydgareddu; Mr. Howells, Wannyrhyddod; Capt. Jones-Parry; Mr. D. Thomas, of Vet, &c. Some of the pigs were of good breed and extremely fat, but these might have been more numerous. We could also have wished to see a larger show of good butter, but indeed that for which prizes were given was of prime quality.—*Carmarthen Journal*.

EAST CUMBERLAND.

The annual show of the East Cumberland Agricultural Society was held at Carlisle, on August 16, on the show ground, adjoining Chatsworth Square.

There was a smaller show of horses for road or field than last year, but the quality was in most of the classes quite as good. Harness horses were not so numerous. The feature of

the horse section was, as usual, the turn out of agricultural specimens. Most of the exhibitors that took the highest honours last year were again forward. Hackneys were fair, and included some prize-takers.

The show in cattle was not large, but the quality was very fair. The Shorthorn bulls were a good lot, the old ones being a much more numerous show than usual, five being exhibited. "Royal Irwin," the winner, is well-known in show-yards. Among the females the competition was somewhat confined, but it was good, and the dairy cows, which are a feature of this show, were also up to the mark of last year. The Galloways were a very good lot, but included a few inferior beasts. The bulls were good in all classes, perhaps with one exception. The three bulls in the aged class were all shown in the two-year-olds last year, and the positions of the winners were reversed as they stood at Dumfries. The cows were a good lot, but the two and three-year-old heifers might have been better. The sheep were a very fair lot, but the number of competitors as usual, was limited. The pigs were a very good lot, and there was a large show of implements. — *Cumberland Advertiser.*

PENISTONE.

The twenty-fifth annual exhibition in connection with this society was held on Aug. 22, and *The Doncaster Gazette* says that in point of numbers of entries and the quality of the stock exhibited, proved the best that has taken place. The stock, as usual, included cattle, sheep, pigs, horses, poultry, and dogs, and the entries numbered 672, the largest ever known. Of these 49 were included in the divisions for cattle 68 in those for sheep, 39 in those for pigs, 58 in those for horses, 214 in those for poultry, 23 in those for pigeons, 30 in those for rabbits, 172 in those for dogs, and 11 in those for agricultural implements and carts. Though the cattle were not so numerous as in 1877 they were a better lot, and the latter remark also applies to sheep, which this year was the largest show seen. There were also more pigs, but in horses there was a slight falling off, in two classes—one of them being hunters—there being no entries whatever.

THE IRISH AGRICULTURAL SOCIETY

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I congratulate you on the admirable rebuke which your reporter has given to incompetent rulers of the Irish Royal Agricultural Society. Irish papers would not publish such a stinging report. Suffering seedsmen's clerks, and manure agents and vendors on the Council Board, and dashing about the show yard in flaming ribbons, and assuming airs of importance, for years past has been so disgusting as to prevent the true agriculturists from joining the Society. Judges are not at all times properly chosen, and the fact of only two being appointed to each class on the last occasion, and but one for Kerry cattle is such an absurdity as to cause much disgust. This has been overlooked by your reporter, as also the fact of the Shropshire Downs being "sculptured," as Mr. Beale Browne long ago called the false shearing, watering, colouring, battledoring, and trimming, so as to felt the wool they are almost weekly subjected to, though he came heavily down on H.R.H. the Prince of Wales's Southdowns, which were not a bit more "sculptured" than the Shropshire Downs were; and this is done and winked at against the rules which forbid any artificial treatment, and which the judges lack the courage to disqualify them for, although shearing judges were appointed at the last show.

Your reporter has been misinformed as to this show at Balls-bridge being an amalgamated one. It was purely and simply the show of the Irish Royal, with the Horse Show added, by a mutual agreement between the Royal Dublin and Royal Irish Agricultural Societies. The origin of this Horse Show was the result of an observation

made by the late Sir John Power, of Kilfane, who was master of the famous Kilkenny fox hounds, at the banquet of the Irish Royal Agricultural Society, when the show was held in Kilkenny in 1863, respecting the deterioration of Irish-bred horses. A subscription was soon after entered into, and the first show was held in April, 1864, under the auspices of the Royal Agricultural Society of Ireland, on the premises of the Royal Dublin Society, when 370 horses were entered. As the result of some disputes as to the prizes awarded, there was no show in 1865; but in consequence of the Cattle Plague raging in England and Scotland, and in a part of Ireland, there were no cattle shows, and in order to fill up the gap another house show was organised and subscribed for, which took place in September of that year, under the auspices of the R. A. Society, and in the premises of the R. D. Society as before, the numbers being 303. This show was such a great financial success, that the R. Dublin Society insisted on holding future horse shows for their own benefit, although their own officers were employed and liberally paid for their services. The dispute ended in a sort of compromise, viz., that when the Irish R. A. Society held its show in or near Dublin the horse shows should be exclusively theirs, but at all other times the horse show should be the property of the R. Dublin Society. Therefore the Irish Royal having held its annual show in Stephens-green, Dublin, the horse show was held in combination with it, and again in 1871, at Balls-bridge, where it was held this year (1878), and in each year between the years above named, the horse shows were held by the R. D. Society in their premises, but not as their show, but under the old name, as the Great National Horse Show, by which they filled their own coffers and liberally lined the pockets of their own officials, of which there is no official account made public.

The R. D. Society neither had nor have any prescriptive right to hold any show at all, by either their original or supplementary charter. The spring show and agricultural museum originated from a letter addressed to the R. D. Society by the then Marquis of Downshire, and the first show was held in 1831, to fill the vacuum left on the dissolution of "The Farming Society of Ireland" in 1828, which commenced its labours in 1800, and to which Ireland is to this day chiefly indebted for the introduction of the best breeds of cattle, sheep and swine.

The records of the Royal Dublin Society, show that for the last century they ignored agriculture and took to the manufacture of woollen and silk goods, and opened shops for their sale, and saving the spring cattle shows and the winter green crop shows, and fat cattle, which are of much later date have the spring show, the Society have done nothing for Irish agriculture for over a century. During the latter half of the past century the Dublin Society offered and paid premiums for bog and mountain reclamation, which for twelve years brought under cultivation about 18,000 Irish acres at a cost for premiums of over £12,000. The Society closed the account there, and applied their means to the manufacture and sale of soft goods, and the last Act of the Irish Parliament voted them £15,000, £3,000 of which were for a veterinary institution and reports on agriculture; 24 counties were reported on out of 32, and all that was done as to the veterinary institution was the appointment of a professor and an assistant. The former was badly paid, and ended his days by self-destruction. The assistant was the late Mr. Watts, who made a fortune by severing himself from the imbecile Society, which for the past century has done anything but encourage "husbandry and the useful arts." It is high time, therefore, that it should be extinct.

I am, Sir, &c.,

AN IRISH JOURNALIST.

AGRICULTURAL SOCIETIES.

ROYAL OF ENGLAND.

MONTHLY COUNCIL, Wednesday, July 31st, 1878.
Present—Lord Skelmersdale (in the chair), the Earl of Powis, Lord Vernon, the Hon. W. Egerton, M.P., Sir Watkin W. Wynne, Bart., M.P., Mr. Arkwright, Mr. Aveling, Mr. Cantrell, Mr. J. Howard, Colonel Kingscote, M.P., Mr. Leeds, Mr. McIntosh, Mr. Martin, Mr. Odams, Mr. Randell, Mr. Ransome, Mr. Russell, Mr. Sheraton, Mr. Shuttleworth, Mr. Torr, M.P., Mr. G. Turner, Mr. Wells, Mr. Whitehead, Mr. Wise, Prof. Simonds, and Dr. Voelcker.

The following new members were elected:—

Beach, Joseph, of The Hattons, Brewood, Penkridge, Stafford.
Buchanan, Walter Cross, of Sunnyside, Portwood, Southampton.
Bullock, James, of Hoo Hall, Preston, Wellington, Salop.
Burnaby, Colonel E. S., Bagerave Hall, Leicester.
Duke, Lewis William, of Blakenhurst, Arundel.
Edwards, William, of 27, The Walk, Cardiff.
Ford, James, of Wraxall Court, Nailsea.
Fowle, William Hugh, of Chute Lodge, Andover.
Gibson, Arthur S., of Bulwark Hall, Nottingham.
Harding, Joseph, of Stourton, Bath.
Knowles, R. M., of Colson Bassett Hall, Bingham, Nottingham.
Lilwall, George Hughes, of Erocklands, Fladbury, Pershore.
McClare, J. H., of 115, Cannon Street, London, E.C.
Martin, John Thomas, of Corn Market, Derby.
Mayer, William, of Chaddesden, Derby.
Müller, Frederick, of Bi-hop's Stortford.
Miller, T. B., of Bi-hop's Stortford.
Parker, Thomas, of Edgbaston, Birmingham.
Peel, Thomas Park, of Sun-ome Wood, Oxtou, Southwell.
Smith, Butler, of The Grove, Cropwell Butler, Bingham, Nottingham.
Thomas, George, of The Heath, Cardiff.
Trendell, E. J., of Abingdon.
Trousell, W. B. P., of Anghrim Park, Athenry, Ireland.
Walker, John Smith, of Knightwick, Worcester.
Wilder, John, of Reading.
Willis, Joseph Deans, of Bpton, Codford, Wilts.
Wood, John B., of The Hall, Wirksworth, Derby.

FINANCE.

Mr. RANDELL 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 30 was £2,347 17s., and at the Bristol bankers £11,038 6s. 11d., the sum of £3,000 remaining on deposit.

JOURNAL.

LORD VERNON having reported that the sum of £500 had been apportioned by the Mansion House Committee, to be offered as prizes for sewage and other farms, and presented the recommendations of the Committee in reference thereto, it was moved by Lord Vernon, seconded by Mr. Aveling, and carried unanimously, that the area for market-garden farms should include the five metropolitan counties (viz., Kent, Surrey, Middlesex, Hertford, and Essex), and such portions of other counties as are within 50 miles of the Mansion House. It was further moved by Mr. Cantrell, seconded by Mr. James Howard, and carried unanimously, that the market-garden district should be within a radius of 20 miles from the Mansion House. The report of the Committee was then adopted as follows:—

That prizes be offered in the following sections and classes:—

SECTION I.—Sewage Farms in England and Wales.

Class 1.—For the best-managed farm utilising the sewage of not more than 20,000 people, a piece of plate value £100.

Class 2.—For the best managed farm utilising the sewage of more than 20,000 people, a piece of plate value £100.

SECTION II.—Market-gardens within a radius of 20 miles from the Mansion House.

Class 3.—For the best-managed market-garden exceeding ten and not exceeding fifty acres in extent.—First prize, £50; second, £25; third, £10.

Class 4.—For the best-managed market-garden above fifty acres in extent.—First prize, £50; second, £25; third, £10.

SECTION III.—Market-garden farms situated in one of the five metropolitan counties—viz., Kent, Surrey, Middlesex, Hertford and Essex; or if situated in any other county, such farms to be within a radius of fifty miles from the Mansion House.

Class 5.—For the best-managed market-garden farm, in which market-garden crops alternate with farm crops, above one hundred acres in extent.—First prize, £50; second, £25; third, £10.

On the motion of Lord VERNON a grant of £150 was made to defray the Editor's expenses in obtaining materials for a series of articles on French agriculture.

CHEMICAL.

Mr. WELLS (Chairman) reported the recommendation of the Committee, that Mr. Christopher (the Society's Surveyor) proceed to draw up the necessary contract for the work connected with the Laboratory at the back of the Society's house, on the understanding that the estimate, amounting to £770, be not exceeded, and that the Secretary be authorised to enter into the necessary agreement with the builder. This report was adopted.

GENERAL BRISTOL.

Mr. RANDELL reported that the Committee recommended the payment of the bills relating to the Bristol meeting, as stated on the list furnished to the Finance Committee. This report was adopted.

GENERAL LONDON EXHIBITION.

Colonel KINGSCOTE (Chairman) reported that the Committee had considered the prizes for foreign-bred cattle and sheep, adopting a certain schedule, and they recommended that prizes should be given for foreign hops. The Committee had accepted with thanks a grant of £200 from the Shorthorn Society for Shorthorns bred in any European country other than the United Kingdom, and a grant of £210 from a Local Committee for prizes for hops grown in the United Kingdom. This report was adopted.

SHOW-YARD CONTRACTS.

Mr. RANDELL reported that the Committee had considered draft agreements having reference to the London exhibition, and recommended that the Secretary be authorised to sign the same. They further recommended that the sum of £1,539 2s. 6d. be paid to the contractor on account of the Bristol Showyard Works, and £360 17s. 6d. on account of the Liverpool Showyard Works.

VETERINARY.

The Hon. W. EGERTON (Chairman) reported that the committee had received the balance-sheet relating to the grant to the Brown Institution to defray the cost of experiments into pleuro-pneumonia, and other diseases, up to the end of 1877; and that Dr. Burdon Sanderson had resigned his position as professor-superintendent of

that institution, but that he would still take an active part in its management, and would continue to serve on the committee. This report was adopted.

The SECRETARY was authorised to sign and seal an agreement with the Ecclesiastical Commissioners for the occupation of land at Kilburn as a site for the Metropolitan Exhibition next year.

On the motion of Sir WATKIN WYNN, Bart., M.P., seconded by Mr. Randell, it was unanimously resolved that the cordial thanks of the Council be given to T. Dyke, Esq., of Long Ashton Lodge, near Bristol, for his valuable assistance to the Society as Steward of Forage at the Bristol meeting; also to the Chief Constable and to the Postmaster of Bristol; and the West of England District Bank, for their valuable assistance in connection with the meeting.

The following suggestions made at the general meeting of members in the show-yard at Bristol were referred to various standing committees, viz.:—

(a) Mr. BRABY: "That larger prizes be offered for Sussex cattle," to the stock prizes committee.

(b) Mr. GRIMWAY and Mr. GRAINGER: "That railway companies should issue return tickets to the members of the Society at single fares," to the Finance Committee.

(c) Mr. ROBERTS: "That the Chemical Committee should obtain the consent of members who send materials for analysis to Dr. Voelcker before publication of his report thereon," to the Chemical Committee.

The SECRETARY reported that he had received a letter from the Earl of Powis as to the forming classes for Welsh cattle in 1879, but that as the question had been since dealt with in the draft prize-sheet, it would not be necessary to read the letter, but only to note it for future reference.

A letter was read from Mr. Sexton, Secretary of the English Cart Horse Society, asking for accommodation for that Association, and the Secretary was instructed to reply that the size of the Society's house would not admit of their granting this request.

It was moved by the Earl of Powis, seconded by Mr. RANDELL, and carried unanimously that the usual holidays be granted to the Secretary and clerks; and the Council then adjourned over the recess until Wednesday, November 6th.

BATH AND WEST OF ENGLAND.

At the Council Meeting of the Society, held Tuesday, July 30th, at the Grand Hotel, Bristol, in the unavoidable absence of the President (the Earl of Morley), Mr. H. G. Moysey was voted to the chair.

The CHAIRMAN feelingly referred to the great loss sustained by the Society by the death of Mr. Charles Gordon, who for many years had rendered efficient service as Member of the Council and Steward of one of the principal departments of the Society's Exhibition; of Mr. Herbert Williams, who as Chairman of Finance, and in other prominent capacities, had served the Society with indefatigable zeal; and of Mr. Bremridge, whose munificent hospitality on the occasion of the Barnstaple meeting would be ever memorable in the history of the Society.

The Finance Committee brought up their quarterly statement of accounts, and payments to the amount of £5,719 0s. 8d. were sanctioned by the Council. It transpired that considerable loss had been incurred by the recent Oxford Meeting, and the Finance Committee were authorised, should they find it necessary, to sell out £1,000 India Bonds.

EXETER MEETING, 1879.—The Committee appointed to visit Exeter and make arrangements for this Meeting presented their report, and it was resolved that the site opposite the barracks on the Topham Road be accepted, and power was given to the Committee to conclude arrangements with the local authorities. The Council, on the motion of Mr. Knollys, seconded by Sir John Wilson, affirmed the proposition that it is desirable to establish permanent friendly relations with

any Agricultural Society existing in any district or county which may be visited by the Society, and further resolved that the Devon County Agricultural Society be invited to join the Bath and West of England Society in the meeting of 1879 upon such terms and under such arrangements as may be settled by a Committee consisting of Colonel Luttrell, Mr. Jonathan Gray, Mr. Knollys, Mr. Newbery, and Mr. Clement Bush, with Mr. Spackman, Official Superintendent.

MEETING OF 1880.—The Council having, at a previous meeting, received an invitation from the authorities of Southampton for the Society to hold its meeting in that important town in 1880, a further communication from the authorities of Southampton was now presented by the Hon. and Rev. J. H. Boscawen, and a deputation was appointed to visit Southampton on an early day to inspect the proposed site, and make other arrangements preparatory to the next meeting of Council.

NEW MEMBER OF COUNCIL.—On the motion of Mr. R. R. M. Daw, seconded by Mr. Jonathan Gray, the bye law relating to the election of members of Council otherwise than at annual meetings of the Society was unanimously suspended, and Mr. Edward James Sanders, of Stoke House, Exeter, was elected a member of Council to supply the vacancy occasioned by the election of Mr. C. A. W. Troye, as a vice-president, such vacancy having been omitted to be filled up at the annual meeting.

The Committee, Stewards, and Officers for the ensuing year were nominated, and, in the event of their consenting to act, will be elected at the next meeting of Council in August.

STOCK PRIZES FOR 1879.—On the motion of Colonel Luttrell the sum of £2,070 was placed at the disposal of the Stock Prize Sheet Committee for the Exeter Meeting, this amount, being £70 in excess of that offered at any previous Meeting, having special reference to the class of breeders of Channel Islands Stock. Owing to the large amount of business to be transacted, the consideration of the prizes to be offered for Poultry and in other Departments was deferred until the August Meeting.

Among other communications read to the Council was one from Mr. Gamlen, Hon. Secretary at Oxford, announcing that the Local Committee have undertaken to defray the expenses of the recent Art Loan Exhibition, without asking for any part of the sum of £40 voted by the Council for the purpose.

GLAMORGANSHIRE.

The annual show was held at Swansea on July 31 and August 1. *The Cambrian* says of the live stock:—"The horse show was particularly good, both in point of number and quality. Weight-carrying hunters were well represented; there were some nice light weights, and the running, jumping, and driving in harness were such as gave very general satisfaction not only to the public but also to the large number of gentlemen of influence and special knowledge who attended. The class of cart horses was also very good for such a district as ours. The cattle show was very good, the Herefords and black cattle eliciting high encomiums. The entries of cattle were very large, and, with few exceptions, the animals sent in were well worth looking at. The pigs and sheep were not numerous, and there were some few of mediocre merit, but many also of excellent breed and condition. The departments of cheese and butter, poultry and dogs, were rather small in number of entries, but the exhibits were very commendable."

CATTLE.

HEREFORDS.

For the best two cows, above three years old, in calf or in milk, and their offspring under 12 months old.—First prize, £12, T. Thomas, St. Hilary; second, £6, J. E. Spencer, Cowbridge.

Cow, above three years old, in calf or in milk.—First and second prizes, £5 and £3, W. S. Powell, Taibach.

Bull above three years old.—Prize, £6, T. Thomas, St. Hilary.

Yearling bull.—First prize, £5, and second, £3, T. Thomas, St. Hilary.

Two-year old heifer, in calf or in milk, for breeding purposes.—First prize, £5, W. S. Powell, Taibach; second, £3, T. Morgan, Cowbridge.

Yearling heifer, for breeding purposes.—First prize, £4, J. Williams, Llansannor Court; second, £2, T. Thomas, St. Hilary.

Bull calf under 12 months old.—First prize, £1, J. Williams, Cowbridge; second, £2, J. E. Spencer, Cowbridge.

Heifer calf under 12 months old.—First prize, £4, T. Thomas; second, £2, W. S. Powell, Taibach.

SHORTHORNS.

Two cows above three years old, in calf or in milk, and their off-pring under 12 months old.—First prize, £12, R. Stratton, Newport; second £6, J. Thomas, Cowbridge.

Cow above three years old, in calf or in milk.—First prize, £5, R. Stratton; second, £3, G. W. G. Thomas, Cardiff.

Bull above three years old.—First prize, £6, R. Stratton; second, £3, Marquis of Bute, Cardiff Castle.

Two-year-old bull.—First prize, £6, R. Stratton; second, £3, T. Penrice, Swansea.

Yearling bull.—First prize, £5, J. R. Homfray, Cowbridge; second, £3, W. Jenkins, Cowbridge.

Two-year-old heifer, in calf or in milk, for breeding purposes.—First prize, £5, R. Stratton; second, S. Owen, G. Lligatle.

Yearling heifer for breeding purposes.—First prize, £4, J. Thomas, Eastfield House; second £2, G. W. G. Thomas.

Bull calf under 12 months old.—First prize, £4, R. Stratton; second, £2, J. Thomas.

Heifer calf under 12 months old.—First prize, £4, G. W. G. Thomas; second, £2, R. P. Bidder, Neath.

OTHER PURE OR CROSS-BRED COWS.

Two milking cows above three years old.—First prize, £5, Dr J. Jenkins, Cowbridge; second, £3, J. Thomas.

Milking cow above three years old.—First prize, £4, J. Thomas, Cowbridge; second, £2, D. J. Jenkins, Cowbridge.

Pair of dairy cows in milk.—First prize, £5, S. Wilson, Kn. Iston.

Dairy cow in milk.—First prize, £3, R. Wilmot, Norton.

WELSH BLACK CATTLE.

Bull not exceeding four years old.—First prize, £5, Earl Cawdor, Pembroke; second, £3, Mrs. L. Williams, Llandilo.

Yearling bull.—First prize, £5, W. James Talybont; second, £3, H. Davies, Typicca.

Bull calf under twelve months old.—First prize, £3, R. H. Harvey, Haverfordwest; second £2, ditto.

Cow in milk or in calf.—First prize, £5, J. Walters, Carmarthen; second, £3, H. Harris, Narberth.

Two-year-old heifer.—First prize, £4, Earl Cawdor; second £2, ditto.

Yearling heifer.—First prize, £4, R. H. Harvey, Haverfordwest; second, £2, ditto.

Heifer calf under twelve months old.—First prize, £3, J. Davies, Carmarthen; second, £2, Mrs. L. Williams.

Bull, cow, and offspring, of any pure breed.—First prize, £10, W. S. Powell, Taibach; second, £5, R. Stratton, Newport.

PURE OR CROSS-BRED STEERS.

Pair of two-year-old steers.—First prize, £3, R. Thomas, Cowbridge; second, £3, ditto.

Pair of yearling steers.—First prize, £5, — Thomas; second, £3, — Thomas, Cowbridge.

Male breeding animal exhibited in any of the foregoing cattle classes, or for any special cattle prize given under the sanction of the Society.—Prize, £10, T. Thomas, St. Hilary.

Female ditto.—Prize, £10, R. Stratton, Newport.

SPECIAL PRIZES.

Bull, cow or heifer not less than two years old, reared on and direct from any mountain or common not less than 300 feet above the sea.—Prize, £5, H. H. Vivian, Swansea.

Pure or cross-bred heifer (not qualified in Class 1 or 2) and not exceeding two years old.—First prize, £4, W. Thomas, Cowbridge; second, £3, J. Thomas, Cowbridge.

Yearling heifer, the property of tenant farmers, farming exclusively within the Swansea, Pontardawe, and Gower Union; or otherwise subject to the rules of the Society.—First prize, £4, R. R. Wilmot, Norton; second, £3, W. James, Swansea.

Heifer calf under 12 months old, the property of tenant farmers, farming exclusively within the Swansea, Pontardawe, and Gower Unions; or otherwise subject to the rules of the Society.—First prize, £1 10s., R. R. Wilmot, Swansea; second, £1, R. B. Wilmot.

SHEEP.

LONGWOOL.

Yearling ram.—First prize, £5, G. W. G. Thomas, Cardiff; second, £3, W. Wheeler, Shipston-on-Stour.

Ram lamb.—First prize, £4, G. W. G. Thomas, Cardiff; second, £2, G. W. G. Thomas.

Five ewe lambs for breeding purposes.—Second prize, £2, T. Thomas, Cowbridge.

Five wether lambs.—Prize, £5, T. Thomas, Cowbridge.

Five ewes exceeding two years old that have been bred the preceding season.—First prize, £5, G. W. G. Thomas, Cardiff; second, £3, J. Thomas, Cowbridge; third, £2, T. Thomas, St. Hilary.

SHORTWOOL.

Yearling ram.—Prize, £4, E. Rees, Swansea.

Ram lamb.—First prize, £4, and second, £2, E. Rees, Garth Farm, Swansea.

Five ewe lambs for breeding purposes.—First prize, £4, and second, £2, E. Rees, Swansea.

Five wether lambs.—Prize, H. H. Vivian, Swansea.

Five ewes, exceeding two years old, that have been bred the previous season.—First prize, £5, second, £3, E. Rees, Swansea.

Aged ram of any pure breed.—First prize, £5, Earl Cawdor; second, £3, W. Wheeler, Shipston-on-Stour.

Five yearling ewes of any pure breed.—First prize, £5, E. Rees, Swansea; second, £3, G. W. G. Thomas, Cardiff.

CROSSBRED.

Yearling ram.—First prize, £4, and second prize, £2, W. Wheeler, Long Compton.

Five yearling ewes.—Prize, £4, W. V. Huntley, Cowbridge.

Aged ram of the Welsh Mountain breed.—Prize, £4, H. Harrys, Ystradowen.

Ram lamb of Welsh Mountain breed.—Prize, £2, D. Thomas, Llantrissaut.

PIGS.

Sow, with pigs or in farrow of any large breed.—First prize, £5, W. Wheeler, Shipston-on-Stour; second, £2, W. Wheeler.

Sow, with pigs or in farrow of any small breed.—First prize, £5, Lord Moreton, Turtworth Court; second, £3, Lord Moreton.

Boar of any large breed.—Prize, £3, W. Wheeler.

Boar of any small breed.—First prize, £5, Lord Moreton; second, £3, Lord Moreton.

Boar under a year old.—Prize, £4, Lord Moreton.

HORSES.

HUSBANDRY.

Cart stallion which shall have covered in the county during the season of 1878.—First prize, £10, A. Watts, Bridgend; second, £5, J. Braddick, Cowbridge.

Cart mare in foal or with foal at foot.—First prize, £3, R. Thomas, Pyle; second, £5, R. Thomas, Margam.

Three-year-old cart gelding or mare.—First prize, £5, R. Williams, Brecon; second, £3, W. Powell, Aberdare.

Two-year-old cart gelding or mare.—First prize, £5, R. Williams, Pyle; second, £3, J. John, Llanerwen.

Yearling cart colt or filly.—First prize, £4, R. Thomas, Margam.

SPECIAL PRIZES.

Pair of cart horses for the general purposes of husbandry.—Prize, £10, R. Morgan and Sou, Marlas.

Dray horse or mare.—Prize, £5, J. Dyes, Swansea; second, £3, G. Davies (Kilvey).

HUNTERS.

Thoroughbred stallion, calculated to produce weight-carrying hunters, which shall have covered in the county for the season of 1878.—Prize, £10, R. J. Savours, Neath.

Brood mare, calculated to produce weight-carrying hunters, in foal, or with foal at foot.—Second prize, £6, R. T. Bassett, Cowbridge.

Three-year-old gelding or mare, for a weight-carrying hunter.—Second prize, £3, R. J. Savours, Neath.

Two-year-old gelding or mare for a weight-carrying hunter.—First prize, £5, J. Thomas, Kidwelly; second, £3, J. Brogden, Porthcawl.

Yearling colt or filly, for a weight-carrying hunter.—Prize, £4, R. J. Savours, Neath.

Weight-carrying hunter, up to 14 stone with hounds.—Prize, £10, J. M. I. Harris, Llantrissaut.

Horse, mare, or gelding, under four years old, adapted for harness or riding purposes, the property of a tenant-farmer in the Gower Union.—Prize, £5, E. F. Davies, Gower.

Hackney gelding or mare, not under 14 hands 2 inches high.—First prize, £6, R. Williams, Brecon; second, £4, W. Smith, Cowbridge.

SPECIAL PRIZES BY THE SOCIETY.

Cob above 13 hands, and not exceeding 14 hands 2 inches high.—First prize, £7, P. Williams, Cardiff; second, £3, W. Powell, Aberdare.

Cob stallion, not exceeding 14 hands 2 inches high.—First prize, £5, J. Holland, Gower; second, D. Harries, Kidvelik.

Pure-bred Welsh Mountain pony, not exceeding 12 hands 2 inches high.—First prize, £4 4s., W. Powell, Aberdare; second, £2, J. John, Clydach.

Entire pony, not exceeding 13 hands high.—First prize, T. Jenkins, Cefngwyn, Llanon; second, E. Thomas, Cowbridge.

HIGHLAND AND AGRICULTURAL OF SCOTLAND.

MEETING AT DUMFRIES.

The annual exhibition in connection with the Highland and Agricultural Society of Scotland, or what may be aptly called the Scotch "Royal," opened on July 30 at Dumfries and closed on Friday. The show-yard was about a mile and a half to the west of the town, and occupied about 24 acres on the farm of Rochell. It was a few acres less than either the Glasgow, Aberdeen, or Edinburgh yard, and in some departments there was a want of room slightly felt. The arrangement of the stalls and offices, &c., was the same as in former years. The weather has been delightful, though at times oppressively hot, the number of visitors who have visited the show-yard has been large, and the number and character of the entries of stock, implements, &c., were quite up to the standard of "Highland." Indeed, what may be termed as the "usual excellence" has been in some of the departments exceeded. For over-all merit we have seen a better show of Shorthorns; excluding one or two of the more prominent honour-winners, the display was quite of a mediocre character. The Polled Angus Breed are of course not in their native district here, but it is very noticeable in regard to them that although their numbers were not so large—as the many empty stalls showed the general merit never was higher. There was not a weed nor an indifferent animal in the whole section. The smallness of the numbers of the Polled may be, however, accounted for from the fact that two of the three judges who acted in the same section at Aberdeen were adjudicating here, and many of the Aberdeen animals which met with an adverse fate have been kept back, possibly from the consideration that positions would not be much altered by the same judges. One or two polled cattle entered for the show have been, we believe, detained in quarantine at Brown's Wharf, London, on their return journey from the Paris Exposition. The Galloway and the Ayrshire cattle are in the district quite peculiar to them, and we had a large and magnificent display of them. The Highland and fat cattle were not a large show, but some good specimens quite maintained the character of these sections. Clydesdale horses were forward in their usual numbers and merit, and once more formed the prominent feature of the show. A better collection of Clydesdale mares never was seen before anywhere, while some of the young horses were of surpassing merit. The Dumfries district is not a hunting one, and consequently the display of hunters and roadsters was small and very indifferent, very few attractive specimens of these breeds being forward. The sheep on the whole were a fair show as compared with former years. The Border Leicesters were forwarder perhaps than ever before, but individual merit was not strikingly high. Two very important

and successful exhibitors were conspicuous by their absence—that is their sheep—this year. These are the Messrs. Clark, Oldmanstocks, the breeders of Border Leicesters, and the Messrs. Archibald, Overshield, the breeders of black-faced sheep. But it must be said that their absence has had the effect of bringing out not a few lots that perhaps would not have ventured so far. Pigs were small but very good show, while that of poultry cannot for a national show be called a fine one in point of merit, although there were no doubt a great number of entries. Dairy produce formed a creditable display. The entries in various sections this year were: Galloways, 78; Polled Angus, 89; Ayrshire, 82; Highland, 25; fat and extra stock, 21—making a total of 357. Agricultural horses, 246; hunters and roadsters, 53; ponies and extra horses, 28—making a total of horses of 328. Cheviot sheep, 64; black-faced, 100; Border Leicester, 88; Leicester, 4; Cotswold, 3; Lincoln, 22; Shropshire, 12; extra sheep, 15—making a total of sheep of 308. Pigs, 27; poultry, 227; dairy produce, 235. These figures are, on the whole, slightly in excess of those of last year. It may be mentioned the total number of entries eight years ago, when the show was last held at Dumfries, was 1,170, and it is curious to note that the entries of agricultural horses are about double what they were then, while those of the Ayrshire cattle are about half of what they were eight years ago. The general arrangements of the show have been carried out energetically and efficiently, which reflects to the credit of the Secretary, Mr. Menzies, and his excellent staff. The catalogue gave the place of preference to the Galloways, but for obvious reasons we shall notice the Shorthorns first. Fourteen aged Shorthorn bulls were walked into the ring for honours, and after a good deal of careful inspection the first honour was given to Mr. Linton's Sir Arthur Ingram, which came from Bristol after taking his third "Royal" premier honour. He was second here last year, standing second to Mr. Browne's Pioneer. Sir Arthur looks a magnificent bull in the show-yard, but if he has points which are unsurpassably good he has others which cannot be called other than serious defects. He has great length, a splendid fore-arm and front, a long hind-quarter, and beautiful head; but he is not so nice on the tail head, and he stands very closely on his two fore-feet; but, notwithstanding that, he was certainly the most handsome bull in the class, and deserved his honour. Pitted against some of the prize females, he subsequently carried off the Tweeddale gold medal for the best Shorthorn animal in the yard. The second aged Shorthorn bull was Mr. Mitchell's Duke of Chambergh, who has taken honours here before, but never, if we mistake not, a first. He is in splendid form, has grand hind-quarters, although not so well sprung or covered in the rib as we would desire him. Mr. Willis's Rear Admiral is not large for his age, is a little bare on the shoulders, but he has grand quality, and otherwise very attractive shapes. The third bull at Edinburgh when the Duke of Chambergh was fourth was the Earl of March, which got a highly commended ticket here. The Earl was in great favour with the public, and it was thought he was worthy of a higher place. In the two-year-old Shorthorn bulls Mr. Willis's Vice Admiral, the winner in the yearling class at Bristol, was awarded first ticket. Prince of Falkland, a Bites bull, was a very deserving second. Eight promising yearling bulls entered the ring for honours, and the premier one was given to a sweet white, Lord St. Vincent, belonging to Mr. Handley, Milnthorpe, Westmoreland. He was excellent quality and was fourth at Bristol. Prince Alfred, the second bull is a roan of some shape, but it did not seem to be in best of bloom for show-yard. The first prize cow, Alma, at the Aberdeen Show, belonging to Mr. Mitchell, White-

house, was forward, and in virtue of this was awarded the medium gold medal. In the aged cow class, which was a fair one, Mr. Beattie's Blooming Daisy, with plenty of flesh, but not remarkable for style, secured the first honour, while Princess Georgie, the property of Mr. B. St. J. Ackers, Prinknash Park, Gloucestershire, got the second honour. The two-year-old heifers were a strong class, and it was headed by Innocence, an animal of excellent quality and admirable symmetry, belonging to Mr. George Ashley, Ashbey, Northamptonshire. Lady Jane, a stylish, beautifully-topped heifer, from Alwick Castle, got the second ticket. A very sweet roan was Stanwick Rose, the first prize yearling heifer, belonging to Mr. White, Aldborough, Darlington, and which was walked into the ring for the Tweeddale Medal, against Sir Arthur Ingram. Lady Evelyn Hope, a well-bred very promising youngster, secured second card.

A class very difficult to judge—the merit being so close—was that of the aged Ayrshire bulls. The first prize bull, B'rland, belonging to Duncan Kier, Bucklyvie, is a stylish brown, which was first at Ayr, Stirling, and Merryhill; while he was commended last year at Edinburgh. The Marquis of Drumlaurig, a bull bred and owned by the Duke of Buccleuch, which got second honour, has great length and good hind-quarters, but is slack a trifle in the rib. The breeders' silver medal was given to Mr. Mackay, Bilfron, the breeder of B'rland. The two-year-old bull competition was a very stiff one, but Morning Star, belonging to the Duke of Buccleuch, and which was first at Glasgow, carried off the palm. Mr. Guthrie's (Ayr) Gordie was first in a good class of yearling bulls, while Young Marquis, a promising youngster, was second. Mr. Martin's first prize cow at Aberdeen, Frost of Drumlaurig, bred by the Duke of Buccleuch, was forward, and secured the medium gold medal which was awaiting her. In the cows in milk, calved before 1st January, 1875, Mr. John Meikle, Bathgate, was deservedly put first for a handsome cow, Cowbonnie, and the Duke of Buccleuch was a good second with Rosie 2nd of Drumlaurig. Cows in milk calved after 1st January, 1875, a large fine class—about 15—were headed by Mr. H. D. B. Wilson, Sankular, with a red and white Commerce, Contentment, with capital blank, and great length. Mr. Caldwell's Sprightly, which got second honour, had better rib. Cows in calf were headed by the Duke of Buccleuch's Nora of Drumlaurig, which is a handsome cow bred at the well known Brownhouse byres. Kenmore of Drumlaurig, another of his Grace's, got the second honour with scarcely such a level back or evenly-fleshed carcass as the former. In the two-year-old heifers Snowflake of Drumlaurig, also the Duke's, which was first at Glasgow got the first honour, while another from the same place, Daisy of Drumlaurig, took the second. The latter was first at Ayr. The yearling heifers were but a very moderate class. Mr. McDowall's Jean, a shapely heifer, was first, while Bella 5th of Drumlaurig made a good second. The principal prize takers in the Highland cattle were Mr. Stewart, Dunhulm, Portree, the Earl of Breadalbane, the Earl of Seafield, Mr. Duncan, of Benmore, and Mr. Hunter Marshall, of Callender. The Highland cattle formed a larger portion of the fat stock than we have seen before. The fat stock prize winners generally were the Earl of Galloway, the Earl of Seafield, Mr. Jardine, of Castlemill, Lockerbie, and Mr. Biggar Grange, Dalbeattie. A medium gold medal was awarded to Rival of Drumlaurig, the first prize Ayrshire bull at Edinburgh in 1877, belonging to the Duke of Buccleuch. An Alderney ewe and two heifers of the same breed forwarded by Mr. Johnstone, Lochmaben, were awarded a commended ticket, and the same honour was given to some Japanese cattle sent by Mr. Bell Irving, of Whitehill, Lockerbie.

We have seen a better display, in point of general merit, of aged Clydesdale stallions, although there were some specimens in the class which were not to be surpassed. There were 23 went into the ring for honours. There was a long and stiff tussle for honours, but it lay between three or four animals. Ivanhoe, a thick compact horse, with prominent Clydesdale character, belonging to Mr. Crawford, Dumgoyack, Strathblane, was put at the top of the class. He was first at the Glasgow Stallion Show, in February last, and at the show of the West of Scotland at Glasgow, in May. Prince of Myre, a strong handsome horse, belonging to Mr. Riddell, was second. He was first at Inverness, and first as a two-year-old at the Glasgow Show of the Highland Society. Pride of Clyde, owned by Mr. Riddell, and Landsman, belonging to Mr. Johnston, Maryhill, worthily followed. It may be as well to mention here that Mr. Riddell's famous horse Darnley, which has had honours heaped upon him at the West of Scotland and other shows, was forward to compete only for the silver cup for the best stallion for agricultural purposes. Ivanhoe, Mr. Hendries' Druid, the first three-year-old colt, and Mr. Johnston's Roderick Dhu, the first two-year-old colt, were put into the ring along with Darnley for the cup; but Darnley had the victory, although he was pretty hard run for it by Druid. The silver cup for the best mare for agricultural purposes went to Mr. Bird's Jess, a powerful symmetrical animal. Twenty-five three-year-old colts entered the ring for honours, and as stated above, Mr. Hendries' Druid carried off the palm, but this class occupied the judges for nearly two hours. Druid is bred by Mr. Milroy, Stranraer, and is a large, powerful, well-built, heavy-legged horse. Bonnie Scotland, the second colt, is not so strong in bone, but does not lack in any way the symmetry of the former. He was second as a two-year-old at Edinburgh. Twenty-five two-year-old colts formed the next class, and, as already stated, Mr. Johnston's Roderick Dhu, headed the lot. He is a horse of very attractive shape and fine quality, but not so heavy in the bone as we could wish. He was first at Glasgow in 1877 as a yearling. Mr. Waddell, Bathgate, with his handsome colt, Duke of Hamilton, which he bought recently at the Merryton sale, was second in this class. He is perhaps a little too straight on his hocks for some judges, but still his general merits are not to be seen every day, outside of him. The largest class of agricultural horses was yearling colts—32—which was topped by the Earl of Dunmore's Blair Athol, a sweet, robust stylish looking youngster, which was first at Ayr. Pride O'Dee, belonging to Mr. Craig, Gtento, Castle Douglas, made a second. His colt, we believe, has been bought for Lord Polwarth for £300. He is out of the samedam as the two-year-old which Mr. Thomson, Birkknowes, bought at Ayr. The mares were a splendid show. In the mares with foal at foot foaled before 1st January, 1875, Mr. Lawrence Drew's mare Sheba, which was second at Manchester and Ayr this year, and a first at Glasgow three years ago, was first here also. A good deal of discussion took place as to the breed of this mare, and not a few maintained that she was not a Clydesdale, but a Suffolk. She was chestnut in colour, but had grand symmetry and strength, although she might be better in the feet. Mr. Cunningham's (Parbreoch) mare Jean, which was first at Ayr before Sheba, has to play second fiddle to her here. The famous Kelso Maggie was in this class but she only got a fourth ticket. The Aberdeen first prize mare, Maggie, belonging to Mr. Buchanan, Carsenden Marris, was forward, and secured medium gold medal. Mr. Bird's Jess, which we have noticed already as taking the silver cup for the best mare, comes to the front among the mares (in foal) foaled before 1st January, 1875. She was first at Glasgow. Mr. Drew's Queen, a stylish

limbed mare, secured second honour. Mr. Drew's Countess, which was first at the Royal Show at Bristol, only got third here. Countess goes to Paris in September. The three-year-old fillies were a magnificent class. Damsel, a powerful, shapely filly, from Auchendennan farm, secured first honour, while Young Darling, from Craigie, Kilmarnock, which would have been preferred by many judges, got second. A very numerous class was that of the two-year-old fillies, which Mr. Martin, Auchendennan, topped with Effie Deans, an animal of remarkable symmetry and power; while Lovely, from Urie, was but second and very deservedly so.

In the yearling fillies Mr. A. Montgomery had first ticket with Jeannie Sproat, a very sweet, strongly constituted filly; while Dandy, from Mr. William Montgomery Banks, Kirkcudbrightshire, was awarded second. The principal prize-winners in the agricultural geldings, generally of good shape and strong build, were Jas. Walker, St. Ann-street, Glasgow, the Duke of Buccleuch, Lawrence Drew, and Mathew Henderson, Ardrossan. As we have stated, the hunters and roadsters were a mediocre display. Membrino Belle, a very smart mare belonging to Mr. Simon Beattie, Preston Hall, Annan, was first in the brood mares (with foal at foot), suitable for field. Archibald Kerr, Lockerbie, took a similar position in the aged hunting geldings, with a fine specimen of equine symmetry. In the three-year-olds Mr. Sain, Laikbersington, Coldstream, was first with Royal Duke. Geldings suitable for hackneys or roadsters, between 14 and 15 hands high, were topped by Nora, belonging to Mr. Thomson and Sons, Carlisle. The ponies were a small and very indifferent show, and the principal prize-takers were Sir Geo. Douglas Clerk, of Pencuik, Miss Nixon, Bowsteadhill, Carlisle, and John Watson, Dalkeith.

In the aged Cheviot tups Mr. Johnstone Archbank, Moffat, came first with an animal of great wealth of mutton, evenly laid on, and beautiful coat, Mr. Brydon Holm, of Dalquhairn, coming second with a good strong shapely sheep. In the two shear tups of the same breed the two gentlemen stand in the same position in this class with large well-bred sheep. Mr. Brydon carries off first for the shearing tup, and Mr. Eliot, Hindhope, for the second. The class of ewes above one shear, with lamb, was also topped by Mr. Brydon, with a splendidly even pen. The gimmers were headed by Mr. Eliot with beauties of the breed. The blackfaced sheep prizes were taken, mostly by Mr. Tod, Glenree Lambash, Mr. David Foyer, Campsie, Mr. Charles Howatson, Mauchline, and J. and J. Moffat, Gateside, Sanquhar, with well-coated, firm handling, finely-mottoned sheep. As we stated above, the Border Leicesters were a large and magnificent show. The Whittinghame and Castlemains first and second aged tups had good symmetry for fleece, while the shearing tups from Yester and Whittinghame, which took the same positions, were very promising animals. Mr. Nisbet, Lambden Greenlaw, secured the leading prizes for his well brought out ewes. The English breeds of sheep were a fair display. In the Leicesters Mr. Eric Sutherland, Rosevally, Burghhead, and in the Cotswolds Mr. Francis Gibson, Woolinet, Dalkeith, had all the honours to themselves. The principal prize takers in the Lincolns were Bell Irving, Lockerbie, and Thomas Wilkin. In the Shropshires Lord Polwarth, Mr. Gibson, Woolinet, and the Earl of Zetland. Mr. Irving, Duinfries, and Mr. Biggar, Dalbeattie, took the most of the prizes for wethers and hogs of various breeds, while Mr. Brydon, Moffat, Charles Howatson, and Mr. Ferguson, Kinnochtry, carried off the prominent honours in wool.

Pigs were a small but a good display, and Mr. Crowther, Bury, Mr. A. Peterkin Hope, Dunbar, and Mr. B. St.

John Ackers were the principal winners of the honours here.

PRIZE LIST.

JUDGES. — CATTLE. — Galloway — T. Gibbons, James Gifford, J. McCornack. Poll-d Angus or Aberdeen — H. D. Adamson, J. Walker, W. Whyte. Shorthorn — G. Drewry, H. Chandos, J. Reed. Ayrshire — A. Allan, J. Hamilton, R. Paton. Highland — J. Campbell, J. M'Lauchlan. Fat stock — H. Muirhead, A. Young. HORSES. — Fraught stallions and Entire Cobs — J. Crawford, T. Kerr, A. Smith. Draught Mares, Fillies, and Geldings — W. Gray, A. Murdoch, J. Young. Hunters, Roadsters, Ponies, and Extra Horses — W. Ford, J. Hope. SHEEP. — Cheviot — W. Henderson, J. Miller, R. Shortreed. Blackfaced — J. Cumberough, D. M'Diarmid, J. M'Pherson. Border Leicester — T. Clark, R. Hardie, J. Usher. Leicester, Cotswold, Lincoln, and Shropshire — T. H. Morris, T. Ferguson. PIGS: P. Eden, S. Keir, T. Mylae. DAIRY PRODUCE: T. Bailie B. Osborne.

CATTLE.

GALLOWAY.

Bulls calved before 1st January 1876. — First prize, J. Cunningham, Dalbeattie; second, T. Biggar, Dalbeattie; third, J. Muirhead, Carlisle.

Bulls calved after 1st January, 1876. — First prize, J. Little, Longtown; second, the Duke of Buccleuch; third, M. Clark, Dumfries.

Bulls calved after 1st January, 1877. — First prize, Duke of Buccleuch; second, P. Morton, Longtown; third, R. Vane, Penrith.

Gold medal for previous first prize cows. — Prize, Duke of Buccleuch (Nightingale of Drumlrig).

Cows calved before 1st January, 1875. — First prize, Duke of Buccleuch; second, T. Biggar, Dalbeattie; third, J. Cunningham, Dalbeattie.

Cows calved after 1st January, 1875. — First and third prize, Duke of Buccleuch and Queensberry; second, J. Cunningham, Dalbeattie.

Heifers calved after 1st January, 1876. — First, second, and third prize, the Duke of Buccleuch.

Heifers calved after 1st January, 1877. — First, second, and third prize, Duke of Buccleuch.

POLLED ANGUS OR ABERDEEN.

Bulls calved before 1st January, 1876. — First prize, T. Ferguson, Coupar Angus; second, W. J. Taylor, Huntly; third, G. Bean, Pitcairle.

Bulls calved after 1st January, 1876. — First prize, W. J. Taylor, Hothiemay House; second, Marquis of Huntly, third, Marquis of Huntly.

Bulls calved after 1st January, 1877. — First prize, T. L. M. Cartwright, Ladybank; second, G. Hamilton, Aberdeen; third, W. M'Combie, Skene.

Cows of any age. — First prize, G. Reid, Aberdeen; second, Sir G. M. Grant; third, J. Moor, Aberdeen.

Heifers calved after 1st January, 1876. — First prize, W. Skinner, Ballindalloch; second, W. M'Combie; third, Sir G. Macpherson Grant, Bart.

Heifers calved after 1st January, 1877. — First prize, T. Ferguson, Kinnochtry; second, W. M'Combie; third, Sir G. Macpherson Grant.

SHORTHORNS.

Bulls calved before 1st January, 1876. — First prize, Wm. Linton, York; second, W. A. Mitchell, Aberdeen; third, T. Willis, jun., Bedale, Yorkshire.

Bulls calved after 1st January, 1876. — First prize, Thos. Willis, jun.; second, A. H. T. Bruce, Falkland; third, J. Forster, Northumberland.

Bulls calved after 1st January, 1877. — First prize, W. Handley, Millthorpe; second, C. S. H. D. Moray of Abercairny, Crieff; third, J. Bruce, Fochabers.

First prize cow at Aberdeen (exhibited for medium gold medal). — W. A. Mitchell, Aberdeen.

Cows of any age. — First prize, J. Beattie, Annan; second, B. St. John Ackers, Gloucestershire; third, J. Angus, Stockfield-on-Tyne.

Heifers calved after 1st January, 1876. — G. A. Ashby, Northamptonshire; second, Duke of Northumberland; third, Duke of Richmond and Gordon.

Heifers calved after 1st January, 1877.—First prize, J. Whyte, Darlington; second, Duke of Richmond and Gordon; third, Duke of Northumberland.

AYRESHIRE.

Bulls calved before 1st January, 1876.—First prize, D. Keir, Bucklyvie; second, Duke of Buccleuch; third, J. Thomson, Airdrie.

Bulls calved after 1st January, 1876.—First prize, J. Williamson, Greenhead; second, Duke of Buccleuch; third, T. Ballantyne, East Kilbride.

Bulls calved after 1st January, 1876.—First prize, Duke of Buccleuch; second, W. Guthrie, Ayr.

Cows in milk, calved before 1st January, 1875.—First prize, J. Meikle, Bathgate; second, Duke of Buccleuch; third, J. and J. Moffatt, Sanquhar.

Cows in milk, calved after 1st January, 1875.—First prize, H. D. B. Hyslop, Sanquhar; second, J. Caldwell, Dundonald; third, R. Wilson, Kilbarahan.

Cows in calf, of any age, or heifers in calf, calved before 1st January, 1876.—First and second prizes, Duke of Buccleuch; third, R. Wilson, Forehouse.

Heifers calved after 1st January, 1876.—First, second, and third prizes, Duke of Buccleuch.

Heifers calved after 1st January, 1877.—First prize, A. McDowall, Stranraer; second and third, Duke of Buccleuch.

First prize cow at Aberdeen (exhibited for medium gold medal)—Duke of Buccleuch and Queensbury (Frost of Drumlaigrig).

HIGHLAND.

First prize bull at Aberdeen (exhibited for medium gold medal).—Prize, J. Grant, Carrbridge.

Bulls calved before 1st January, 1876.—First prize, J. Stewart, Portree; second, Earl of Breadalbane; third, J. Duncan, Greenock.

Bulls calved after 1st January, 1876.—First prize, J. Stewart, Portree; second, W. H. Marshall, Callander; third, B. Ivi g, Dumries.

Cows of any age.—First prize, Earl of Seafield, Grantown; second, J. Stewart, Portree; third, W. H. Marshall, Callander.

Heifers, calved after 1st January, 1875.—First prize, J. Stewart; second, Earl of Seafield; third, J. Duncan, Greenock.

Heifers, calved after 1st January, 1876.—First prize, J. Stewart; second, Earl of Seafield; third, W. H. Marshall.

FAT STOCK.

Galloway oxen, calved after 1st January 1875.—Prize, Earl of Galloway.

Galloway oxen, calved after 1st January, 1876. Prize, Earl of Galloway.

Highland oxen, calved after 1st January, 1874.—First prize, Earl of Seafield; second, L. Dalglish, Pitttrone.

Highland oxen, calved after 1st January, 1875.—First and second prizes, Earl of Seafield.

Oxen of any other pure or cross breed, calved after 1st January, 1876.—First and second prizes, R. Jardine, Castlemilk, Lockerbie.

Galloway heifers, calved after 1st January, 1876.—Prize, J. Biggar, Dalbeattie.

HORSES.

FOR AGRICULTURAL PURPOSES.

Stallion, foaled before the 1st January 1875.—First prize P. Crawford, Strathblane; second and third, D. Riddell, Paisley, Maryhill.

Entire colts, foaled after 1st January, 1875.—First prize, J. Hendrie, Stirlingshire; second, A. Montgomery, Castle Douglas; third, P. Crawford, Strathblane; fourth, A. Galbraith, Killearn.

Entire colts, foaled after 1st January, 1876.—First prize, J. Johnston, Maryhill; second, J. Waddell, Bathgate; third, R. F. F. Campbell, Ayr; fourth, P. Crawford.

Entire colts, foaled after 1st January, 1877.—First prize, Earl of Dunmore; second, G. Craig, Castle Douglas; third, Earl of Strathmore, Glamis; fourth, J. Kilpatrick, Craigie.

Mares (with foal at foot) foaled before 1st January, 1875.—First and third prizes, L. Drew, Hamilton; second, J. Cunningham, Dalbeattie; fourth, J. Thompson, Kelso.

First prize mare at Aberdeen, exhibited for medium gold medal.—D. Buchanan, New Kilpatrick.

Mare in foal foaled before 1st January, 1875.—First prize, A. Baird, Stonehaven; second, third, and fourth, L. Drew.

Filles foaled after 1st January, 1875.—First prize, J. M. Martin, Balloch; second, J. Picken, Kilmarnock; third, J. Waddell, Bathgate; fourth, L. Drew.

Filles foaled after 1st January, 1876.—First prize, J. M. Martin; second, A. Baird; third, J. Cunningham, Tarbreoch, Dalbeattie; fourth, J. Hunter, Coplawhill, Strathbungo, Glasgow.

Fillies, foaled after 1st January 1877.—First prize, A. Montgomery; second, W. Montgomery, Kirkeudbright; third, A. Rankin, Stranraer; fourth, J. M. Martin.

Silver cup for best mare.—W. Baird, Urie.

Draught geldings, foaled before 1st January, 1875.—First prize, J. Walker, Glasgow; second, Duke of Buccleuch and Queensberry; third, J. Waddell.

Draught gelding, foaled after the 1st January, 1875.—First prize, L. Drew; second, M. Henderson, Ardrossan; third, R. Harbour, Dumfries.

HUNTERS AND ROADSTERS.

Brood mares, with foal at foot, suitable for field.—First prize, S. Beattie, Annan; second, J. McKie, Castle-Douglas; third, R. G. Graham, Loughton.

Mares or geldings, suitable for field, foaled before 1st January, 1874.—First prize, A. Kerr, Lockerbie; second, M. Hodgson, Carlisle; third, D. Dobie, Dumfries.

Mares or geldings, suitable for field, foaled before 1st January, 1875.—First prize, S. Jack, Mersington, Coldstream; second, W. G. Graham, Carlisle; third, B. G. W. Morrison, Cupar-Eife.

For jumping.—First prize, A. Kerr, Lockerbie; second, H. Welsh, Edinburgh; third, Col. Fletcher, Hathorn.

Mares or geldings, suitable as hackneys or roadsters, between 14 and 15 hands high.—First prize, M. Thompson and Sons, Kirkhope; second, Captain A. Maxwell, Dumfries; third, W. Johnstone, Moffat.

PONIES.

Highland stallions, 14½ hands and under.—First prize, Sir G. D. Clerk, Bart., Penicuik; second, A. Patillo, Inverness.

Mares or geldings, between 12½ and 14 hands high.—First prize, Miss Nixon, Carlisle; second, Mrs. Fletcher, Dumfries; third, H. Calder, Dumfries.

Mares or geldings, under 12½ hands high.—First prize, J. Watson, Dalkeith; second, J. McKie, Castle Douglas; third, T. Deans, Annan.

EXTRA HORSES.

Thoroughbred stallions and colts.—Commended J. Church Canonbie; J. McKie.

Entire horse.—Silver cup, D. Riddell, Kilbowie.

SHEEP.

CHEVIOTS.

Tups, three shear and upward.—First prize, J. A. Johnstone, Moffat; second, J. Brydon, jun., Galloway; third, T. Elliot, Jedburgh.

Tups, two shear.—First prize, J. A. Johnstone; second, J. Brydon, jun.; third, J. Brydon.

Shearing tups.—First prize, J. Brydon, Kinnelhead, McCfat; second, T. Elliot.

Pens of five ewes, above one shear.—First prize, J. Brydon; second, T. Elliot; third, T. Welsh.

Lambs.—First prize, J. Brydon; second, T. Welsh.

Pens of five shearing ewes or gimmers.—First prize, T. Elliot; second, D. Mundell, Fort-George Station; third, J. Brydon, Tynron.

BLACKFACED.

Tups, three shear and upwards.—First prize, W. Tod, Lam-lash; second, J. Fleming, Strathaven; third, G. Greenshields, Lesmahagow.

Tups, two shear.—First prize, D. Foyer, Lennoxton second, J. McKersie, Muirkirk; third, J. Fleming.

Shearing tups.—First prize, C. Howatson; second, J. Greenshields; third, C. Howatson.

Pens of five ewes, above one shear.—First prize, J. and J. Moffat; second, P. Melrose.

Lambs.—First prize, J. and J. Moffat; second, P. Melrose.

Pens of five shearing ewes or gimmers.—First prize, D. Foyer, Campsie; second, A. A. Blues, Dumfries; third J. and J. Moffat.

BORDER LEICESTER.

Tups above one shear.—First prize, A. J. Balfour, Prestonkirk; second, A. Smith, Gifford; third, G. Daif, Wick.

Shearing tups.—First prize, Marquis of Tweedale; second, A. J. Balfour; third, G. Danbar.

Pens of five ewes above one shear.—First prize, J. Nisbet, Duns; second, R. Calder, Coldstream; R. Tweedie, third, Catterick.

Pens of five shearing ewes or gimmers.—First prize, Nisbet, Duns; second, Marquis of Tweeddale; third, Smith, Haddington.

LEICESTER.

Tups above one shear.—First and second prize, E. Sutherland, Barghead.

Shearing tups.—E. Sutherland.

Pens of five ewes above one shear.—E. Sutherland.

COTSWOLD.

Tups above one shear.—F. Gibson, Dalkeith.

Pens of five ewes above one shear.—F. Gibson, Dalkeith.

Pens of five shearing ewes or gimmers.—Francis Gibson,

LINCOLN.

Tups above one shear.—First prize and highly commended, J. B. Irving, Lockerbie; second, T. Wilkin, Dumfries; third, and commended, T. Wilkin, Dumfries.

Shearing tups.—First prize, J. Bell Irving, Lockerbie; second, T. Wilkin, Dumfries; third, J. O. Trotter, Yorkshire.

Pens of five ewes above one shear.—First and second prize, T. Wilkin.

Pens of five shearing ewes or gimmers.—First prize, T. Wilkin; second, J. Bell Irving.

SHROPSHIRE.

Tups above one shear.—First prize, Lord Polwarth, Upper Keith; second, F. Gibson, Dalkeith.

Shearing tups.—First prize, F. Gibson, Dalkeith; second, Lord Polwarth; third, Earl of Zetland.

Pens of five ewes above one shear.—F. Gibson.

Pens of five shearing ewes or gimmers.—First prize, F. Gibson; second, Earl of Zetland.

EXTRA SECTIONS.

Pens of five Cheviot wethers not above three shear.—First and second prize, T. Irving, Dumfries.

Pen of five blackfaced wethers not above four shear.—First and second prize, T. Irving.

Pen of five half-bred wether hogs not above one shear.—First prize, T. Biggar, Dalbeattie; second, T. Irving.

Pens of five cross-bred wether hogs not above one shear.—First prize, T. Irving; second and highly commended, W. Litch, Kirkcubright.

EXTRA SHEEP.

Highly commended, W. Owens, Torr (five wether hogs); commended, J. O. Trotter, Bedale, Yorkshire (improved Teeswater tups).

WOOL.

Best woolled tup, Cheviot breed.—J. Brydon, Kennelhead.

Best woolled tup, blackfaced breed.—C. Howatson.

Best woolled tup, Leicester breed.—T. Ferguson.

Best woolled tup, other long woolled breeds.—J. B. Irving.

PIGS.

Bars, large breed.—Prize, A. Crowther, Bury, Lancashire.

Sows, large breed.—First prize, A. Crowther; second, T. J. Grayson, Dumfries; third, Mrs. M. Lenny, Dumfries.

Pens of three pigs, not above eight months old, large breed.—First prize, A. Crowther; second, R. Wallace, Mauchline; third, Dr. J. Batty Tuke, Edinburgh.

Bars, black or Berkshire breed.—First prize, A. P. Hope, Dunbar; second, Sir W. Forbes, Aberdeen; third, Marchioness of Queensberry, Kinmount.

Sows, black or Berkshire breed.—First prize, B. St. John Arkers, Painswick, Gloucestershire; second and third, Her Majesty the Queen, the Consort's Saw Farm.

Pens of three pigs, not above eight months old, black or Berkshire breed.—First and second prizes, A. P. Hope; third, S. S. Lloyd, Birmingham.

Bars, small breed.—Prize, A. Crowther.

Sows, small breed.—First prize, A. Crowther; second and third, Her Majesty the Queen.

DAIRY PRODUCE.

Cured butter, not less than 7lb.—First prize, D. McFarlane, Bishopbriggs; second, D. McLaren, Milngavie; third, J. Morrison, Kilmarnock.

Powdered butter, not less than 7lb.—First prize, D. McFarlane; second, D. McLaren; third, A. Cullen, Airdrie.

Fresh butter, three half-pound rolls.—First prize, D. McLaren; second, A. Bullock; third, R. Watson, Lanark.

Cheddar cheese, 56lb. and upwards.—First prize, W. Baird, Croctown; second, M. J. Stewart, Straunraer; third, A. McGuffie, Straunraer; fourth, W. McMaster, Duraigut; fifth, J. Kerr, Wigtown; sixth, J. Paterson, Straunraer; seventh, J. McCulloch, Lockerbie; eighth, G. Cowan, Glenluce.

Cheddar cheese, 14lb. and under.—First prize, W. McMaster; second, W. Baird; third, J. Lindsay, Castle Douglas.

Dunlop cheese, 30lb. and upwards.—First prize, J. H. Baird, Singular; second and third, Duke of Buccleuch.

Cheese, any other variety, 30lb. and upwards.—First prize, D. A. Hood, Kirkcubright; second, M. Hunter, Straunraer; third, G. L. Muir, Castle Douglas.

Cheese, tall make, any variety, 15lb.—First prize, Duke of Buccleuch; second, D. A. Hood; third, A. M. Kerrow, Southwick.

IMPLEMENT AWARDS.

Gold medals were awarded to Mr. Frederick Savage, of St. Nicholas Works, Lynn, for ten-horse power "Agriculturist" locomotive and winding engine combined, adapted for ploughing, thrashing, and all regular remounts of a farm, and to Messrs. J. and H. McLaren, Midland Engine Works, Leeds, for an eight-horse power patent agricultural locomotive engine.

The following received silver medals:—Messrs. Corbett and Pele, Perseverance Ironworks, Sirensbury, for an Eclipse corn-dressing machine; J. Williams and Son, Phoenix Ironworks, Rhuddlan, Llyn, for a new chaff cutter; Mr. J. Richardson, 60, London-road, Carlisle, for a grass seed dressing machine, made to chaff, riddle, and pare at one operation; Messrs. Richmond and Chandler, Salford, Manchester, for chaff cutter; Mr. A. Wood, 36, Worshipp-street, London, E.C., for new enclosed gear mower (new invention); Messrs. Logan and Eller, Tweedmouth, Berwick-on-Tweed, Howart's patent self-lift cultivator (new invention); Messrs. W. N. Nicholson and Son, Treat Ironworks, Newark-on-Treat, patent safety grist or corn grinding mill, for horse, steam or water power, No. 0 size, suitable for small farmers, will kibble and grind any kind of pulse or corn, &c., made upon a new principle of metal, cone and concave, invented by W. N. Nicholson and W. Matier.

THE DINNER.

The President's Dinner took place in the Mechanic's Hall on Wednesday afternoon. The Earl of Galloway occupied the chair.

The noble CHAIRMAN, in proposing the toast of the evening, "The Highland and Agricultural Society of Scotland," spoke of the absence of the Marquis of Lothian, the President of the Society, and of the Earl of Dalkeith, who was Ex-President, to take the President's place. The Society had, he said, been in existence for nearly a century. It began its peregrinations between fifty and sixty years ago, and had continued its tours to the chief cities of Scotland at regular intervals. For the seventh time the town of Dumfries had had the honour to receive the Highland and Agricultural Society of Scotland. He congratulated the directors of the Society on having come to a very picturesque neighbourhood, upon having been received in a land of eternal sunshine, as far as the show had gone, and upon having received a cordial welcome from the Caledonian southern metropolis. On the other hand, he congratulated the people of Dumfriesshire and Galloway upon having been honoured by the company of the Highland and Agricultural Society. He spoke the sentiments of all Dumfriesshire and Galloway people in saying that every time the Society came to visit the district the better would the directors be pleased. In 1870, when the show was last at Dumfries, the amount taken at the gates during the week was £1,700, and during the first two days of the present show about £1,500 had been collected. Another subject for congratulation was, that in 1870 only £1,600 was spent upon premiums; on this occasion £2,763 had been set apart for that purpose. This was the first show at which the Tweeddale Gold Cup had been offered. The

Society was indebted to the present Marquis of Tweeddale for that gift as a tribute of respect to the late Marquis, and in memory of his long connection with the Society. He hoped not to be accused of any jealousy or rivalry in saying that he was rather sorry to see the cup go out of the district. Upon each occasion of the visit of the Society to Dumfries the three counties—Dumfries, Kirkcudbright, and Wigton—had contributed £1,000 to the funds of the Society. A matter for personal congratulation was the decided increase in the exhibition of Galloway cattle, and at the same time he expressed regret at the meagre exhibition of Highlanders.

LEICESTERSHIRE.

The annual exhibition of this Society was held at Leicester, on the race-course, on July 29 and August 31, and proved quite equal in every respect to those of previous years. *The Stamford Mercury* says: The show of horses was exceedingly good, animals for hunting purposes being particularly well represented. There was also a splendid lot of cobs and ponies, and amongst the horses suitable for agricultural purposes were some very good animals. In class 25, for geldings, however, there was only one competitor, but it was a good looking blue roan, and the judges awarded it the first prize. Amongst the cattle, of which there were 40 entries, there were some well-bred animals. Colonel Reeve, of Leadenham, took two first prizes for a very good-looking white ox and a useful roan heifer, Mr. Wright, of Nocton, being second in both classes. A handsome Shorthorn bull belonging to the Duke of Portland was awarded first prize, a bull very little inferior to it, belonging to Mr. Bland, of Dingley Grange, taking second honours. Mr. Sharpe, of Broughton, was a very successful exhibitor in the Shorthorn classes, three prizes going to animals shown by him, the Marquis of Exeter's Shorthorn cow Queen of Ithaca being placed second to a red cow of his. There was a splendid lot of sheep both Leicesters and Shropshires, Mr. Wright, of Nocton, being the principal prize taker in the first-named classes, and Mr. G. German, of Normanton-le Heath, in the latter. Pigs were not so numerous as at some previous shows, but for quality they have never been surpassed. There was only a small show of agricultural implements, but a rather extensive display of other kinds of implements and miscellaneous articles, also of carriages, carts, and waggon, Messrs. Hayes, of Stamford, being amongst the exhibitors of the latter articles. On Wednesday there was a public luncheon on the ground, at which Col. Barnaby, the President of the Society, presided. Afterwards some of the jumping prizes were competed for, and the performances of the different animals were watched with keen interest by the spectators, Mrs. Williams, a professional rider, being one of the competitors. On Thursday the chief attraction was the judging of the harness classes and the jumping.

PRIZE LIST.

JUDGES.—HORSES: Hunters, Hacks, &c.: A. L. Maynard, R. G. F. Howard, J. M. K. Elliott, Jumping and Driving: Colonel Barnaby, Captain Baillie. Agricultural: G. Smith. CATTLE, SHEEP, and PIGS: J. Robinson, J. Lyun, T. Mansell.

HORSES.

Hunters not less than five and under ten years old.—First prize, £20, J. T. Paulett, Edinburgh; second, £10, T. Standbridge, Aston Flamville; third, £5, A. Dabbs, Leicester.

Hunters not less than four and not exceeding six years, the property of tenant farmers or their sons.—First prize, £10, T. Rowlat, Great Bowden; second, £3, J. Darker, Quorndon.

Geldings or fillies four years old, for hunting purposes, bred within the limits of the Belvoir, Quorn, Mr. Talby's, Cottesmore, Atherstone, and Pychley, Hunts.—First prize, £20, W. E. Oakley, Atherstone; second, £10, to ditto; third, £5, A. R. Adcock, Ecton Manor, Northampton.

Hunting geldings, three years old, as in class 3.—First prize, £10, F. H. Stratton, Warton, Atherstone; second, £5, J. E. Beddington, Theddington, Rugby.

Hunting fillies, three years old, as in Class 3.—First prize, £10, J. E. Bennett, Theddington; second, £5, Mallaby and Alkin, Grenaon, Atherstone.

Hunting geldings, two years old, as in Class 3.—First prize, £10, T. Selby, Frisby-on-the-Wreake; second, £5, T. Rowlatt, Great Bowden.

Hunting fillies, two years old, as in Class 3.—First prize, £10, R. Hor-pool, Billesdon; second, £5, D. Ward, Nailstoue, Hinckley.

Yearling hunting colts, or fillies, as in Class 3.—First prize, £5, G. Stratton, Husbands Bosworth; second, £3, J. S. Crosland, Hinckley.

Ladies' hacks not exceeding 15 hands 2 in. (to be ridden by ladies).—First prize, £10, L. L. Berridge, Leicester; second, withheld.

Hacks not less than 14 hands 2 in. and not above 15 hands 2 in. high.—First prize, £10, J. H. Steeles, Market Harborough; second, £5, R. Horspool, Billesdon.

Cobs not above 14 hands 2 in.—First prize, £10, G. Moore, Atherstone; second, £5, A. R. Adcock, Northampton.

Ponies not above 13 hands 2 in.—First prize, £2, G. Clarke, Long Sutton; second, £2, H. J. Hopkins, Northampton.

Mares for breeding hunters, the property of tenant farmers.—First prize, £10, J. T. Paulett, Theddington; second, £5, O. Stokes, Hosc, Melton Mowbray.

Gelding or mares not less than 15 hands, for jumping.—First prize, £10, E. Walker, Birstall; second, £5, E. Waller, Peterboro'.

Hacks or cobs under 15 hands and over 13½, for jumping.—First prize, £7, J. Cant, Leicester; second, £3, T. Stokes, Caldecott.

Ponies not above 13½ hands, for jumping.—First prize, £3, T. Yates, Nottingham; second, £2, J. Richardson, Leicester.

Pair of horses or cobs not less than 14 hands, driven in double harness.—First prize, £10, G. A. F. Quantin, Cheltenham; second, £5, H. E. Emberlin, Oadby.

Geldings or mares not less than 15 hands, driven in single harness.—First prize, £10, S. Peach, Loughborough; second, £5, G. A. F. Quantin; third, £2, B. Snelton, Leicester.

Cobs under 15 hands and over 13½ hands, driven in single harness.—First prize, £10, G. Moore, Atherstone; second, £5, H. Hilsley, Leicester; third, £2, T. H. Strupkin, Hoby.

Ponies not above 13½ hands, driven in single harness.—First prize, £10, A. Adderly, Leicester; second, £5, W. Burgess, Leicester; third, £2, G. Clarke, Sutton Marsh.

Cart stallions traveling not less than two days a week in the county in 1879.—First prize, £25, E. J. Foxwell, Hinckley; second, £10, W. Carver and Sons, Leicester.

Entire cart colts two years old, as in Class 21.—First prize, £15, H. Burgess, jun., Leicester; second, £5, W. J. Hipwell, Rogoy.

Geldings two years old, for agricultural purposes.—First prize, £10, W. H. Potter, Derby; second, £5, R. H. Timms, Rogoy.

Fillies two years old, for ditto.—First prize, £10, T. H. Vergette, Peterboro'; second, £5, B. E. Bennett, Market Harboro'.

Geldings one year old, for ditto.—Prize, £10, S. Wade, Rogoy.

Fillies 1 year old, for ditto.—First prize, £10, R. H. Tomms; second, £5, F. Tomlinson, Derby.

Mares with foals or in foal, for ditto.—First prize, £15, R. Loder, Towcester; second, £10, W. E. Sanders, Lutterworth; third, £5, J. Roe, Leicester.

Foals adapted for agricultural purposes.—First prize, £10, W. Barber, Atherstone; second, £2, ditto.

Cart horses adapted for agricultural purposes.—First prize, £10, R. Loder, Towcester; second, £5, W. E. Sanders, Lutterworth.

CATTLE.

Fat oxen.—First prize, £10, Lieut.-Col. J. Reeve, Grantham; second, £5, R. Wright, Lincoln.

Fat cows or heifers.—First prize, £10, Lieut.-Col. J. Reeve; second, £5, R. Wright.

Shorthorn bulls, over two and under four years, that have served cows the previous season.—First prize, £10, B. St. John Ackers, Painswick; second, £5, ditto.

Shorthorn bull above one and under two years.—First prize, £10, Duke of Portland; second, £5, T. H. Bland, Market Harborough.

Shorthorn cows, in calf or in milk.—First prize, £10, J. J. Sharp, Kettering; second, £5, Marquis of Exeter, Stamford. Shorthorn heifers, in calf or in milk, above two and under three years.—First prize, £10, B. St. J. Ackers, second, £5, T. H. Bland.

Pair of Shorthorn stirks.—Prize, £7, J. J. S. arp.

Pair of dairy cows.—First prize, £10, J. A. Beale, Lutterworth; second, J. Sharp.

Four animals of one family of the Shorthorn breed (bull, cow, and two of their produce).—No entry.

Loughorn bulls.—First prize, £5, R. Hall, Derby; second, £2 10s., F. Tomlinson, Derby.

Loughorn cows.—First prize, £5, R. Hall; second, £2, ditto.

Loughorn heifers.—First prize, £5, R. Hall; second, £2, ditto.

SHEEP.

Leicester shearing rams.—First prize, £10, R. W. Cresswell, Ashby-de-la-Zouch; second, £5, G. Turner, junr., Northampton.

Leicester or long-wooled shearing rams.—First prize, £10, H. Smith, Notts; second, £5, S. Smith, Oxon.

Leicester or long-wooled rams.—First prize, £10, R. Wright, Lincoln; second, £5, ditto.

Five long-wooled ewes.—Prize, £6, H. Smith, Cropwell Butler.

Five long-wooled theaves.—First prize, £6, S. Smith, Somerton; second, £2, R. Wright, Nocton Heath.

Shropshire shearing ram.—First prize, £10, G. German, Ashby-de-la-Zouch; second, W. Baker, Atherstone.

Shropshire rams.—First prize, £10, G. German; second, £5, G. German.

Five Shropshire ewes.—First prize, £5, G. German; second, £2, W. Baker, Moor Barns.

Five Shropshire theaves, under 18 months old.—First prize, £5, S. C. Pilgrim, Ilinckley; second, £2, W. Baker, Atherstone.

PIGS.

Boars, large breed.—First prize, £5, R. E. Duckering and Son, Kirton Lindsey; second, R. Tommas, Birmingham.

Boars, small breed.—First prize, £5, S. Spencer, St. Ives; second, £2.

Berkshire boar.—Prize £5, R. Tommas.

Breeding sow, large breed.—First prize, £5, R. Thomas; second, £2, R. E. Duckering and Son.

Breeding sows, small breed.—First prize, £5, S. Spencer; second, £2, S. Spencer.

Three breeding pigs, any breed.—First prize, £5, S. Spencer; second, R. Tommas.

CROOK.

The Council of the Crook Agricultural Society were favoured with magnificent weather for their sixteenth annual exhibition, which was recently held in the cricket ground. There was a very numerous attendance. The chief feature of the show was the display of horses, and the agricultural classes were very strongly represented, prize-takers at most of the Northern shows during the past two or three years being on the ground. The hunters, though few in number, included several well-bred animals sent by gentlemen of the district, but there were no great prize-takers from a distance. The harness classes included some good, useful animals, and there were a number of splendid roadsters and hackneys. The Shorthorn classes included some very capital specimens, and the bulls were especially good. The white bull belonging to Mr. Joseph Vickers, of Mown Meadows, Crook, has previously secured prizes in first-class county shows. The sheep, though few in number, included some very fine specimens of the Leicester breed, Mr. David Linton, of Bedale, being one of the most successful exhibitors. The pigs shown were those of local breeders.

GAINSBOROUGH.

The second annual show of horses, farm and dairy produce, poultry, dogs, &c., in connection with this Society was held on July 31 and August 1. The entries

were more numerous than those of last year, and a large number of visitors attended. The various classes were well filled, and the show on the whole was a great success. Of horses there were 153 entries, against 139 last year, and there was a fair show of farm and dairy produce. The competition amongst the riding and driving horses was particularly keen. The total number of entries for the various exhibits were upwards of 1,500, including those of the horticultural exhibition.

ROYAL NORTHERN OF SCOTLAND.

The exhibition of this Society, held at Aberdeen on July 25, was a very successful one, and the fine weather attracted a numerous attendance of visitors. The entries numbered 818, being a little fewer than those of last year. For Shorthorns the Aberdeen show ranks next to that of the Highland Society, and this year there was a very creditable lot, both more numerous and better than those of last year. The polled cattle were proportionately still better represented. The Northern show is not famous for horses, but in this respect there is an improvement, and there was a fair lot for the country at Aberdeen. Agricultural horses were not numerous, but rather above the average in quality, and there was a good show of harness horses.

SHORTHORN.

A Meeting of the Council of this Society was held at the Society's rooms, 12, Hanover Square, on Tuesday, the 30th ult. Present: Lord Skelmersdale, President, in the chair, the Duke of Manchester, the Earl of Feversham, Colonel Kingscote, C.B., M.P., Mr. B. St. John Ackers, Mr. H. W. Beauford, Mr. Charles Howard, Mr. D. McIntosh, Mr. R. Stratton, and Mr. G. Murton Tracy.

The following new members were elected:—

Lloyd, A. H., Harewood, Betchingley, Surrey.
Pery, E. H. C., Coolcroan House, Foxford, Co. Mayo.

EDITING COMMITTEE.

Colonel KINGSCOTE reported that the Committee had examined several pedigrees sent for insertion in volume 24, some of which were accepted, and the Secretary was instructed to communicate with the breeder of one animal, that with reference to the entry of a bull called Grand Duke 27th. The Secretary communicated with the owner of the bull, and, on the recommendation of the Committee, he had agreed to the name being altered to Grand Duke of Bainesse. In consequence of the increase of members the Committee recommended that 1,550 copies of the forthcoming volume of the Herd Book be printed. This report was adopted.

GENERAL PURPOSES COMMITTEE.

Colonel KINGSCOTE reported that the accounts for the month of July had been examined by Messrs. Quilter, Ball, and Co. and the Committee, and were found to be correct; that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £13 9s. 6d. during the past month, that the receipts for the same period had been £70 3s. 8d., the balance of the Society's current account at the banker's being £277 4s. 2d., and £700 on deposit; and that the Committee recommended that cheques be drawn for various accounts and salaries amounting to £153 11s.

This report was adopted.

The President was asked to write a letter to the Royal Agricultural Society, enclosing a copy of the following resolution, which, on the motion of Col. Kingscote, C.B., M.P., seconded by Mr. E. Bowly, was carried unanimously at a meeting of the Council held on the 11th inst.:—

That a sum of money (not exceeding £200) be set aside out of the funds of this Society, to be offered as prizes at the

International Show of the Royal Agricultural Society of England, to be held in London in 1879, for Shorthorn bred in any country of Europe (except Great Britain and Ireland) such prizes to be awarded by this Society in such manner as may be agreed upon between them and the Royal Agricultural Society.

The Council then proceeded to the election of a President and Vice-President of the Society in accordance with the following article of Association:—

Article No. XI.—“At the Council meeting next after the annual general meeting in every year the Council shall appoint two lie members of the Society to be respectively President and Vice-President of the Society who shall hold office until, and shall retire at the Council meeting next after, the annual general meeting of the Society to be held in the year following their appointment.”

On the motion of his Grace the Duke of Manchester, seconded by Colonel Kingscote, C.B., M.P., the Earl of Dunmore was unanimously elected President of the Society for the ensuing year, and on the motion of the Earl of Feversham, seconded by Mr. H. W. Beauford, Mr. Thomas Christopher Booth, of Warlaby, was unanimously elected Vice-President of the Society for the ensuing year.

Leave of absence having been granted to the Secretary and Clerk, the Council adjourned over the autumn recess until Tuesday, November 5th, at 3.30 p.m.

C L Y D E S D A L E .

A general meeting of the Clydesdale Horse Society of Great Britain and Ireland was held on July 31 in the show yard of the Highland and Agricultural Society at Dumfries. Sir Michael Shaw-Stewart, Bart., of Ardgowan, occupied the chair.

Mr. THOMAS DYKES (Secretary) having read the notice calling the meeting,

CHAMBERS OF AGRICULTURE.

NEWBURY.

A public meeting was held in the Council Chamber on August 1, under the auspices of the Newbury Chamber of Agriculture, to consider “How far it is (1) Advisable, (2) Practicable, to introduce Non-Intoxicating Drinks into the Harvest Field.”

The chair was occupied by the President of the Chamber, Mr. E. J. Deverell.

The CHAIRMAN said that when the question arose as to the desirability of discussing this matter he gave it his hearty support. He had long been convinced of the advisability of adopting means to introduce non-intoxicants into the harvest field, provided it could be found practicable. The great obstacle was, he feared, the labourers themselves, who looked upon any change as for the benefit of the master and to the disadvantage of themselves.

Mr. PALMER then read an interesting and practical paper. He said, in concluding: Instead of bringing forward any more instances which tend to show that beer can be dispensed with in the fields, I suggest that tea, oatmeal and water, syrups, &c., might be sent into the fields early in the morning, so that the beer might not be wanted quite so soon, my opinion being that much harm is done by beginning with beer and keeping on with it all day. We should try to let the agricultural labourer feel that we wish to advocate no harsh measures which would interfere with his comforts, nor to deprive him of beer against his will, but to give him an opportunity of tasting something which would help him quench his thirst instead of depending entirely upon beer. In summing up, I would observe that if I have succeeded in persuading you that some reform is needed as to the supply of beer or cider in the harvest field, you are requested to consider how far it would be practicable to introduce wholesome and refreshing beverages which might be the means of reducing the consumption of intoxicating drinks. We have evi-

The CHAIRMAN explained that certain alterations in the bye-laws were proposed; and those alterations having been read by Lord Arthur Cecil, were agreed to on the motion of the noble lord, seconded by Sir George Macpherson Gault, of Balindallock.

The CHAIRMAN then said—The retrospective volume of the Stud Book is expected to be in the possession of members by the beginning of October. It will contain upwards of 750 completed pedigrees, with an introduction bearing on the earlier history of the Clydesdale breed, giving useful information regarding pedigrees, &c., of some of the more noted sires. It will also contain an appendix with the names of the horses not acceptable for the Stud-Book under the conditions now in force. The Editing Committee have experienced great difficulty in the prosecution of their labours from the confusion by the similarity of names, in many cases the sire's name being given to the son with the adjective “young” prefixed during the lifetime of the former and then being dropped after the sire dies, as well as by the numerous *aliases* by which various horses were known, and under which they travelled the country in the possession of different masters. Delay has been caused by the dilatoriness of many breeders not answering the inquiries addressed to them, and it was hoped that all having circulars of this description in their possession would kindly forward them at once, as the committee are about to begin final revision for the press, and all incomplete or seemingly unimportant pedigrees will be struck out. Sir Michael, in conclusion, said the attention given by the Editing Committee to the work, which was not light, was very great. If any gentleman possessed authentic information about any horses he would do great service to the Clydesdale Horse Society by furnishing that information when applied to, and would expedite the production of the volume considerably.

Mr. OLIPHANT BROWN moved a vote of thanks to Sir Michael Shaw-Stewart for presiding.

The CHAIRMAN, in acknowledging the compliment expressed regret at the absence of Lord Dunmore, President of the Society, who was unfortunately prevented from being present by indisposition.

dence to show that the system has been tried successfully in other places. And yet, I repeat, I do not advocate the total abolition of beer from the fields. Let it be taken in moderation and not too soon in the morning, and let some light and wholesome drink be supplied as well, which the men can take if they choose, and we are not without a good hope that if a reform of this kind were set on foot it would tend much to the spiritual as well as the temporal advantage of the agricultural labourer, nor do we believe employers of labour will ever repent the day when they make the attempt to carry out the scheme proposed. I hope the benefit will be three-fold, viz.:—First, in a pecuniary point of view, secondly, in the more satisfactory nature of the work done, and last, but not least, in the increased prosperity of the agricultural labourer.

After a discussion the following resolution was unanimously adopted:—“That this Chamber considers it desirable to lessen the quantity of beer carried into the harvest field by paying in money rather than in kind; and that it is also well to endeavour to provide non-intoxicating drinks to prevent the men spending their money in public houses.”

SCOTTISH.

The half-yearly general meeting of the Scottish Chamber of Agriculture was held on July 26, at Perth, Mr. Wm. REDDELL, Dundee, Jedburgh, president of the Chamber, in the chair. After the reading of the minutes and of a statement giving a variety of reasons in favour of the immediate abolition of the law of hypothec, copies of which had been transmitted to the Government, all the Scotch and a number of the leading English members of Parliament,

The Cattle Diseases Bill was discussed.

Mr. CURRO having reported the action which had been taken by the directors with reference to this measure,

Mr. MELVIN, Bonnington, remarked that great changes had been made in the clauses of the Bill, and that the main

provision had been altered. The effect of the alteration, however, might not be so great as some people imagined. If the Privy Council undertook to keep diseased cattle out of the country, and really did so, that was all that was wanted. It was the foreign cattle-jobbers and their agents in this country who banded together in close union, desired to have live stock introduced without restraint. The more disease they could import the more they destroyed the home-stock competition, and made the more room for the cattle and sheep of the foreign producer. It was quite natural that they should endeavour to palm on an ill-informed public all sorts of mis-statements if they had the colour of truth about them, and in this purpose their agents had most industriously worked on the fears of the community. He should endeavour to show wherein the public had been so misled, and that in place of the foreign live-stock importation having been the means of keeping down the price of butcher meat it had greatly aided in raising it by reducing the growth of the home supplies. The return obtained by Sir George Ballour showed that 10,000,000 cattle was the average number kept in the United Kingdom during the past six years, 3,775,000 of which were cows. Taking the average value of these cows at £10 a head—prices varying from £4 to £14—gave a return of £37,000,000 per annum. There were 6,250,000 of other cattle, and assuming the average of these at £8 per annum, this brought out a total of £50,000,000 per annum. Of sheep there were on an average 33,000,000 kept in the United Kingdom, the wool of which he estimated at £9,000,000, and the carcases, which he put down at £2 a-head, at £22,000,000. That added to the cattle returns gave £118,000,000 as the value of the animals produced by the home flocks and herds. Besides this, there were 4,000,000 pigs, the value of which would be £9,000,000 or £10,000,000, but he left these out of the calculation, and said nothing of the value of the stock to the retailer, of the vast sums paid to the railways for transit, of what their potato, barley, and wheat crops would be without manure, or of the number of people employed in the industry. Comparing the above with the results of the importation of live stock, Mr. Melvin remarked that for six or seven years past the average annual number of live cattle imported had been 220,000, of the value of about £4,000,000, and of sheep 900,000 at £2 5s. per head, about the value of £2,000,000—being £6,000,000 in all, as against £118,000,000 estimated as the produce of the home flocks and herds, not including pigs. It seemed to him, therefore, that when the importers of stock spoke about the vast importance of the trade which they carried on, they talked in a "tall" manner. It was also very noticeable that the importers kept in the background the great increase which had taken place in the importation of dead meat of all sorts. Fresh beef had risen in 1877 to £1,636,000; preserved meat to £1,800,000; pork, bacon, and ham to upwards of £10,000,000. Butter had also increased from £1,359,000 in 1840 to £13,200,000 in 1875. Importers said that but for their stock, beef and mutton would have been far higher than it was. If their reasoning was correct why had butter got so high? It had risen far more in proportion than beef. When foreign cattle were first brought to this country it was selling at 8s. or 9d. per lb.; it was now 1s. 6d. and 1s. 10d., while beef had risen, one-half. Could he asked, there be any more striking proof that the terror of pleuro-pneumonia and foot-and-mouth disease had checked the increase of dairy cows, on whom these diseases fell heaviest? There was no protection in the matter. The true cause of the outcry against live-stock importation was the dread of the disease being brought into the country. In regard to the action which the Chamber should take Mr. Melvin was a little at a loss to advise. It was, he thought, matter of regret that Mr. Barclay's proposal for enabling veterinary surgeons possessing the certificate of the Highland Society to act as inspectors had not been adopted. This was a blunder, and there were others; but as in reality the Chamber at present knew little about the Bill, he did not see what action could be taken in the meantime. He proposed, however, that in the event of any change taking place in the measure on its introduction to the House of Lords the directors be empowered to take action in the matter in accordance with the motion previously adopted.

After the discussion the following resolution was carried by a large majority:—

"The meeting, approving generally of the Bill, remit to the directors to watch over its progress through Parliament."

A vote was taken with the following result:—For Mr. Alexander's motion, 14; Mr. Smith's, 3; and Mr. Storiers, 2.

The report of the directors having been received, Mr. McCulloch read a paper on Agricultural Leases, and concluded by moving:—

"That no terms of lease can satisfy the necessities of an advanced and advancing agriculture that does not secure to the tenant (1) the full beneficial usufruct of the holding (subject of course to liability for depreciation); (2) the right to assign his interest to trustees or *bona fide* purchasers; (3) the right to protect his crops of all kinds from destruction by wild animals and birds, whether known as game or not; and (4) the value of his unexhausted meliorations of all kinds at the issue of his lease."

Mr. MACKNIGHT seconded the motion, which was agreed to.

Mr. CURROR read a statement by the directors in view of the fact that constituencies were already engaged in testing the fitness of individuals to represent their views in Parliament.

ERRORS IN DIET.—There is no doubt that a goodly proportion of the "thousand ills that flesh is heir to" might successfully be guarded against by a wider dispersion amongst us of physiological knowledge, and a more general acquaintance with the chemistry of the human body so far as it relates to the appropriation and assimilation of food. How is it that the average duration of life is little more than half the orthodox three-score years and ten? Look around, and mark the general neglect of sanitary laws, and the answer is plain. Impure air, intemperance, and dissipation produce a long catalogue of disorders; but errors in diet are as effectual in shortening life as any of these causes, and are, perhaps, of more common occurrence. Intemperance and dissipation are not gentlemanly vices, but errors in diet are highly respectable, and sanctioned by the usages of the most fashionable society. Rich soups, highly-seasoned dishes, and hot condiments are swallowed in defiance of the simplest dietic laws, while the poor stomach, consorted for simple fare in moderate quantities, is distended with a huge conglomerate of fish, fowl, flesh, and pastry which the gastric juice cannot permeate, and the digestion of which can only be effected by a disastrous expenditure of vital force. In youth and early manhood the elasticity of our constitution is such that a considerable amount of abuse can be borne without much apparent injury or loss of tone; but sooner or later there will come a revolution; the ill-used organs will rebel, and terrible will be the revenge they will take for the long-continued slavery and hardship to which they have been subjected.—*Science for All.*

HOW TO ESTABLISH A PENNY BANK.—It is by no means a laborious thing to establish a penny bank. All that is required is to get about half a dozen respectable and well-to-do people who will act as guarantors; their responsibility will be trifling, and their risk less. The Controller of the Post Office Savings Bank will supply the deposit books, rules, and instructions gratuitously, and the cost of cash book and ledger as supplied by that Department is only eighteen-pence for the two. There is a special need why this subject should receive the careful thought of earnest men and women at the present time, when there is everywhere a tendency to allow expenditure to exceed the limits of income. The great depression in trade has created a desire on the part of many to save, for improvident and unthrifty men have been witnesses that the steady and thrifty are always the last to be paid off, and consequently the last to feel the full effect of dull trade. And it is the more necessary that real philanthropists should bestir themselves in this good work at once, seeing that there are institutions whose aim is to create huge business regardless of risk—institutions high-sounding in title, elaborate in advertisement, and extravagant in management, which benefit the promoters more than they benefit the poor—and as it is certain that excessive expenditure must be met by some means, and it cannot be from the interest on the accumulated capital, it is to be feared that some day a crash may come, and one such catastrophe shatters the work of years. To avert such an evil, let the work be voluntary, let the machinery be without expense, and let the reward be the pleasure of knowing that germs of great principles are being sown which will bear fruit in the present and in after years.—*Cassell's Family*

LIVE STOCK NOTES.

The great event has come and is over, and its sequel proves that those are right who believe in the enduring worth of the "blue blood" Shorthorn. The event I refer to is Groom's sale in America. I remember to have read somewhere from the pen of a gentleman who is given to ridicule, the prices given for fashionable cattle (fashionable be it remembered because their value in improving outside herds generally has been ascertained to the satisfaction of an increasing circle of admirers, including many grave, earnest, business men as can be found anywhere), that "when money once more becomes plentiful few things will feel its stimulating influence in an increased demand more quickly than will well-bred tribes of useful Shorthorns," and yet on the same page the same writer observes "that it neither makes the Shorthorn cattle better nor worse to have *this* going on." "This" refers to a previous statement in the paper that there exists in England a "limited section of millionaires to whom money is small object; men *who would—rather than not—pay thousands, where others pay sovereigns!* There may be no need to pay so much, but there is a wish, and the wish has its way where the purse is long. It neither makes the Shorthorn cattle better nor worse to have this going on!" Assuredly a jury would conclude him to have "a tile off" who can write such stuff! How can a vastly increased value of a live and improvable article fail to promote the intelligent from cultivating its yet additional excellence? A temporary run may be caused after any "screw" to be found of the description, but that market naturally comes to an end, whilst with equal certainty thoughtful owners will spare no pains to improve their sale commodities of the sort yet more; and where are "well descended" animals to be had if no one strives to maintain the excellence of the blood sires from which the merit of the half-bred filters? High prices are like the prizes of a profession; they stimulate genius. I will say no more, however, upon the subject now that the recent sale shows the approved blue blood to maintain its worth in the estimation of the public on the verge of an opening market. The idea that sane Englishmen of the classes who purchase this high-priced stock at auctions absolutely prefer to give much is as puerile a statement as it is superfluously spiteful. There is something, however, to be allowed for sour grapes. I am surprised not to have seen any full account of the sale in any of the home papers, considering the interest involved. In *The Globe* and *Canada Farmer* there is published a whole column, from which the following extracts are made: "To put up for sale by auction at one time without any reserve 195 high-bred Shorthorns was in these times a very bold thing to do, but it has been done, and with very great success. At Winchester, Kentucky, on Wednesday and Thursday of last week, the entire herd of Mr. B. B. Groom was sold at the hammer for cash down, and a sum exceeding 80,000 dollars was the realised amount. The herd was of the most mixed character, a good many of very high pedigrees, of great individual merit, and in admirable condition; others with two of these qualities, but lacking in the third; others with one of them, but lacking in the other two; and a good sprinkling that had little to recommend them. The company present was gathered from far and wide over the North American Continent; great interest attached to the sale amongst intelligent farmers; every animal on the catalogue was sold after a brisk competition; not the slightest suspicion of by bidding attached to the conductors of the sale, and the whole affair went off with the highest satisfaction to all interested, whether

buyers or sellers. Of the 126 females 28 were non-breeders, very aged, or out of health and these were well sold at an average of 97 dollars per head. The remaining 98 females produced 54,630 dollars or an average of 557 dollars per head, an average which, though much below old prices, cannot be regarded under all the circumstances as universally satisfactory. The bulls and bull calves averaged 334 dollars per head. A most instructive view of this sale for enterprising farmers is the comparative amounts realised for the respective families of Shorthorns included in it. The 98 females sold in sound condition embraced two or more of the following well known families and they took rank in the following order: First, Mr. Bates's Wildeyes family, four cows were sold on an average of 2,075 dollars each. Second comes the equally-prized Bates family, of Kirklevington, four of which were sold at 2,800, 2,050, 750 and 500 dollars. But it is noticeable that the two low-priced ones were 11 and 12 years old respectively, and of doubtful usefulness. Third, the Bates Lally family made an average of 1,160 dollars. Fourth came the Roses of Sharon, with an average of 1,057 dollars each. Fifth, the illustrious Maids of Oxford made 1,000 dollars each only, in consequence of doubts as to their fertility. Sixth came the Bates Harts' family, of which three sold at an average of 600 dollars. Seventh, the Craggs' sold at an average of 500 dollars. Eighth came the Bates Filbert family, of which eight were sold at about 500 dollars average.

"The remaining ten families rank in the following order:—

Foggathorpes	3	at an average of	438
Victorias.....	3	"	430
Pieces.....	2	"	420
Desdemonas...	2	"	390
Acombs	4	"	342
Georgianas ...	7	"	310
Young Marys	5	"	245
Bell Tykes ...	4	"	207
Duennas	12	"	202
Blooms	2	"	170 "

Very various names of buyers appeared on the extended sale list; but I recognise no English. Mr. Cochrane invested in some of the more fashionable lots. The Bow Park Association, Toronto, Canada, secured eight females, descendants of which may we live to see, as gigantic as those that astonished our weak nerves at Liverpool last year. Their choice was Kirklevington Duchess of Horton, bred by R. Pavie Davies, for 2,800 dollars; 15th Lady of Oxford, bred by E. H. Cheuey, 1,000 dollars; Red Daisy of Fairview 8th, 500 dollars; Annette, of the Asia tribe, 330 dollars; Oxford Annette and B. C., bred by Mr. Fox, also of the Asia tribe, 430 dollars; Blanche 10th, bred by H. De Vitre, 510 dollars; Seventh Maid of Oxford, bred by J. O. Sheldon, 1,000 dollars; and Winsome 16th, bred by the Duke of Devonshire, 2,600 dollars.

There is therefore every encouragement to the Shorthorn breeder at home to "keep up his pecker" as the sea-side song used to counsel. At the approaching autumn sales there will be many good things to be picked up. Mr. Wilson, of Shotley's, catalogue, which has just reached me, reads right well. Let the intending purchaser take time by the forelock, study well in each catalogue, herd-book in hand, the various pedigrees, and *decide what to buy before he views the animal in this flesh, being of course ultimately influenced by her appearance when the*

day comes. Go, however, *first* for *old blood*, and as much of the Collings' as you can get.

The flush of grass this year has had its dark side. The stackyard may be groaning with its accumulated hay ricks, but there is a sad record of cows dead from milk fever, excessive internal fat at calving, &c. It has been almost impossible to keep the heavy females on short enough keep. They ought always towards their confinement to have to work for their living. The worst of

it is that they don't look so well, and that certainly is a point to be considered. The same of ewes too, only in their case Mr. Wood's wonderful discovery will be of eminent service in the future. For those who want to buy sucking colts the coming St. Mary Hill Fair upon a grass mountain in Glamorganshire is an old institution where excellent youngsters may be picked up beside their dams, from the cotter's pouy to the weight-carrying hunter. VIGIL, Aug. 3.

FARM PONDS AND HOW TO UTILIZE THEM.

BY JOHN H. KEENE.

No 2.

I have in a former communication presumed to urge the desirability of fish culture generally, and now come to the ways and means of so doing. Unquestionably for rivers there can be no hesitation in recommending the salmon for extended cultivation, and facilities of all kinds are necessary to be given for the annual migration of these fish. As we have seen, if such facilities are actually given, the feasible result is an increase of often as much as 2 to 3 lb. per month in the salmon. And this increase is peculiar in its causes and progress. The fish after ascending with infinite effort to the highest possible position toward the headways of the river crowds its course by burrowing like a swine in the disintegrated gravel and laying its ova. The industrious and observant male then impregnates them and covers them up, and the act of generation is performed as far as the parents are concerned. The male and female now remain for some little period quiescent and languid and rapidly absorb any remaining fat or exuberance of body, and become infested with parasites and loathsome in appearance. The flesh at this time is described by Mr. Francis as "carrion" compared with what it is after the migratory visit to salt water. It really is unfit for food. Presently the calls of natural instinct awake the fish to exertion and it drops from pool to pool and gradually passes from the brackish water to the open ocean, where it acquires the marvellous increase of size by some peculiarity of food before referred to. The finality of all is that our tables, since the Salmon Fishery Acts, are provided with a moderately-priced delicious fare by the prolific waters of some of our streams. From a gastronomic point of view I think it will be conceded that salmon is simply an unapproachable production of the waters, and hardly needs that I should here say so. The salmon, however, by reason of its migratory instincts, is hardly fitted for cultivation in our lakes and land-locked waters. Truly there is such a fish as a "land-locked salmon," born and bred in a lake—and fairly good eating they are—but I cannot do further than mention the fact. The successful artificial breeding of them, so far as I know, not having been accomplished. These fish never seem to attain the splendid characteristics of the migrating fish, and appear rather like overgrown smolts than the mature fish. The flesh, also, is, although decidedly good, nevertheless much inferior; indeed I think it inferior to a well-grown and fed trout. Still, however, if the fish-culturist chooses there is no harm in trying the experiment of breeding and rearing the ordinary *salmo salar* in a confined space; and at any rate the result cannot be of less value than the possible present production by the water of coarse fish. Next—and for our purpose the best on the list of useful fish for culture—comes the trout; and I know of no fish capable of such improvements under human care. The varieties of trout suitable for general culture are two only—the brown or common trout

(*salmo fario*), and the *salmo fontinalis*, or American brook trout. The relative values of each are great when the qualities of either are properly made use of, but it is injudicious to attempt to get them to live together. The American cousin is a perfect demon for voracity, and in the struggle for existence completely beats its English brother out of the field. The ultimatum is that the *fontinalis* nibbles off the fins of the *fario*, and otherwise illuses it, and in this process injures itself to the extent of hindering growth. My advice, therefore, to the intending fish culturist is not to attempt to grow these fish together. Separately, however, as I shall detail anon, they may be successfully introduced and grown with ease.

In order to understand the culture of trout the reader should bear in mind the following hypothetical case:—The farmer has possibly a small stream on his farm and a few ponds, the result of drainage or springs, as the case be. The stream has hitherto produced small trout—fingerlings is the expressive word used by our American cousins. These fingerlings have been of poor sport and less worth—gastronomically. Probably the most delirious exaggeration has never succeeded in getting together a tradition of a capture of over a pound weight from this or neighbouring streams. Assuming that this stream has springs or a supply which does not absolutely fail in the most trying month, the first course is to trim the banks and erect dams or tiny weirs at intervals to be regulated by the lowest supply of water. By doing this the depth of the water is increased, and may be increased indefinitely, especially if the bank be raised by excavation or naturally. Exuberant foliage should be discouraged on the bankside. Birches, beeches, alder, and willow are the most suitable of trees. Fir or cedar are of little utility, as they produce no insect life, and the falling of their leaves is attended with eminently prejudicial effects. The bottom of the stream should be cleaned with the rake and broom. This done, and the other conditions complied with, the whilom unproductive stream is ready for systematic culture.

The ponds referred to may be used separately or in conjunction with the stream. I am not asserting that their connection can be made possible in all cases, but we will suppose it is so in the present hypothetical instance. We have in such a conjunction the possibility of replenishing the pond with water, or of allowing of the exit of superabundant water. This being the case, with a little ingenuity each pond can be made a nursery for young fish eventually destined to attain maturity in the stream aforesaid. But, supposing that the union of the two is impossible, the pond may yet be useful in trout rearing, and I have known trout to do well, making two and three pounders, in an insignificant piece of water hardly ten yards square.

The chief necessity of the case admitting in imagination the picture drawn of the supposititious stream or pond,

on both is now the selection and breeding of the fish. The ova of fresh fish is desirable, and Mr. Buckland and many others will supply it at the proper time with promptitude and at a small cost. The stream must be used for their incubation, or any small running brooklet will suffice, or an artificial brooklet may be made without much difficulty. Fresh water and clean they must have, however, and immediately they have absorbed the umbilical vesicle the little trout should be turned into, if possible, an enclosed space, that eels, lampreys, other trout, birds of prey, and various other enemies may not decimate them. When by hand or self feeding they have arrived at a respectable size they should be turned free to shift for themselves. They will naturally mate with others, and the result will be the infusion of fresh blood, and accession of size surprising to see; with size comes pluck also, which means sporting power, a most desirable adjunct not to be overlooked. I shall return to the details of trout management in another article, my object here being simply to enumerate with a few attendant remarks, the fish most available for the farm water of England and the Principality.

The fresh water eel is in my opinion the next best fish for cultivation in such ponds as are unfit for the successful growing of trout. Cleanliness is, however, as necessary for the eel as the trout, and it is a mistake to suppose that the eel is a dirty animal, revelling in mud, and eating filth. It is true that the thick viscid mucous slime protects the epidermis from the deteriorating agency of the mud in which the fish will lie concealed, but it is incorrect to suppose that the eel enjoys the contact. On the contrary, the eel much prefers soft, clean gravel or sand wherein to hide, and a few huge boulders or irregular concrete blocks will afford capital supplementary covert. A farther proof in favour of extreme cleanliness in connection with fish culture generally, and the eel in particular, is apparent in the fact that the eel is extremely absorbent of the constituents of the putrid matter with which it may come in contact. All fish are so in a greater or lesser degree, but the eel pre-eminently. To give an example of what I mean I will mention a curious incident which once occurred. An eel had been accidentally left for some little time in the bottom of the punt which had been newly tarred. There was a little water, deemed sufficient to keep it alive, and which in fact did so, for it was not necessary to sever the vertebrae before skinning it. It was subsequently cooked and brought to the table, when all present remarked a peculiarly sickly tar-like odour. On tasting the eel it was found to be utterly unfit for food, the odour was of gas-tar and the taste similar. The oils of the tar had impregnated the water and the eel had consumed them sufficiently to become exceedingly offensive. Struck by this fact I determined to make a few experiments. I confined eels with all kinds of strong smelling oils and chemicals. I even went so far as to use Schiel's hydrocyanic (or Prussic) acid, and the peculiar almond-like smell and more curious taste of the acid were palpably apparent when the fish was cooked. Trout, perch, and roach gave similar results, but in a less marked degree, owing chiefly to the decreased tenacity of life in these fish. Carp were also strongly affected.

I detail the above facts because they bear importantly on the necessity for absolute cleanliness of *habitat* and food for fishes. The eel and all other fishes are in flavour, regulated by the quality of the food and their surroundings, and I am by no means sure that exceedingly unhealthy results may not follow the consumption of fish bred amongst decaying vegetable and organic matter.

The method of generation of the eel is not precisely known, but it is not by any means necessary that they should go to the sea, as has been asserted for the purposes of multiplication. It is desirable that eels should not be

allowed in a pond or stream in which the finer kinds of game or even coarse fish designed for culture are kept. They are most inveterate as destroyers of ova, especially of trout, and so mysterious are their nocturnal movements that I would recommend a broad path of sand round each eel fence to prevent migration overland—for eels will travel through the dewy grass. A friend of mine has taken half-a-dozen in a night by placing a net between two contiguous ponds in his garden—one containing eels and the other gold fish. Where, however, as I have before said from motives of economy or mechanical difficulties the pond or stream appears unfit for other fish eels, because of their hardihood may be successfully introduced. In the event of the water being unavoidably impure a fortnight in a clean water stew, and a few pellets of oatmeal paste occasionally dropped in towards evening will do much in cleansing and improving the fish. There are several species of eels known in English waters, but the best of these are the species *A. lateolus* and the *acutirostris*, or sharp-nosed eel, *alias* silver eel.

The carp is also capable of great cultivation, and is moreover a very firm and luscious fish when well fed and cooked. The Germans, as before stated, make a splendid revenue out of the sale of these fish, but English people seem quite indifferent to its virtues. The carp is best fitted for ponds, and requires little attention beyond an occasional meal of maize, &c. Since writing my last article I have come across some valuable documentary information of the *modus operandi* of the immense carp fisheries in the Pietz Lakes, several passages of which I subjoin a translation*:

"The Ural-Baltic plateau, which includes a portion of Lusatia, contains a very large number of lakes and ponds. Of these the Pietz Lakes are the most important. These lakes, seventy-six in number, and forming a water area of 5,000 acres, are a Royal domain, and are at present rented to Mr. Th. Berger. After the first year in the life history of the young carp they are placed in ponds usually covering about thirty acres apiece, at the rate of 360 to 600 fish per acre. After they have stayed in these ponds a year the fish (now two years old) are placed in still larger ponds (generally covering an area of 400 acres each) at the rate of 180 to 360 per acre. After another year has passed, the fish (now three years old) are placed in the large ponds (generally about 900 acres each), in which they stay another year, and reach an average weight of 2½ to 3½ pounds, and thus attain their maturity."

As the annual fishing days come round, the scene at the lakes grows very exciting. I cannot forbear giving a short excerpt from the article referred to, the scene being so utterly unlike anything to be encountered in England:—"The day of harvest comes at last. Three weeks beforehand the fishermen begin to let the water flow off, and the carps gradually gather in the deep ruts or holes of the bottom. On the morning of the great fishing day they are driven into a basin about the size of an acre, and about one metre deep. This is done by the fishermen, who, armed with purse-nets, wade, often with half their bodies in the muddy water, and, shouting and yelling, drive the fish before them. Slowly the great mass of fish comes rolling on, making the water of a dark, muddy colour, and throwing great quantities of mud-like clouds in the air. No one could tell that these are carp, for the dark, round backs, which in innumerable places become visible among the seething mud and water, rather resemble eels or similar fish. The whole spectacle, which is quiet in the beginning, reminding of the driving of a flock of

* De Kirpfen frischei in den Peitzer Leichen. From a Berlin daily paper.

zeese or a drove of sheep, gradually becomes quite exciting, especially towards the end, where from 60,000 to 70,000 pounds of carp are crowded together in a narrow space scarcely twenty paces square. Two simple nets are, nevertheless, sufficient to close up the two channels leading into the basin, which now resembles a cauldron full of boiling mud and water. In this turmoil the pikes, which, during the last year of growth, are allowed amongst the carp, fare worse, for some of the carp, which, like tame steers, seem in the last moment to remember that after all they possess considerable strength of muscle, are continually dealing powerful blows with their tails, which the sensitive and cowardly pikes cannot stand very well, so they endeavour as much as possible to crowd into a distant corner. Now the fishing itself commences, and a number of men with two drag nets, each holding about 5,000 pounds of fish, slowly haul that quantity on shore." After they are successfully brought to *ten ra firm* they are transferred a short distance to an open shed, where there is a large pair of scales with a 100lb. weight. "The carp are uninterruptedly brought up from the pond in

immense buckets, each carried by two stout men, and thrown on boards by the side of the scales. With lightning-like rapidity one fish after another is seized by men standing there for the purpose, counting, 'One, two, three, four' * * * until the scales are evenly balanced. Thirty-one to thirty-three fish generally make the hundred pounds. The full scale is then immediately seized by two men, whilst an empty one is being filled, and the fish are placed in large casks on one of the many wagons which load at a short distance. As soon as the three casks, which every wagon holds, are filled, the wagon is rapidly driven along the turnpike, near which the whole transaction takes place, to the Hammer Canal, distant about one kilometre (3,280.703 feet), where the fish are immediately placed in the holds of boats, which contain water. Each of these boats carries 2,500 pounds of fish." They are then transferred to the various centres of commerce, and the number consumed would seem marvellous when it is borne in mind that as many as 500,000 pounds of carp are annually sold in Berlin alone.

THE BREEDING AND REARING OF CART-HORSES.

At the inaugural meeting of the Derbyshire Chamber of Agriculture, Mr. GILBERT MURRAY read the following paper.

The subjection of the horse to the service of man may be viewed as one of the most important acquisitions the animal kingdom has furnished to civilised life. This sagacious and faithful servant is equally ready to act as our slave or minister to our pleasure, and fearlessly faces the glistening sabres and thundering guns on the field of battle with a spirit as dauntless as that of the rider. The first domestication of the horse is lost in the mists of antiquity. In all probability his subjugation is coeval with man himself. At an early age of the world's history horses were numerous in most Eastern countries, and yet so late as the seventh century, when the prophet Mahomet attacked and routed a large army near Mecca, he had only two horses in his train. Probably Egypt was the first country where the breed of horses was improved, and from whence Eastern monarchs obtained their studs. Solomon's stables seem to have been supplied from this source. Conjecture points to Asia as the original country of the horse, which even to the present day roams unrestrained over the boundless plains. No horses were found either in America or in Australia when these two extensive continents were first discovered, though they are now to be met with in large numbers. The horse in a domesticated state is now common in every habitable country on the globe, except it be with the Laplauder amid the eternal region of snows; each country has breeds of horses possessing distinct characteristics peculiar to itself. It is purely a speculative question whether the globe, and the organised life with which it is clothed, is not slowly undergoing progressive development, even though it may elude the perception of the busy worker and the brief sojourner of a day; and which may yet in the course of countless ages react upon the whole of the existing race, and in obedience to the fiat of the great Creator may adapt themselves to the imperceptible gradations of external nature, or whether as centuries roll on the changing circumstances call forth fresh acts of creative power in order to produce a new race suited to the altered conditions. Within certain limits plants and animals have the power of adapting themselves to existing circumstances. Climate and food ever exert a powerful influence on their healthy development. When Julius Cæsar landed on the shores of Kent he was opposed by a numerous army, consisting of cavalry and war chariots resembling those of Eastern nations at a more remote period, and thus by a parity of reasoning the connecting link of pristine relationship may be traced. The first and most natural method of reducing the horse to a state of subjection and usefulness is to teach him to learn the burden of a rider. At no very remote date the use of wheel carriages were unknown on the farm. Hay, corn, and manure were all carried on the backs of horses,

the latter in creels or panniers specially constructed for the purpose, a *fac simile* of which I saw in use in our own county not many weeks ago, though the bearer was not the noble animal, the horse, but his despised congener, the donkey, and his load, not the product of the farm, but of the mill. In many of the wide pastoral parishes in the south of Scotland, even within my own recollection, husband and wife brother and sister, each pair on a single horse, might be seen winding their way to church on a Sunday morning, decked out in all the pride of their holiday attire. Ancient historical records familiarise us with the existence of a race of wild horses common to Africa, Asia, and Europe. They still continue in countless numbers to roam at will over the boundless plains of South America. Within the past two years considerable numbers of mustangs, or South American horses, have been imported into this country. They are said to possess great powers of endurance, and to subsist on scanty fare. The sudden change from a state of unrestrained freedom to that of domestication breaks their spirit, and they lose much of the fire for which they are celebrated on their native plains. The horses of Europe, like the inhabitants, are of mixed lineage. The Russian horse is of small stature, hardy, and muscular; he is capable of great endurance, exposure, and privation. The Italian horses of the present day present a great diversity of character; many are powerful and well-shaped. During the middle ages they were imported into this country for military purposes, and no doubt became blended with the native races. The Spanish horse is small, with a strong dash of Arab blood. Large numbers of Norman-French horses are imported into London and the provincial towns; they are compactly formed, generally soft, and sluggish in their movements, with shelly hoofs, subject to side-bones and contracted feet. It is generally conceded that the improvement of the breed of heavy horses in England was principally effected through the importation of a race of black horses from Holland and Belgium. These were at first principally used for military purposes during the wars of the middle ages. It required an animal of no mean strength to bear the weight of a steel-clad warrior, and withstand the shock of his opponents in the battle-field. Who can tell whether we may not still have in South Derbyshire some of the lineal descendants of the very animals on which Isaac of York mounted the Black Knight when he so successfully entered the joists in the presence of King John and his assembly of courtiers at Ashby-de-la-Zouch. Be this as it may, it was well-known that Mr. Birkwell, of Dishley, through whose energy and intelligence the breed of Leicestershire sheep and Long-horned cattle were brought to such a high state of perfection, also greatly improved the breed of horses. He made several journeys to Holland, where he selected mares, which he imported to his farm at Dishley, and crossed them with the old black horse of the Shires. Luterly, M :

Bakewell's horses were in great repute. We have seen paintings of several of his favourite stallions. About the year 1820, 1821, and 1822 a Flemish horse travelled this district, and I believe was the sire of many fine mares. I gather from various authentic sources that not only the present strain, but the best specimens of the old English cart-horse in the kingdom, were at no very remote date principally bred within 50 miles of the town of Derby. Some of the best blood still remained, like the celebrated bull "Favourite," 252, the founder of a noble line of Short-horns. We find the Taekington blind horse the starting-point of unsurpassed merit, descending through Kirby, old Mausetter, Hart's bald horse, Wild's old Swainstone, Arnold's Brown George, Bearsoll's Leicestershire, Young Leicestershire, bred by Mr. Walker, of Radbourne, Young Drayton, bred by Mr. Adams, of Normanton, Sul an, winner of the first prize at the R.A.S. Lincoln meeting, and sold for 200 guineas to an Australian purchaser, Nonpareil, first prize two-year-old at the R.A.S. at Windsor, Prodigy, winner of the first prize in the two-year-old class at the R.A.S. meeting at Exeter, Sampson, a chestnut horse foaled in 1821. This horse travelled for many years in North Leicestershire and South Derbyshire. As a two-year-old he took first prize at the R.A.S. meeting at Shrewsbury, and was winner of many local prizes. He was admitted by good judges to be the best cart stallion in England. Many of you will, I have no doubt, recollect Stychie's Bangup, a horse who travelled this district for nineteen seasons, and was said to have left the best stock of any horse in the kingdom. I could even now find you some of the sort, and they, though aged, are no disgrace to their ancestry. Bangup was by Sir George Crewe's Snelcho, also a celebrated sire, who travelled the Castle Donington district for nine seasons. The dam of Snelcho was sister to Big Ben, and closely related to Bluelegs, who stood at 5 guineas a mare. No district in England could boast of such purity of blood, and no part of the country is better adapted for the purpose of breeding cart horses. The establishment of a Stud Book, the aim of which is to furnish the breeder with an authentic record of the pedigree, is undoubtedly a step in the right direction, and merits the support of every breeder. It will not only enhance the value of the animals in the market, but it will enable intelligent breeders to carry out their ideas with greater certainty and attain more satisfactory results. It requires a natural combination of fortuitous circumstances to successfully carry out the breeding and rearing of the sires, or old English cart horse. Breeding never answers on large tillage farms; the busy seasons of spring seeding, the preparation of the land, and the sowing of the root crops, at the very time when the mares are heavy in foal or suckling, are not conducive to the health of the young animal. However well it may answer to turn out hard-working horses to graze on seed-layers, they are totally unsuitable for mares and foals. The best lands for growing cart-horses are the rich alluvial flats of the river valleys, with the soil of a damp or marshy character, which in summer and autumn throws up a profusion of grass, sometimes of a coarse and inferior quality, little relished by cattle, yet it is eaten with avidity by horses, who generally thrive rapidly upon it. The spongy character of the pasture induces a healthy development and expansion of the horny tissues of the feet. The old English cart-horse is, I had almost said, an indigenous produce of the moist climate and rich pasture lands of the Midland counties. When transposed to the drier climate and crustaceous soils of the south and eastern counties in a few generations they lose much of the feather, and be, comparatively clean in the leg. Derbyshire is in every respect peculiarly adapted to the breeding and rearing of a superior class of draught-horses. On most farms there is only a small area under tillage, and yet a certain number of horses must be kept. The great work of the year is securing the hay crop, and as this only lasts for a few weeks at most during the greater part of the year there is very little for the horses to do. I am strongly of opinion that on most Derbyshire farms a preponderance of mares should be kept, and as many foals bred as possible, taking into account all the risks and chance of breeding. I know of nothing that pays a farmer better than selling weaners at from £30 to £40 each. I am now speaking of grass farms. On purely tillage farms I do not think it ever pays the farmer to breed. It is an old adage, and a safe practice, not to put too many eggs in one basket. It is gratifying

to see the increasing interest that is springing up amongst breeders, and it must be reassuring to them to see that, as a proof of their efforts being appreciated, some of the best judges in the kingdom will readily undertake a journey of two hundred miles for the chances of securing a single animal. The value of the Derbyshire mares for crossing with the pure Clydesdale is too well known to need any comment from me. High prices are tempting, yet we should sedulously endeavour to impress on breeders the folly of selling the goose who lays the golden eggs. By breeding only from good animals we would, in a few years, see a class of mares of the real old sort spring up, with tassel at hip, knee, and hough, and a profusion of straight silky feather that no county in England can equal. This is at present the fashion in some cases. We have seen fashion outrun practical utility; we are apt to associate a profusion of hair with greasy heels, and we have yet to learn that coarseness always implies strength. An incalculable amount of injury is inflicted by breeding from animals who are suffering from hereditary diseases; these are perfectly certain, sooner or later, to reappear in the progeny, though they sometimes pass over one generation, but they are sure to crop up the next. Altho' in the breeding of cart horses far too little attention has been paid to the selection of sires; the chief recommendations have been a low fee and easy access. It is needless to say that close observation and considerable practical experience in the breeding of the different kinds of our domesticated animals thoroughly convince us of the great value of pure blood. It is true I like a good animal, yet I would infinitely prefer, for breeding purposes, a moderate animal of pure strain to that of the most perfectly formed mongrel. We greatly dislike all signs of weakness and effeminacy in the male; he should be wide and deep, rather than high and leggy. In the draught horse good feet and legs are of the utmost importance; the shoulder should be oblique in order that the animal may have free and safe action. The stallion should have a well arched chest, long lean head, and clear prominent eye. We prefer to breed from young rather than from very old animals; the produce of aged parents more early assumes the characteristics of premature old age and decay. Our opinion is strongly in favour of putting the fillies to the stud at two years old, assuming that they have been well kept till this age. I have heard an objection raised to this system on account of the greater degree of risk. This is for the most part an imaginary evil; it is well known that parturition for the first time is attended with less danger in a young than a comparatively old subject, and the produce of young animals are almost invariably the most vigorous. Not the least important consideration is the saving effected; if a foal can be reared it will pay for at least a year's keep, and the mare will be worth as much at five years old as if she had not had a foal, and the value of the work to be got of a two-year-old is very trifling. The adult animal when in foal may, if in careful hands, be safely worked up to the date of foaling, provided she is not over-drawn, or during the latter period of gestation used much in the shafts, particularly with heavy loads, on grass farms, where little horse work is to be done; during the winter, undoubtedly, a yard having an open shed and manger, with a few loose boxes, however rude their construction, if they are only watertight overhead, and afford some degree of shelter, they are far more healthy than close mistsy stables, to maintain an animal in a healthy state. A certain cubic area, or free breathing space, is necessary for a horse: it should not be less than 600 cubic feet, on sanitary principles. I am utterly opposed to the old-fashioned stables, cribbed and confined by a hay or corn loft overhead: a more rational system has rooted out many diseases which were formerly so prevalent. I may mention that of blindness: few blind horses are now to be seen. In foal mares require careful treatment gentle exercise, and access to pure water are necessary in maintaining the health of pregnant animals. The food should be of a nourishing, but not of a heating, character: a mixture of bran, oats, and Indian meal, with some boiled roots and a small quantity of cut hay or straw, is the best food, unless the season is considerably advanced. The mare and foal should be kept in a loose box; for the first week a mixture of boiled linseed, bran, crushed oats, and cut hay, or straw chaff, the whole well moistened with water; the foal should be closely watched, and, if necessary, a dose of castor oil given the day after birth.

Many valuable foals are yearly lost from carelessness and ignorant inattention to their wants; the new-born foal is a helpless creature, often requiring a considerable effort on the part of the attendant before it can be made to suck, and in cold weather, and exposed situations, frequently perishes for lack of food. Great caution should be exercised in the change of the mare's food from a dry to that of a suckling character. A rapid change is apt to affect the quality of milk, which frequently induces a sudden attack of diarrhoea, which, if not immediately checked, often runs a rapid and fatal course. Suckling mares, if worked at all, should have short hours and light work. Weaning time is a very important epoch in the life of the young animal—a change from an abundant supply of food, containing all the elements of nutrition, and to be thus suddenly thrown upon its own resources, and unless artificial aids are furnished the growth of the young animal is checked. Horses are social animals; young ones in particular do best where two or three of the sameage herd together. It will well repay the breeder to spend a little money and bestow a good deal of attention in teaching the foal to take to artificial food before leaving the dam. The quality of the food exercises a marked influence in the development of the young animal; hence the greater value of mixed food, which should be rich in the four elementary bodies—carbon, hydrogen, nitrogen, and oxygen. The dried bones of the horse contain 67 per cent. of phosphate of lime. During the day the horse throws off from its lungs, by the act of respiration, five pounds of carbon; to supply this will require twelve pounds of starch, which must be provided by the food, or otherwise the deficiency must be made up from the accumulated fat of the body. Some recommend the use of linseed cake, Indian corn, and other substances rich in fatty matter. No doubt these, when given to a full-grown animal, probably thrown out of work, it will soon make it assume a

sleek, plump appearance. In the case of a young animal, our aim is to grow bone and muscle; here an excess of fat formers is not only wasteful, but injurious. For young horses we know of nothing more wholesome and suitable than a mixture of crushed oats, bran, and a sprinkling of bean-meal. We prefer the fodder cut into chaff and mixed with the corn and moistened with water before being put into the manger; the use of long fodder is a wasteful practice. A few sliced swedes daily forms a palatable and nutritious adjunct; even the farmer who grows no roots himself would find it no unprofitable speculation to purchase a ton or two for his colts during the winter months. Another most important point is to keep a piece of rock salt constantly in the manger, or at least within reach of the colts. Although some of the Derbyshire laud is particularly well adapted to the growth of colts, yet I must admit I am haunted by the idea that many of you would obtain extra profits by expending a small sum on artificial food to give to your colts, even on the pastures. I know this will entail some trouble; it requires only a firm resolve, and the "bogies" disappears. I earnestly trust that the farmers of Derbyshire will give the breeding and rearing of cart horses their most earnest consideration; they have all the elements of success within their grasp. We cannot force the changes and chances which revolving years bring round, but the present prospect is re-assuring. The Stud Book will undoubtedly greatly enhance the value of the breed. At no distant period the colonies will be exclusive and liberal purchasers. This county is most fortunate in being represented on the Council of the Stud Book Association by a gentleman who, not only from his position, but from his agricultural knowledge and the great interest he takes in every movement for the improvement of agriculture and the diffusion of useful information amongst the sons of the soil.

AGRICULTURAL SOCIETIES.

YORKSHIRE.

MEETING AT NORTHALLERTON.

On escaping from the sulphurous canopy of the "inner circle," with all the starch taken out of our shirt collars, as we stand inflating our lungs with the salubrious atmosphere of King's Cross, we wonder at the ingenuity of man and what next it will do for mankind, yet, thank God! nature is still the same a few miles out of town, and the merry sunshine, the balmy air, the flowery hedge-rows, "I know a bank," etc., the songs of birds, the gurgling of the winding brooks, the lowing of the herd, the sighing of the winds, the velvety grass, the various hues of the trees, the azure distance, and a glass of pure spring water—with just a little drop of whisky in it—are as inviting, invigorating, enlivening, and enchanting as in the days we went a gipsying with you, Agricola: so jumping into a carriage we think what a happy man you ought to be with your embrowned countenance glowing with health, and contemplating with pleasure the golden crops we see being harvested on our way from London to York on a bank holiday. As every dog has his day, so every county must have its Agricultural Show, and Yorkshire, being the largest of the family, and the most horsey child, she is not satisfied with one: still *the one* is the Yorkshire Agricultural Society, which was this year held at Northallerton, on August the 6th, 7th, and 8th, a little town on the old north road, and once famous for saddlery, and we think we have heard spurs called "Northallerton's" in our youth, although a Yorkshire friend, and a good man across country, said "Ripon for rowells." As a show of riding horses and carriage horses it is second to none in the kingdom. So it has been during the reign of Mr. Partridge, who has abdicated in favour of the present able and obliging secretary, Mr. Marshall Stephenson, to whom, as he had a wet opening, we drink success, for on

Tuesday and Wednesday mornings it rained and no mistake, so much so that we thought we were in for a second Skipton, where as fast as we made notes in our catalogue, they were washed out, but at Northallerton it cleared up on both days about noon, and the "Booth back," not of the Shorthorn but of the Yorkshireman, might be seen smoking like a hot rick—for though rain might stall off a few fancy dressed people it did not the sturdy Yorkshire lads and lassies, who mustered something like 17,000 strong on the second day before the clock struck three. The show was laid out with great taste on the Northallerton race-course, which is within a stone's throw of the railway station, although on the second day the dense crowd round both the rings made us regret not having brought a "betting stool" with us, or that we were not so long in the leg as the ancient family of Longshanks, which we are assured by a pedigree man is descended in a direct line from the North Pole. As we are just going to begin, be it known to all that there are two days' judging at the Yorkshire Show, and that on the first day the Shorthorns are judged in one ring and some of the riding classes in the other, and on the second day the agricultural and coaching classes in one, and the remaining classes of riding horses in the other ring. As usual we intend taking the agricultural classes first, which were few, but fairly represented, for though Northallerton is a noted breeding district only second to that of Driffield and Bridlington, be it understood that the Yorkshireman looks to a good hunter nag, or coach horse to pay expenses, and many of them think like the dealers in black cattle (negroes) that they can buy them cheaper than they can rear them, that is good ones. The Yorkshireman loves a deal. What made the agricultural classes weaker was Lord Ellesmere's scratching all his horses out of respect to poor Dan who was killed at Bristol. Pride of the Shires and Wonder were entered

In the stallions, three years old and upwards, which, with another absentee, reduced the class to seven, which was won by Mr. Crowther's Topsman that has won two or three times since the Royal, Young Champion, having recovered from a slight attack of gout he was suffering from at Bristol, being second, while the third was a neat good, looking Clydesdale, Souter Johnny, over which there was a little noise on his being placed before Lord Ellesmere's shire colt, Samson the Second, last year at York; Mr. Wynn's Nonpareil, the Birmingham Royal winner, the deep, useful Renown, and the neat, active Leading Article of Mr. Strickland's, Headley Hall, Tadcaster, with Mr. Stompin's of Hull, Clydesdale Champion, a compactly built, nice sized, useful horse, which was third in the class last year, being out of it, and Young Conqueror, another very useful horse of Mr. Linton's, of Bedale. Lord Ellesmere's Young Prince of the Isle and Young Drayman were entered in the next class, which reduced the agricultural colts foaled in 1876 to seven, the Marquis of Londonderry sending a lengthy, short-legged bay by the Swell; Messrs. Buckle, of Darlington, Briton Conqueror, a plain, short, useful horse; Messrs. Leaf, a thick set, powerful, and active black, The Duke, by Brown Prince; Mr. Anton, of Masham, Bedale, Champion, by Norfolk Champion, a handsome, light colt, but rather teggy at present. The fine grown powerful Napoleon from Newbold Brough, belongs to Mr. Stephenson, and the lengthy, short-legged Time o' Day to Mr. Stillborn, of Darlington, while Mr. Law's (of Stokesley) Merry Tom has form and good limbs. The agricultural brood mares were Jessie Wilson, a short deep mare, and very active, the rather grand looking Countess, by Loch Fergus, from Seaham Hall, and Mr. Wynn's upstanding active, dapple grey mare, which takes after her sire, A. 1, a light-necked horse with rather light limbs but very active and often to be seen in the ring some few years back. Beauty, Honest Lady, and Lady Worsley from the same stable were absent, and again were three Worsley yearlings, colts, or fillies, which left but two nice ones, the first and second prizes, and two very moderate—one from Seaham Hall, and the other from Northallerton, with his quarters tucked in. Mr. Miller's youthful but strapping Princess Dagmar, to which the Royal Bench at Bristol preferred the "Irish Clydesdale," headed four very good two-year-old geldings and fillies, viz.: Mr. Crook's Tom, Mr. T. C. Booth's Tom, the Marquis of Londonderry's Primrose, and Mr. T. Law's Beauty; Lord Ellesmere had two entered in this class. Six three-year-old geldings or fillies followed, making a very good class—Mrs. Hedden's Buck, by Joek; Mr. Miller's luxom Fatina, by Honest Tom; Mr. Stephenson's black, Mr. Snodin's Prince of Wales, and Mr. Smith's Governor, from Bingham, Notts.

Having disposed of the small lot of agricultural horses, we now take the coachers in hand, commencing with the Cleveland stallions, which were but one short of those shown at York last year. The winner, Lord Penzance, which now belongs to the Fylde Horse Company, we said when first at York was a nicely made three-year-old, showing plenty of breed, combined with good action. Prince Frederick, the second horse, was also at York, and now bowled out The Count, a well-made horse, but not possessing as much biced as the winner. In fact, there were several wanting in quality, and some in form being very peacocky, with long, weak-looking backs. Five good-looking coaching mares and foals contended for the prizes, the first, as usual, going to Bonny, a grand old mare in her fifteenth year. Princess, another handsome mare, was only third here, though second to her at York.

The coaching yearlings, five, all told, were moderate looking, and one of the best, Mr. Kirby's, of Stamford-

bridge, did not get a place. The champion two-year-old coaching gelding in a small class is a fine grown and promising young-ster, and the second deep in his rib with a nice head, and four or five very nice coaching fillies made a nice class, and belong to Messrs. Strickland, Burnside, Kirby, Thistlewaite, and Lancaster. The grey of Mr. Burton's at present is not taking to the eye. Mr. Kirby, in a good class of three-year-olds, was first and second with two very handsome, fine-grown horses, Belthorp, the first prize-taker, being a very stylish nag, carrying his head like a king, or rather like a king ought to. Mr. Harrison exhibited a very nice-matching pair of "greys," which made them conspicuous among the bays. The three-year-old fillies were moderate, but taking the coachers as a lot they were nicely represented, if not quite as grand as we have seen.

Fireaway the Islington prize roadster stallion, which pleases us better when in action—as nothing can go much better—than as a stand-still horse, and a better built one of the roadster stamp was Star of the West, who here played second to him, and is the property of the same gentleman. Mr. Holmes, of Beverley, who sold Mr. Statter Star of the East after winning at Skipton, which was here but amiss. Charley Merrylegs, that beat the Company's horse at Bristol, was also in the ring, and so were the clever, nicely built Sir Alfred, a second to Star of the East at York last year, Mr. Trillitt's gentlemanly nag Prime Minister, Mr. Brough's Sultan, and several more neat ones in a class of seventeen. As at the Royal, and wherever she roves, what ever shows to see, the variant neatly built, clever-stepping "Spotted Mare," from Easton, gained first honours, and Mr. Mulcaster, who has charge of the Duke's animals, says there never was such another, not even his old flame Craty—the thought of which reminds us that we are fifteen years older, and have written on as many shows as Dr. Manton made sermons on the 119th Psalm, or some of our debaters have made speeches on the Eastern Question—so it is still a question to be decided by the judges of one of our shows, as to which of us has done the most to benefit mankind. It was a nice little class of ten, including Mr. Martin's nice mare, Lady Mary, Mr. Rose's smart grey, Countess, Mr. Cags's clever looking Fanny, Mr. Burnside's lengthy, cobby mare, Jersey, and M. Hart's roomy roadster mare, Lotty. Four nice three-year-old hackney fillies competed for the £15 the first honors being awarded to Gipsy Queen, a very taking filly of Mr. Morley's with a rare loin, thighs, arms, and good wearing looking legs, and to whom, though so young, the ring is no novelty. In fact, gipsy or no gipsy, a women rush to the ring and a wedding, and sigh, moan, and groan, they know not why, but simply because it is the fashion to do so. Sunbeam scored another victory for Newburgh, close to home with Lady Wilton as her waiting maid, which was second in a class at York up to 15 stone, where Sunbeam was not placed. Here the weight was twelve stone, and there were several clever nags out of a baker's dozen. We have dilated on the beauties of Sunbeam and Lady Wilton often, and so we have on the two best of the ponies not exceeding fourteen two, the Queen of the Fairies with Bosco at her heels again as at York. Several smart little bobs and ponies contended for the prize money, and silver-mounted whip, given by the Secretary—which brings us to the thoroughbred stallions and hunting classes, the most interesting part of the show to most Yorkshiremen. The stallions were not up to those at York, the reason being given in the following conditions:—Stallions, thoroughbred for getting hunters which have served half-bred mares in the county of York during the season of 1878, at a fee not exceeding five guineas, or which shall serve half-bred mares in the county of York during the season of 1879 at a similar fee.

The prize not to be paid under the latter condition till fulfilled. This was the only class for thoroughbred stallions at Northallerton, while at York there was £175 extra money given for stallions four years old and upwards, suitable for propagating the breed of sound and stout horses for racing or stud purposes, which brought thirteen horses of a very different stamp into the ring to what the money with conditions did; in fact we were twelve stallions short of York, though the same money with conditions brought one more horse into the ring than it did there, and among them were Duc de Beaufort, by Ventre St. Gris out of Dame D'Honneur, by the Baron, a Frenchman by birth, with the sire of Stockwell as his grandsire, a very taking horse, showing a deal of blood, with length and good quarters, and limbs well placed, with knees and hocks near the ground; but he has round and almost beefy shoulders, with light back ribs. The Mallard by Knowsley, out of The Drake's dam by Pyrrhus the First, is a muscular built horse on short limbs with hind legs well under him, but rather twisted fore pasterns—still a very nice nag for the purpose, and a mover—so we described them when first and second at York; but here the Duc only gets second honours and The Mallard nothing; nor does the flashy-going Landmark by Cathedral out of Miss Agnes by Irish Birdcatcher fare any better, though a winner one year at Drillfield, we think; nor the one-eyed, short, deep-topped Cedric by Volturmo, out of Carry by King Caradoc, and the very taking Typhæus by Stockwell out of Typee by Touchstone, a horse with the exception of his ankles, for he has been put through the mill, we thought more adapted for getting hunters than any of the others, and that about this time of the year 1866 we remember well as a foal at foot of the handsome Typee, which with the blind Defenceless and the slashing looking Elspeth with their progeny were brought into a paddock for our especial gratification when favorites of the late owner of Middle Park. It seems but yesterday, but yesterday has turned many a man, in the eyes of those that were lads then, into a grey old fogey, though some men never age, never turn grey and never die although they are always dyeing—that's a riddle. We don't find fault with the Judges—how kind! for fixing on horses like the hackish looking Raby by Arthur Wellesley, out of Remnant by Neville, though he and the wiry Bourbaki by Adventurer out of Prudence by Voltigeur were thought by some as wanting in substance to get hunters, as we think it is time some of the little ones had an innings, as old Citadel—who was not here—has held the wicket long enough—while of Murtagh by Ben Webster, out of Molly Malone by Sprig of Shillelagh and Illustrissimus without a pedigree, the least said the better. "Zounds!" we shall make these Yorkshire gentry say, "we know what's damned genteel as well as they." Meteor by Volturmo, out of Meg by King Caradoc we just caught sight of as he shot by, and we thought him neat—very neat. Eleven decent-looking hunting brood mares came into the ring with their foals. Lady Lyne (late Rosamond) by Codrington being the chosen one, which was first at the Royal, when we said she did not remind us of a hunter quite, although she might have been a good one across country. It is not every man that is a conjuror that looks like one. Smiling Beauty by Post Captain was of a fair hunting form, and Concertina by Newport very roomy and very lengthy, in fact could place her hind feet on one bank and her fore on the other of the Whissendine—an excellent shift for a pontoon bridge. Clematis, another grey by Chanticleer, dam by Birdcatcher, was more to our mind, with good form and short legs. Of the others we ticked off Mr. Hodgson's Borealis, Mr. Trenholm's Countess, and Mr. Botterill's Annora. We now come to the youngsters, and we must say "Blame where you mast, be caund where you

can," that they were a credit to Yorkshire, particularly the two-year-old hunting geldings, and not to be seen at any other show in the kingdom. The seven out of twelve of the yearling fillies that came into the ring were very good, the winner being by The Mallard, that the judges would not have, and the "emperor of puffs," Eolus, (what a name for a roarer) by East Coast, looked like a hunter that would come two days a week. Mr. H. W. Cholmley's chesnut by Speculum, J. Clarke's Barney by Baron Cavendish, and T. H. Foden's brown by the same horse were the others. The two-year-old hunting geldings were headed by a sweet hunting-like horse, with such character and such a head, and the second was very good and also by East Coast; but there were many good and therefore, though pressed for time, we give their names: the Viscountess Down's chesnut by Highthorne, Sir C. W. Strickland's Gluck by The Baron, J. T. Robiuson's bay by The Fox out of Goahead, A. J. Brown's chesnut, by Amusement, R. Kilby's chesnut, by Field Marshal, J. P. Crompton's bay, by The Baron, J. Welbourn's The Esquire, by Arbitrator, T. H. Foden's brown, by Cavendish, and R. Edey's Colonel, by Lord Derby. The fillies were not up to the geldings, and the Maid of the Mill, by Baron Cavendish, though with a good top, was as stiff in her forelegs as if she had a couple of housemaid's knees; and the second, by Laughing Stock, was as handsome as paint, but not of hunting form fore or aft, and with as much daylight under her at the stifle as her sire had when first shown at Newcastle. In a good class of three-year-old hunting geldings the Duke of Hamilton won with a mealy brown, but very hunting-like, gelding, Birdseye, by the Baron, which was objected to as being over the age, but as Professor Pritchard passed him the objection was overruled by the Committee, who, Mr. Muleaster told us, had allowed the objector to bring an action at law if he liked. How very kind!—as if a man could not bring as many actions as he liked! The second was a hunter all over, with an unsightly scar of great size between the point of the shoulder and the saddle-place. The third, Crispin, by The Baron, looked hardy, and could move, but his shoulder was too far into his neck for hunting, and Sir C. Strickland's Beau, by the Baron, with a neat hunting top, was more to our mind. Mr. Welbourn's, The Baron, had heavy shoulders; Mr. Barrow's Glencoe, by Black Jimmy, had stiff forelegs; and Mr. Battye's Mischief, a chesnut with capped hocks, looked of the useful sort. A nice brown filly, Coramaudel, by Ploughboy, out of Carnation, by Angels, was declared to be the best of a few three-year-old fillies, Snowdrop, a bay with heavy shoulders, by Snowstorm, playing second; while the third was Mr. Brown's bay, by Uncas. Mr. Jackson's Princess, by Nine Elms, we thought a very nice one, and Mr. Belton's Black Princess, though light of bone, was of hunting form, and could move. Out of an entry of nineteen four-year-old geldings; ten made their appearance in the ring, and the three first were very hunting-like horses, but not up to Golden Drop in form or galloping, as we never saw him look or show better. The second, Nobleman, was a fine horse with a hollow back, that could go, as could Ringleader, a compact built one. Of the others we marked Volunteer as nice but not much of a mover. Then M.P., The King, The Baron, and Sir Joseph we ticked as fair horses, and Osman as slow as a coach. We thought it a middling class of four-year-old hunting mares—very middling—though Mr. Kirby's Lady Brian was neat and active, with hocks and knees near the ground; while Kathleen did the dealers' yard business with her knees in her trot admirably, but could not gallop, and Lady Vyner was a commoner that ought not to have been elevated to the peerage but to the cobblage with Mr. Lowe and all the cobblers of London. The four-year-old hunting geldings or mares

bred by and the property of a tenant farmer who derives the principal part of his income from the hiring of land, and who attends church regularly twice on a Sunday, and does not wear a pork-pie hat or bet on Thirsk or Northallerton racecourse, was won by Mr. Lett, of Scampton, with a very neat horse, hunting-like, quick and active, but as his owner was objected to as not having complied with some of the conditions, Mr. Lett was put out of it, which let in Mr. Scott's Speculation, and a horse of Mr. Nelson's—nothing like so good as the disqualified. The next were the weight-carriers up to fifteen stone, which Mr. H. Bayly's Tavistock won, going and looking well, while the second to him, Blacklock, was a Leicestershire hunter to look at, and about the best galloper we have seen for many a day, but it was thought by those outside the circle that he was not up to fifteen stone: it is a good weight. The third Commander we did not take as anything wonderful, but we did Sir William Eden's Custania, and bay by Dalesman, from the same stable, which looked and went like hunters, especially the chestnut, Mr. Jacob Smith's Statesman, the first four-year-old at York last year, was in the ring with Mr. Fielden's Bacey-box, and Mr. J. Booth's powerful Robson. In the course of our show-going we have occasionally seen, after luncheon, when even sobriety will cease to be sober, judges of over fifteen stone in the saddle get up on fifteen-stone hunters and give it to them in a twelve-stone hunter class. They don't do such things now. Mr. Jacob Smith's Souvenir, by Donateur, a neat little twelve-stone hunter, and a good goer, and Mr. Booth's Baldersby, well-known in the ring as with the Bedale, were first and second in a very fair class, the chief feature of which, we are sorry to record, being the collapse of Glengyle, which has been amiss since Alexandra Park, and, we hear, not likely to make his appearance in any ring again. We wish we could have brought our notice of the horses to a conclusion with Glengyle in his usual place.

In the very home of the Shorthorn there was one of the best gatherings the Yorkshire Society have had, the animals sent being one hundred and forty-five. As most of them have met in the ring before, and have been fully described in columns of *The Mark Lane Express*, our remarks will be brief. The old bulls were capital, as were the cows; and the yearling and two-years old heifers were good, while the yearling and two-year old bulls were weak, with nothing approaching in form to Mr. Willis's Vice Admiral, though he is not perfect. Then there was an excellent dairy class of cows, of which the winner was a cotta's cow of the old Yorkshire Shorthorn type, perhaps with just a little cross of something else, as Mr. Berryman, when asked for Dairymaid's pedigree, said it was given in the pail night and morning that he had a very excellent poor man's wife, who was a capital hand at making butter, and that they turned out every week so many pounds. "More than I get from all mine" exclaimed a bystander. The families of Shorthorns were all highly commended and comprised Lord Dunmore's Red Rose of Indiana, and four of her offspring, the Marquis of Exeter's Sea Gull and five offspring Colonel Lloyd Lindsay's Burlesque and four offspring, Mr. Miller's Ringlet 2nd, and six offspring, J. Angus, Gaiety and four offspring, C. Stricklands, Truth and two offspring. In the old bulls on Tuesday last Sir Arthur Ingram was placed before Attractive Lord and given the cup for the best male Shorthorn in the yard. Rear Admiral was third and of the highly commended the Duke of Northumberland Lord Snowstorm and A. H. Browne's Pioneer. The other were Wenlock's Alvechurch, Sir John Lawson's Sir Julius Benedict, Messrs. Gaitskell's Rambler, and B. St. John Acker's Clovis. The Shorthorn bulls above two and not exceeding three years old were the Duke of Manchester's

Marquis of Worcester 5th, Mr. Stratton's Pearl Diver, Mr. Saville's Foljambe's Flag of France, Benjamin St. John Acker's Sir Roland, the Stand Stud Company's Favourite, T. Mitchell's Prince of Battersea, and J. Elwell's Bainesse Windsor. Kalamazoo was entered, but did not come. The bulls above one and not exceeding two years old were H. R. H. the Prince of Wales, K.G., Baron Ryedale, the Duke of Northumberland's Lord Mayor, T. Wilson's Wild Oxonian, Col. L. Lindsay's Churchill, M. Kearney's Duke of Abercorn, R. Botterill's 2nd Lord of Dalmarly, T. Willis's Vice Admiral, and J. Swann's Cambridge. There were nine Shorthorn bull calves above five and not exceeding twelve months. The Shorthorn cows were the Marquis of Exeter's Queen of Ithaca, Mr. Wilson's Miss Beverley and Winsome 18th, B. St. John Acker's Princess Georgie, H. Fawcett's Maggie Mildred, H. Fawcett's Bramhope Darling, J. J. Sharp's Julia 11th, T. Hutchinson's Grateful, which was first last year and first this, as well as having the cup for the best female in the yard, although there were several well up. Major Cochrane's Familiar Benvenuta and R. Dunby's Die make up the lot. The heifers not exceeding three years old, and in calf or milk were the Earl of Ellesmere's the Lady and Blooming Bridesmaid, B. St. J. Acker's Lady Carew, J. Angus's Cherry Bloom, G. A. Ashby's Dorothy and Innocence, and T. Whyte's Bainesse Rose. The Shorthorn heifers not exceeding two years old were H. R. H. the Prince of Wales's Fragrance, the Duke of Northumberland's Lady Jane, the Marquis of Exeter's Carolina, Lord Bolton's Prestormian 5th, B. B. Botterill's Beverley, B. St. J. Acker's Third Lady Carew, J. Smarry's Eastern Princess, Mrs. Pery's Lady Violet, J. Singleton's Lady Flora, J. Whyte's Stanwick Rose, F. T. S. Foljambe's Azacena, R. Dunby's Florence Wetherby, J. A. Broanley's Gay Lass. The Shorthorn heifer calves were Lord Ellesmere's Gwendie and Melody, Lord Fitzhardinge's Kirklevington Empress, which was one of the beauties of the show, Major Stapylton's Grand Duchess, T. Hutchinson's Gaiety, A. Garitt's Blanche Rosette, and G. Hutton's Clio. The dairy cows were all commended, the pedigree ones being B. St. J. Acker's Lady Belford, R. Stratton's Fairy Queen, and C. Other's Rosebud. The second belonged to a dealer at Northallerton. The first and second bulls and best cow are by bulls of Mr. J. Booth's, of Kilerby. The sheep were well represented, there being a very good show of Leicester shearling rams, in which Mr. Hutchinson was first with his Royal shearling, and second with another, and highly commended for his third entry, beating three of Mr. Turner's, three of Mr. Barton's, six of Mr. Brown's, and two of Mr. Kendall's, with some others. In the aged rams with his celebrated Royal Liverpool and Bristol winner, which has never been beaten, he was again to the fore, and having no other entry, let Mr. Barton with three entries in for a second with a very good sheep. Mr. Barton at one time used to carry a lot of first prizes off. The shearling gimmers were fair, with a prize for each exhibitor, with the exception of Mr. Strickland, who was left out. For Lincoln sheep it was a little too far North, still there were some excellent specimens, Mr. Smith having first and second with two very good shearling rams, Messrs. Dudding with one out of five entries being third. There were only four, but four very excellent, aged rams Mr. Pears' being highly commended, and Mr. Byron's commended. Then there was a fair collection of short-wooled sheep, the principal exhibitors being, the Earl of Zetland, Lord Wenlock, Mr. H. Miller, Messrs. Dormer, Pilgrim, and Baker.

Mr. Tweedie had it all to himself with Border Leicester sheep. They are not grand in form, and the Wensleydale are curiosities which might be improved by crossing, a

they want necks; while there were specimens of Monnain sheep such as Lundser bred to paint.

The pig, is an important person in Yorkshire, as the county is celebrated for bacon, was well represented in the large, middle, and small breeds, with a few Berkshires and some of the black breed; while there was the usual ringing of the changes as to awards with Lord Ellesmere's and Messrs. Duckering and Spener, who were the most successful exhibitors. The show is to be held next year at Leeds. The following are the entries of live stock for 17 years:—

	Cattle.	Sheep.	Pigs.	Horses.	Total.
1862 York	95	66	91	219	495
1863 Stockton.....	76	49	63	293	391
1864 Howden.....	78	67	66	318	528
1865 Doncaster ...	86	93	90	338	607
1866 York	—	159	83	514	756
1867 Thirsk.....	—	108	120	363	591
1868 Wetherby ...	84	155	98	330	667
1869 Beverley.....	76	124	93	442	736
1870 Wakefield ...	102	146	100	508	656
1871 York	121	113	107	409	753
1872 Malton.....	108	104	91	447	750
1873 Harrogate ...	106	114	87	355	659
1874 Sheffield.....	107	109	109	264	706
1875 Driffield.....	124	127	99	401	751
1876 Skipton.....	98	158	132	247	635
1877 York	86	131	33	352	602
1878 Northallerton	133	124	99	318	705

* Cattle plague years.

PRIZE LIST.

JUDGES.

HORSES—Hunters and Roadsters: Colonel J. Gunter, 4th Lagoon Guards; E. Paddison, Ingleby, Lincoln; A. L. Maynard, Newton Hall, Darham. Coaching and Agricultural Horses: J. Wilson, Woodhorn Manor, Morpeth; W. Robinson, Hutton Hall, Darlington; J. Harrison, North Ormsby.

CATTLE: H. C. Pole-Gell, Hopton Hall, Warkworth; W. Faulkner, Rotherthorpe, Northampton; R. B. Smith, Penrhy Farm, Bangor, North Wales.

SHEEP (Society's Prizes): H. Woods, Merton, Thetford, Norfolk; R. Jefferson, Preston Hous, Whitehaven; J. P. Clark, North Ferraby, Brough. Local prizes: J. Ingleby, Clapham, Lancaster; R. Hutchinson, Wensley, Bedale.

Pigs: L. C. Chrisp, Hawkhill, Alnwick; J. Caislaw, Towneley, Burnley; J. Smith, The Croft, Henley-in-Arden.

HORSES.

Stallions, thoroughbred for getting hunters, which shall have served half-bred mares in the county of York during the season of 1878, at a fee not exceeding 5 guineas, or which shall serve half bred mares in the county of York during the season of 1879, at a similar fee. The prize not to be paid under the latter condition till fulfilled.—First prize, £50, P. Fort and Son, Cross Roads, Keighley (Raby); second, £25, H. P. C. Vyner, Newby Hall, Ripon (Duc de Beaufort); third, £10, W. Robinson, Harlsey Hall, Northallerton (Bourbaki).

Coaching stallions.—First prize, £15, Hyde Horse Breeding Company (Lord Penzance); second, £5, J. Turfin, Pencoete, Bedale (Prince Frederick).

Roadster stallions.—First prize, £15, G. Holmes, Scarborough (Young Fireaway); second, £5, Holmes (Star of the West), Reserved, G. Wilberforce, Pecklington (Sir Alfred).

Agricultural stallions.—First prize, £30, J. F. Crowther (Popsan); second, £15, Staud Stad Company (Young Champion); third, £5, P. Tweedie, The Forest, Catterick (Souter Johnny).

Agricultural entire colts, foaled in 1876.—First prize, £15, W. Stephenson, Brough, Napoleon; second, £5, The Marquis Londonderry (The Warden).

Hunting brood mares and foals.—First prize, £30, G. F. Satter, Whitefield, Manchester (Lady Lene); second, £20 M. Wilkinson, Thirsk (Smiling); third, £10, T. Bradley Great Ayton (Concertina).

Coaching brood mares.—First prize, £20, J. and T. Reader, Holme, York (Bonny); second, £10, J. Kirby, Stamford

Bridge (Cleveland Lady); third, £5, M. Robinson, Glass House, Bedale.

Roadster brood mares and foals.—First prize, £20, Duke of Hamilton, Easton Park, Suffolk (Spotted Mare); second, £10, R. Martin, Flaxton, York (Lady Mary); third, £5, C. Rose, Malton (Countess).

Agricultural brood mares and foals.—First prize, £30, J. Torr, Aylesby Manor, Grimsby (Jessie Wilson); second, £20, Marquis of Londonderry, Seaham Harbour (Countess); third, £10, W. Wynn, Stratford-on-Avon (Queen of Trumps).

Yearling agricultural colts and fillies.—First prize, £10, J. Grimes, Newton-on-Trent, Newark (bay); second, £5, J. Whyte, Albro, Darlington (Pointsman).

Two years old agricultural geldings.—First prize, £15, T. H. Miller (Princess Dagmar); second, £5, G. Crooks, Northallerton (Tom).

Three years old agricultural geldings or fillies.—First prize, £15, J. Snodin, Stonesby, Melton Mowbray (Prince of Wales); second, £10, T. H. Miller (Fatima); third, £5, W. Stephenson, Bushy Hill, Newbald.

COACH HORSES.

Yearling colts or fillies.—First prize, £10, W. Smith Seamer, Yarm (brown); second, £5, M. Robinson, Glass House (bay).

Two years old geldings.—First prize £10, W. and C. Harrison, Bunby House, York (brown); second, £5, R. Cowell, Normanby, Middlesborough (bay).

Two years old fillies.—First prize, £7, R. Burnside, Darlington (Favour); second, £3, W. Strickland, Gill Bank, Pickering (Julia).

Three years old geldings.—First prize, £15, and second, £10, J. Kirby (for Belthrop and another); third, £5, W. Grayson, Pickering (brown).

Three years old fillies.—First prize, £10, W. W. Kirby, Stamford Bridge (Rose Bud); second, £5, F. P. Baker, Bedale (bay).

ROADSTERS AND HACKNEYS.

Three years old geldings and fillies.—First prize, £10, J. Morley, Dishforth, Thirsk (Gipsy Queen); second, £5, C. W. Wilson, High Park, Kendal (bay).

Geldings or mares, from four to seven years old, equal to carry 15 stones.—First prize, £20, J. Robinson, Cleveland House, Colton Street, Hull (Charles 2nd); second, £10, J. Merryweather, Gisborough (Kob Roy).

Geldings or mares, from four to seven years old, equal to 12 stones.—First prize, £15, Sir G. Wombwell, Newburgh Park, Easingwold (Sunbeam); second, £5, W. H. Blackman Howden (brown).

PONIES.

Ponies, any age, not less than 12½ hands and not exceeding 14½ hands high.—First prize, £10, W. H. Blackman (Queen of the Fairies); second, £5, Duke of Hamilton (Bosco).

Pony, any age, not exceeding 12½ hands high, suitable for children, to be ridden in the ring by boys under 15 years old.—First prize, £10, A. H. Newcomen, Redcar; second, £5, G. W. Elliott, Northallerton.

HUNTERS.

Yearling colts or fillies.—First prize, £10, H. W. Cholmley, Newton, Rillington (chesnut); second, £5, F. J. Snowball, Dudley, Northumberland (Eolus).

Two years old geldings.—First prize, £15, C. Emmerson, Diasdale, Darlington (Doctor); second, £5, T. H. Hutchinson, Catterick (Brother to Golden Drop).

Three years old geldings.—First prize, £20, Duke of Hamilton (Bird's Eye); second, £10, J. T. Robinson, Leckby, Aseby, Thirsk (Fox Cover); third, £5, H. W. Cholmley, (Crispin).

Three years old fillies.—First prize, £20, A. J. Cholmley, Newton, Rillington (Coromandel); second, £10, F. C. Marshall, Rischolme, Lincoln (Snowdrop); third, £5, A. J. Brown, North Elmsall (bay).

Four years old mares.—First prize, £20, J. Kirby, Northallerton (Lady Brian); second, £10, T. Ellerby, Whitwell York (Kathleen); third, £5, W. Calam, Grimstone, Malton (Lady Vyner).

Four years old geldings.—First prize, £20, J. J. D. Jefferson, Thicket Priory, York (Golden Drop); second, £10, A. J. Brown, North Elmsall, Pontefract (Noblemans); third, £5, R. Nelson, Barton Hill House, York (Ringleader).

Four years old hunting mares.—First prize, £20, J. Kirby (Lady Brian); second, £10, T. Ellerby (Kathleen); third, £5, W. Calam (Lady Vincer).

Four years old geldings or mares, bred by and the property of a tenant farmer, who derives the principal part of his income from the hiring of land.—First prize, £20, W. Scott, Broom Close, Boroughbridge (Speculation); second, £5, R. Nelson.

Geldings or mares, five, six, or seven years old, qualified to carry 15 stones with hounds, and which have been regularly hunted during the season 1877-78.—First prize, £50, T. H. D. Bayly, Edwinstowe House, Newark (Tavistock); second, £20, C. Legard, Boynton, Bridlington (Blacklock); third, £10, J. Hadland, Beverley (Commander).

Geldings or mares, five, six, or seven years old, qualified to carry 12 stones with hounds, and which have been regularly hunted during the season 1877-78.—First prize, £30, J. Smith, Humberton, Helperby, York (Souvenir); second, £20, J. B. Booth, Killerby, Catterick (Baldersby); third, £10, Hon. G. E. Lascelles, Sion Hill, Thirsk.

CATTLE.

SHORTHORNS.

Families of Shorthorns, to consist of cow of any age, and two or more of her descendants.—First prize, £50, Colonel R. Lloyd Lindsay, Lockinge Park, Wantage (Burlesque and four others); second, £20, Marquis of Exeter (Sea Gull and six others); third, £10, Earl of Dunmore, Dunmore, Stirling, N.B. (Red Rose of Indiana and four others). Highly commended, J. A. Bromley, Stockfield (Gaiety and four others). Commended, T. H. Miller (Ringlet 2nd and eight others); C. Strickland, Sutton-on-the-Forest, Easingwold (Truth and two others).

Bulls of any age above three years old.—First prize, £25, and cup, W. Linton, Sherif Hutton, York (Sir Arthur Ingram); second, £10, Earl of Ellesmere (Attractive Lord); third, £5, T. Willis, Manor House, Carperby, Bedale (Rear Admiral).

Bulls, above two and not exceeding three years old.—First prize, £25, R. Stratton, The Duffryn, Newport, Monmouthshire (Pearl Diver); second, £10, B. St. John Ackers, Prinknash Park, Painswick, Gloucestershire (Sir Roland); third, £5, F. J. S. Foljambe, Osberton Hall, Worksop (Flag of France).

Bulls, above one and not exceeding two years old.—First prize, £25, T. Willis (Vice Admiral); second, £10, Colonel R. Lloyd-Lindsay (Churchill); third, £5, Duke of Northumberland, Alnwick Castle (Lord Mayor).

Bull calves, above five and not exceeding twelve months old.—First prize, £15, A. Garfit, Scothern, Lincoln (Scothern Butterfly 2nd); second, £10, R. Stratton (Antumnas); third, £5, J. Snarry, Sledmere, York (Lord of Ryedale).

Cows, of any age above three years old, in calf or having produced a fully-matured calf since the 1st day of August, 1877.—First prize, £25, and cup, T. H. Hutchinson (Grateful); second, £10, H. Fawcett, Old Bramhope, Otley (Bramhope Darling); third, £5, B. St. John Ackers (Princess Georgie).

Heifers, not exceeding three years old, in calf or milk.—First prize, £20, G. A. Ashby, Naseby Woolleys, Rugby (Innocence); second, £10, Earl of Ellesmere (Blooming Bridesmaid); third, £5, B. St. John Ackers (Lady Carew II.).

Heifers, not exceeding two years old.—First prize, £20, Duke of Northumberland (Lady Jane); second, £10, Marquess of Exeter, Burghley Park, Stamford (Coralina); third, £5, F. J. S. Foljambe (Azucena).

Heifer calves, above five and not exceeding twelve months old.—First prize, £15, Lord Fitzhardinge, Berkeley Castle, Gloucestershire (Kirklevington Empress III.); second, £10, T. H. Hutchinson (Gainful); third, £5, Earl of Ellesmere (Melody).

DAIRY CATTLE.

Cows for dairy purpose.—First prize, £15, D. Berryman, Ruston, Brompton, York (Dairymaid); second, £10, J. Bellwood, Northallerton; third, £5, B. St. John Ackers (Lady Belford).

SHEEP.

LEICESTERS.

Shearling rams.—First prize, £20, and second, £10, T. H.

Hutchinson; third, £5, H. Borton, Manor House, Barton-le-Street.

Leicester aged rams.—First prize, £10, T. H. Hutchinson, (Royal Liverpool); second, £5, H. Borton.

Five shearing gimmers.—First prize, £15, F. Jordan's executors, Eastburn, Driffield; second, £7, W. Brown, High Gate House, Holme-on-Spalding Moor.

LINCOLNS.

Shearling rams.—First prize, £15, and second, £7, H. Smith, The Grove; third, £3, Messrs. Dudding, Panton House.

Aged rams.—First prize, £10, H. Smith, The Grove; second, £5, Messrs. Dudding.

Five shearing gimmers.—First prize, £10, J. Pears, Mere, Lincoln; second, £5, J. Byron, Kirkby Green, Sheaford, Lincolnshire.

ANY DOWN BREED.

Shortwoolled shearing rams.—First prize, £15, the Earl of Zetland; second, £7, C. Pilgrim, The Outwoods.

Shortwoolled aged rams.—First prize, £10, and second, £5, W. Baker, Moor Barns, Atherstone.

Five shortwoolled shearing gimmers.—First prize, £10, the Earl of Zetland; second, £5, W. Baker.

BORDER LEICESTERS.

Border Leicester shearing rams.—First prize, £7, R. Tweedie, The Forest, Catterick (Royal Victor); second, £3, G. T. Dickenson, Wheelbirks.

Aged rams.—First prize, £7, and second, £3, R. Tweedie (Royal James) and (Fitz James).

Five shearing gimmers.—First prize, £7, and second, £3, R. Tweedie.

WENSLEYDALE LONGWOOLLED.

Shearling rams.—First prize, £7, and second, £3, J. Willis, Caperby, Bedale.

Aged rams.—First prize, £7, J. Styau, Mount Park, Wensley, Bedale; second, £3, W. Raw, Hugh Ellington, Masham, Bedale.

Five shearing gimmers.—First prize, £7, W. Raw; second, £3, J. O. Trotter, Danby House, Bedale.

MOUNTAIN SHEEP OF ANY BLACK-FACED BREED.

Rams of any age.—First prize, £7, second, £5, J. Penson, Thorgill, Rosedale, Pickering.

PIGS.

TWELVE MONTHS OLD AND UPWARDS.

Boars of large breed.—First prize, £5, R. E. Duckering, Northorpe, Kirton Lindsey (Cultivator); second, £2, Earl of Ellesmere, Worsley Hall, Manchester.

Sows of large breed, in pig or milk.—First prize, £5, R. E. Duckering; second, £2, Earl of Ellesmere.

Boars of small breed.—First prize, £5, Earl of Ellesmere; second, £2, S. Spencer, St. Ives, Hufts (Fat).

Sows of small breed, in pig or milk.—First prize, £5, S. Spencer (Pride of Oxford); second, £2, R. E. Duckering.

Boars of black or Berkshire breed.—First prize, £5, and second, £2, C. E. Duckering.

Sows of black or Berkshire breed, in pig or milk.—First prize, £5, C. E. Duckering; second, £2, J. Mallett, York (Rose).

Boars of any breed, not qualified to compete in the previous classes.—First prize, £5, R. E. Duckering; second, £2, G. Sedgewick, York (Longback).

Sows of any breed, in pig or milk, not qualified to compete in the previous classes.—First prize, £5, Earl of Ellesmere; second, £2, R. E. Duckering.

NOT EXCEEDING TWELVE MONTHS.

Boars of large breed.—First prize, £5, and second, £2, R. E. Duckering.

Sows of large breed.—First prize, £5, R. E. Duckering; second, £2, Earl of Ellesmere.

Boars of small breed.—First prize, £5, S. Spencer; second, £2, Earl of Ellesmere.

Sows of small breed.—First prize, £5, J. Whitworth, Leeds.

Boars of black or Berkshire breed.—First prize, £5, and second, £2, W. Wheeler, Shipston-on-Stour.

Sows of black or Berkshire breed.—First prize, £5, W. Holmes, York (Lady); second, £2, Lord Bolton, Bolton Hall, Bedale.

Boars of any breed, not qualified to compete in the previous

classes.—First prize, £5, G. Sedgewick (Emperor); second, £2, R. E. Duckering.

Sows not qualified to compete in the previous classes.—First prize, £5, and second, £2, Earl of Ellesmere.

Three breeding sows of any breed, from four to nine months old.—First prize, £5, R. E. Duckering; second, £2, W. Wheeler.

ROYAL OF IRELAND.

The Annual Exhibition of this National Society opened on the morning of the 6th and closed on the evening of the 9th ult. It was this year an amalgamation of what was formerly the Royal Agricultural Improvement Society of Ireland, with what was the Royal Dublin Society. It was anticipated that the joint exhibition would prove a success. Generally, however, the anticipation has not been realised. Several things have contributed to this. In the first place the Council of the Society is composed of gentlemen of the amateur class. Unlike the English Royal and the Scottish Highland Societies, the Irish Royal has few or no practical agriculturists in its directorate, and of course its committees of management are invariably anything but well qualified to conduct its exhibitions so successfully as if practical committees of management had these in hand. In the second place, a Council so composed and managing committees as described are in every shape and form unfitted to attract the support of the tenant class, although the very class for whose improvement the Society has been ostensibly constituted. The result is not only a Society, Council, and Management Committees, but also an exhibition annually, supported mainly by the landed gentry, and all but shunned by the farmers of the country. In various forms otherwise the amateur management is prejudicial. For instance, the site chosen for this year's show is on the south of the City of Dublin, while all the principal railways converge on the north. The upshot is that nearly all the show animals have had to traverse the streets of a large and busy city at considerable expense, trouble, and risk. The same inconvenience attaches to visitors from the country districts. Before the greater proportion of these can get to the showyard some three miles of streets have to be traversed from the railway terminus at which they had been landed. Then in consequence of this amateur management there is too much space of show ground enclosed, there are bad arrangements for stock on every side, stalls and sheep pens are too far apart; there are evidences of heroic plans and efforts on one side, and confusion and dissatisfaction on the other.

In a few words, it may be said of the Exhibition, that it was a great horse fair, a poor turn out of Shorthorns and other breeds of cattle, a good show of sheep, and a first-rate exhibition of pigs. In all the sections there were, of course, superior animals intermixed with many weeds. Some 600 horses of every conceivable breed, mongrel, and size were there. Of these by far the larger proportion had little or no pretensions to much merit. They were sent in on the chance of effecting a sale, and failing that in the showyard, go into livery in the city or to those horse auctions held at show periods. Of the thorough-bred stallions the principal contrast lay between Massanissa, the property of Thomas Lindsay, Killyleagh, County Down, and Maltum in Parvo, the property of Patrick O'Connor, Dublin. Both are aged horses of very superior quality and yet very different horses in more respects than one. Massanissa is a horse of great substance and stands on capital legs, and is worthily first in his class. In addition to first prize in his class the Crokin Challenge Cup is awarded to this horse. For stallions suited to get carriage horses the first prize went to Thomas

McClintock Bunbury, Lisnavagh, County Carlow, for his rich bay stallion Revenge, and the second to Captain Archdale, County Fermanagh, for his bay stallion, Forlorn Hope, both good horses of their class. There was a considerable turnout of agricultural stallions, principally Clydesdale, but among the number there was nothing very superior if we except the horses Lord Haddo the Third and Prince Imperial, exhibited by Messrs. Guinness & Son, Dublin, and bought at Mr. Drew's auction last spring at a low figure. Although, as appeared to us, the best agricultural horse in the showyard, Prince Imperial was anticketed with a prize. To the horse Lord Haddo the Third, the property of James D. Paul, Drumcondra, near Dublin, is awarded not only the first prize in his class, but also the special prize of 100 sovereigns offered by the Local Committee of the show for the best agricultural stallion of the Clydesdale breed. Of the mares and fillies of the different breeds there was a fair exhibition, but nothing beyond that. In each class a few superior animals, and the remainder ordinary stock. The show of hunters able to carry 15 stones and upwards numbered high sixty animals, many of which are very superior, and comprise, in fact, the *élite* of the equine exhibition outside the breeding stock. For a few of these long prices have been obtained, but sales were by no means active. Hunters only up to 13 stones numbered over ninety, and in this lot were many smart animals. The classes following comprised hunters of still a lighter class, young horses suitable for hunters, cobs, roadsters, ponies, and harness horses.

Coming now to Shorthorns, we find in Class I of aged bulls only eight entries; of these the first prize, Anchor, the property of Thomas McClintock Bunbury, is a very superior animal. His handling is not superior, but in most other respects he is near perfection. The second prize bull, St. Roman, the property of B. Hamman, Rivers-town is a much better handler than his rival, but is not altogether so grand in outline. In the next class of bulls calved in 1876 there were seven entries with not a single good animal in the lot. In the class of bulls calved in 1877 matters were no better. Apparently the judges deemed it unnecessary to go very accurately into any particular examination here seeing that they put the second best bull first and the first second. In the female classes matters were not much better. Here and there appeared a good animal; but altogether we have seen a better Shorthorn exhibition at a local show. In the other cattle classes the numbers were few and mostly indifferent, a good Hereford here, a good polled Angus there, and the others not show animals at all, winding up with a few miserable Kerries, wholly unfit for any really useful purpose off a mountain side, but here stuffed with oilcake and good pasture, with a result after all betokening neither judgment agriculturally nor a proper sense of what an improved race of agricultural stock should be. As a poor mountain breed we have nothing to say against them, but to exhibit them as is done here as animals that should be kept on good land is just as sensible a proceeding as would be an exhibition of goats as an accompaniment to the best breed of sheep.

Sheep were a good show and most breeds are fairly well represented: the Prince of Wales exhibited some very nice Southdowns, beautifully clipped into form, as is the fashion with the Down classes, in defiance of all right, reason or indication of what the animals in their natural wool would be. In the Shropshire Down classes some very superior sheep were shown by Mr. Naper, of Lougherewe, of the blood of Lord Chesham's flock. Mr. Hamilton, of Hamwood, also exhibited very superior Shrops. English Leicesters we have seen a better class. These sheep as improvers of other breeds have done and are still doing immense service in the country and we should be sorry to see them go down, if for no other reason than their usefulness

in this respect. Border Leicesters are a larger variety and in the best specimens are to be found the beautiful shapes and the high quality of the English Leicester on a larger scale and on higher legs. These sheep were the largest and on the whole the best class exhibited. One of the most magnificent sheep of the Leicester breed we have almost ever seen was exhibited in this class by Lord Cluden and bred by Mr. Robertson, of Narraghmore in the county of Kildare; very handsome sheep in the ram classes are exhibited by this gentleman, Mr. Young, Brookley-park, whose handsome shewling ram is the first prize, by Lord De Vesci, and others. Lincolns are also a good show. Here a trick has been resorted to for some time which cannot be too soon exposed. Certain exhibitors enter, say a few shearing rams of their own breeding. A commission is then sent to England to purchase one of the best shearlings to be found. He is ordered over to Ireland at the period of the Royal Show and is then substituted for one of the home bred shearlings in question. In order to cloak the operation the entries are made thus:—

"Lincoln shearing ram bred by exhibitor."

"Same; Lincoln shearing ram."

The latter is the sort of entry by which the foreigner is smuggled in. We trust the Secretary to the Royal will insist on "bred by exhibitor" as part of every entry for the future. The class of what is called Rose-moun sheep was also very good. These are sheep bred in the West of Ireland. They are called a native breed by courtesy or affection, but have no real right to anything of the kind, as almost every useful property possessed by them is due to the English Leicester, the Border Leicester, the Cotswold, or to the Lincoln. There were no prizes offered for either the Cheviot or the Scotch black-faced horned breeds, although over large mountain tracts of Ireland such sheep are gradually spreading and found to answer remarkably well. This was a great omission, and one to be entirely attributed to the amateur management above referred to.

Pigs were the best part of the exhibition. Those principally shown were the Berkshire and the small white Yorkshire. Both were very meritorious; indeed, we have seldom seen better.

In the above account we have thought it best to be outspoken and candid. In our criticism we have by no means stated our own individual opinions solely. What we have said has been more the general view than our own. Nor have we alluded to half the expressed dissatisfaction of the showyard. Cooked and pleasant reports of the press are on these occasions, in our opinion, by far too common and productive of the worst results. Fair and above board criticism we hold to be preferable, because by it a future remedy for dissatisfaction and error is more likely to be resorted to and applied. That an agricultural exhibition should be mainly under the management, superintendence, and control of practical agriculturists is a proposition which has common sense on the face of it. In Ireland it has been hitherto all the other way. In the directorate of agricultural exhibitions for the promotion of good cultivation and the breeding of superior farm animals, there are eminent clergymen, manure agents, seedsmen, merchants otherwise, and *occasionally* a few of the landed proprietors of the country, but no practical tenant farmers. Hence the mistakes which occur, the general dissatisfaction given, the ill success there is, the half failures to be seen of these national agricultural meetings, which may perhaps be best described as exhibitions in the country but not of it—as class affairs from which the great agricultural public hold aloof.

LIST OF PRIZES.

JUDGES.—HORSES.—Viscount Combermere, Salop; Colonel Barlow, Woolbridge; H. Briscoe, Carrick-on-Suir;

Marquis of Waterford; R. Watson, Bagnalstown; H. Thompson, Newry; Earl of Coventry, Worcestershire; R. Corbett, Drayton; B. R. P. Pearse, Athenry; J. L. Naper, Oldcastle; Colonel Hillier, Dublin Castle; C. White, Bathdowney; Hon. E. Preston, Balbriggan; O. M. Richardson, Ballycausidy; Major Borrowes, Newbridge; Captain Cosby, Queen's County; T. Penny, Kelso; A. Bulston, Forfarshire; J. T. Power; G. A. Stephens; W. Jameson. FARM PRODUCE: D. Drummond, Dublin; J. Robertson. FARM CART HARNESS: Major Borrowes, Newbridge; J. Simson, Ballinrohe. CATTLE.—SHORTHORNS: A. Mitchell, Alloa, N.B.; A. Metcal, Ravenstonedale, Herefords and other Breeds; H. Haywood, Hereford; W. Taylor, Hereford; Kerrys: E. Haydon, Killarney. SHEEP: Leicesters and Longwoold: J. H. Burbury, Kenilworth; S. Field, Southwell. Border Leicesters: J. Lys, Gifford; J. Angus, Morpeth. Roscommon: J. Simpson, Ballinrohe; R. Glaney, Roscommon. Shropshire: S. Hudson, Salop; G. A. May, Tamworth. PIGS: J. Bruce, Charleville; J. C. Cooner, Limerick. BUTTER: W. A. Green, Mullingar. WOOL: J. B. Workman, Upton-on-Severn; R. Bewoe, Tamworth.

SHORTHORNS.

Bull, calved on or after the 1st of January, 1873, and previous to the 1st of January, 1876.—First prize, £10, T. K. McClintock (Bunbury (Anchor)); second, £5, B. Hanna (Riverstown (Saint Roman)).

Bull calved in the year 1876.—First prize, £15, R. Cholmon, Kingsfort (White Boy); second, £5, B. J. Greene (Prize Rupert).

Bull calved in 1877.—First prize, £15, Earl of Rosmore-Killarney (Lord Beaconsfield); second, £5, E. A. Seal, Kildubbin (Celebrity).

Cow in calf or in milk.—First prize, £10, T. K. McClintock (Pauline Gwynne); second, £5, Miss Rose, Mullaghmore (Red Rose).

Heifer calved in 1876.—First prize, £10, H. Smith, Mountmellick (Queen of Castlebrack); second, £5, J. A. M. Cope, Loughgall (Telluria Belle).

Heifer calved in 1878.—First prize, £10, H. Smith (Victoria 11th); second, £5, D. Gibson, Roserea (Dowdrop 3rd).

HEREFORDS.

Hereford bull of any age.—First prize, £10, Captain Kearney, Clonmellon (Truro); second, £5, G. A. Stephens, St. Doulough's.

Cow in calf or in milk.—First prize, £8, Captain Kearney (Cherry Blossom); second, £5, Capt. Kearney (Lofy the 4th).

Hereford heifer, calved in 1876 or 1877.—First prize, £5, G. A. Stephens, St. Doulough's; second, £3, G. A. Stephens.

POLLED ANGUS.

Angus or Galloway bull of any age.—Prize, £10, W. Owen, Wicklow (Black Knight).

Angus or Galloway cow, in calf or milk.—First prize, £5, G. Bruce, Keig (Forget-me-not); second, W. Owen, Wicklow (Black Bess).

Angus or Galloway heifer, calved in 1876 or 1877.—Prize, £5, G. Bruce (Keepsake 2nd).

ANSHIRE.

Bull of any age.—Prize, £5, Mrs. Hope, Castleblayney (Prince).

Ayrshire cow, in calf or milk.—First prize, £5, R. W. Boyle, Dublin; second, £3, D. Patton, Glasslough (Maggie).

Heifer, calved in 1875 or 1876.—First prize, £5, Mrs. Hope (Daisy); second, £3, D. Patton, Glasslough (Annie).

KERRY.

Bull of any age.—First prize, £5, J. Robertson (Bastard); second, £3, R. Good, Cork (Knight of Kerry).

Kerry cow in calf or milk.—First prize, £5, Earl of Clonmell Straffan (The Pride of Kerry); second, J. Robertson, Malahide (Robbud).

Heifer of any age.—First prize, 5 sovs., Earl of Clonmell; second, 3 sovs., J. Robertson.

CHANNEL ISLAND.

Bull of any age.—First prize, 5 sovs., S. J. Mercier, Guildford (The Emperor); second, 3 sovs., S. Gerrard (Islander).

Cow or heifer, in calf or milk.—First prize, 5 sovs., Viscount Powerscourt (Battercup); second, 3 sovs., Viscount Powerscourt (Crocus).

Dexter Kerry cow or heifer.—First prize, 5 sovs., Earl of

Clonnell, Straffan (Kathleen); second, 3 sovs., G. A. Stevens, Greenwood.

TENANT-FARMERS.

Limited for competition to tenant-farmers whose poor-law valuation is under £100 per annum.

Cow in calf or milk.—First prize, 8 sovs., D. Glenn, Killefennan (Strawberry); second, 4 sovs., D. Patton (Lily).

Heifer, calved in 1875.—First prize, 5 sovs.; second, 3 sovs. No entry.

Heifers, calved in 1876 or 1877.—First prize 5 sovs. D. Glenn (B. antiful Roan); second, 3 sovs., D. Patton (Jessie).

EXTRA STOCK.

Prize, P. Taaffe, Foxborough, Tulse, Roscommon; improved old Connemara cow Peggy.

SHEEP.

LEICESTERS.

Shearling ram.—First prize, 10 sovs., R. Cooke, Kiltinane, Fetard; second, 5 sovs., W. R. Meade, Ballinghassig; third, medal, W. R. Meade.

Pen of five shearling ewes.—First prize, 8 sovs., R. Cooke; second, 4 sovs.

BORDER LEICESTERS.

Shearling ram.—First prize, 10 sovs., W. Young, Stradbally; second, 5 sovs., T. Robertson, Stradbally; third, medal, Viscount de Vesce, Abbeyleix.

Ram of any other age.—First prize, 8 sovs., Viscount de Vesce; second, 4 sovs., Viscount Clifden; third, medal, Viscount de Vesce.

Pen of five shearling ewes.—First prize, 8 sovs., A. Leigh, Rosegarland second, 4 sovs., M. H. Franks, Mountrath.

ROSCOMMON SHEEP.

Shearling ram.—First prize, 10 sovs., R. Flynn, Tulse; second, 5 sovs., R. Flynn; third, medal, B. Hannan.

Ram of any other age.—First prize, B. Hannan; second, 4 sovs., B. Hannan.

Pen of five shearling ewes.—First prize, 8 sovs., B. Hannan; second, 4 sovs., R. Walsh, Saggart; third, J. Plunkett, Taaffe.

LINCOLN OR COTSWOLD.

Yearling ram.—First prize, 10 sovs., C. Going second, 5 sovs., Davidson and Watson, Esker; third, Davidson and Watson.

Ram of any other age.—First prize, 8 sovs., C. Going; second, 4 sovs., C. Going; third, medal, T. Robertson.

Pen of five shearling ewes.—First prize, £8, Davidson and Watson; second, £4, G. Shannon.

SHROPSHIRE SHEEP.

Challenge Cup, presented by J. L. Naper, Esq., for the best shearling Shropshire Down ram, to be won three years.—Awarded to J. L. Naper.

Shearling ram.—First, second, and third prizes, J. L. Naper, Oldcastle.

Ram of any other age.—First prize, Miss G. Rose, Monaghan; second, C. W. Hamilton, Clonee; third, Miss G. Rose.

Five shearling ewes.—First prize, Miss G. Rose; second, G. A. Stephens, St. Donloughs.

Limited for competition to tenant farmers whose poor law valuation is under £100 per annum.

Best pen of five shearling ewes.—First prize (no competition); but merit for second was awarded to P. Dwyer, Toomavara.

EXTRA STOCK.

Great merit and special prize awarded for three Southdown rams, exhibited by H.R.H. the Prince of Wales, K.G., Sandringham, Norfolk.

PIGS.

COLOURED BREED.

Coloured breed.—First prize, J. Molloy, Mountjoy Street Dublin; second, Lord Clermont.

Boar, over 18 months and under 36 months old.—First prize, D. Glenn, Killefennan; second, T. K. McCintock, Bunbury.

Breeding sow under 18 months old.—Prize, J. Molloy.

Breeding sow over 18 months old.—First prize, D. Glenn; second, Lord Clermont.

Berkshire sow and litter of not less than six pigs, under three months old.—First prize, D. Glenn; second, J. K. Millner.

Three breeding pigs of the same litter, above three and not exceeding nine months old.—Prize, the Earl of Wicklow.

WHITE BREED.

Boar under 18 months old.—First prize, J. L. Naper, Oldcastle; second, Miss G. Rose, Monaghan.

Boar over 18 months and under 36 months old.—First prize, J. L. Naper, Oldcastle; second, the Earl of Clonnell. Breeding sow under 18 months old.—First and second prizes, J. Molloy.

Breeding sow over 18 months old.—First and second prizes, J. Molloy.

Sow and litter of not less than six pigs, under three months old.—First prize, J. Molloy; second, the Earl of Wicklow.

Three breeding pigs of the same litter, above three and not exceeding eight months old.—First prize, P. Kennedy, Ballymore; second, G. Glenn, Londonderry.

Limited for competition to tenant farmers whose

Poor law valuation is under £100 per annum.

Best breeding sow over 6 and under 18 months old.—First prize, S. H. Groom, Santry; second, D. Glenn, Londonderry.

Breeding sow over 18 months, in pig or with litter.—First prize, D. Glenn; second, S. H. Groom, Santry.

DAIRY PRODUCE.

Firkin of butter, of not less than 65lb. weight.—First prize, E. Bowers, Silverspring; second, D. Driscoll, Clogheen; third, D. Patton.

Cool of butter, 30lb. weight.—First prize, D. Driscoll; second, E. Bowers; third, Mrs. Davidson.

Roll or print of fresh butter, of not less than 11lb. weight.—First prize, Mrs. S. Stephens, Greenwood; second, Mrs. O'Reilly, Booterstown.

(Open for competition to tenant farmers, whose Poor-law valuation does not exceed £100).

For the best cool of butter.—Prize, D. Patton.

FARM PRODUCE.

Cup value 10 sovs., for the best collection of farm produce grown by the exhibitor in Ireland (equally divided between Messrs. Mowbray and Stephens).—Prize, G. A. Stephens, St. Donloughs, Seymour Mowbray.

Collection of farm produce shown in the yard, a medal, or the value in money, £5 (equally divided between Messrs. Mowbray and Stephens).—Prize, G. A. Stephens, Seymour Mowbray.

FARM HARNESS.

Prizes presented by Messrs. W. and H. Goulding, for the best set of farm cart harness.—First prize, J. Dunlop, Rad-dington; second, W. Elliott; third, J. Dunlop.

WOOL.

(Prizes given by the wool merchants of Dublin).—For the best ten fleeces of longwool.

HORSES.

The Croker Challenge Cup (value 50 sovs.).—For the best weight-carrying thoroughbred stallion, the attention of the judges to be particularly directed to the words "weight-carrying thoroughbred stallion," and in all cases to withhold the premiums in the event of want of merit.—T. Lindsay's Massanissa.

The Scotch Rath Challenge Cup (value 10 guineas).—For the best agricultural brood mare in foal, or having produced a foal in 1877 or 1878. — Awarded to J. D. Paul, of Ellenfield, Drumcondra.

Special prize of £10.—Best Clydesdale mare or filly.—Awarded to Earl Spencer.

Thoroughbred stallions.—For the thoroughbred sire in the stud book which, in the opinion of the judges, is best calculated to improve and perpetuate the breed of sound and stout thoroughbred horses, weight-carrying hunters, and horses for general stud purposes.—First prize, £10, T. Lindsay, Killyleagh (Massanissa); second, £20, P. O'Connor, Dublin (Mutton-in-Parvo).

Thoroughbred sires calculated to get carriage, troop horses, or roadsters. First prize, £25, T. K. McCintock, Bunbury (Revenge); second, £12, Captain Archdale, Irvinestown.

AGRICULTURAL STALLIONS.

Stallion of the Clydesdale breed, over four years.—First prize, £25, J. D. Paul, Ellenfield (Young Lord Haddo III); second, £15, H. McCutcheon, Newtownards (Caledonian); third, W. Buchanan, Glasgow (Dreadnought).

Special prize of £100 for Clydesdale stallions.—Horses entering in class 117 may compete for this special prize without any extra fee.—Prize, J. D. Paul's Young Lord Haddo.

Stallion, of any other breed.—First prize, £25, J. R. Hefferman, Blarney (Viceroy).

Special prize of £50 for the best agricultural stallion of any other breed than Clydesdale.—Prize £50, J. McGraue, Templeogue (Chance).

BROOD MARES.

Thoroughbred mares, in foal, or having produced foals in 1877 or 1878.—First prize, £15, (Sweet Briar); second, £10, J. C. Murphy (Madalene).

Mares calculated to produce weight-carrying hunters, in foal, or having produced foals in 1877 or 1878.—First prize, £20, C. S. E. Walker, Moyvalty (Clodre); second, Captain Cosby, Stradbally; third, £9, W. D. Webber, Athy; fourth, medal, T. Plunkett, J. P., Portmarnock, Baldoyle.

Brood mare, in foal, or having produced a foal in 1877 or 1878.—First prize, £15, Earl Spencer, K.G. (Regina); second, £10, D. Paul, Drumcondra; third, £5, B. Hannan Killcum.

AGRICULTURAL.

Three-year-old filly for agricultural purposes.—First prize, S. R. Keer, Edenderry; second, G. A. Stephens, St. Donough's.

Two-year-old filly for agricultural purposes.—First prize, J. Murdock; second, J. D. Paul, Drumcondra.

HUNTERS.

Gelding or mare, not less than five years old, able to carry 15 stone and upwards.—First prize, £20, J. Gubbins, Kilmallock; second, £12, F. H. Smith, Castlereagh; third, £8, Earl of Kenmare; fourth, £5, J. J. Carew, Kildangan.

Gelding or mare, not less than five years old, able to carry 13 st. 7 lb. to 15 st.—First prize, £15, J. McClinton, Carlow; third, £7, G. B. Hore, Monkstown; fourth, M. G. Sweeney, Castlereagh.

Gelding or mare, not less than five years old, able to carry from 12 st. to 13 st. 7 lb.—First prize, £20, J. Gubbins, Kilmallock; second, £10, W. Dove, Liskillen; third, £5, J. Pollok; fourth, medal, C. G. Boothwell, Staffordstown.

YOUNG HORSES SUITABLE FOR HUNTERS.

Four-year-old gelding, able to carry 13 st. 7 lb. and upwards.—First prize, £15, J. Gubbins; second, £10, J. Meldon; third, £6, H. Walker, Nobber; fourth, medal, Wray Bury, Palliser.

Four-year-old filly, able to carry 13 st., 7 st., and upwards.—First prize, £12, J. O'Connell, Tipperary; second, £8, Captain Cosby; third, £5, E. Kelly, Carlow; fourth, medal, P. Finucane, Dublin.

Four-year-old gelding able to carry from 12 st. to 13 st. 7 lb.—First prize, £10, E. Kelly, Carlow; second, £5, P. Quinlan, Clonmel; third, medal, Captain M. J. Balfe.

Four-year old filly, able to carry from 12 st. to 13 st. 7 lb.—First prize, £10, Baron de Robuek; second, £5, R. Flynn; third, medal, M. Dodd.

Three year old gelding.—First prize, £10, J. D. Meldon; second, £1, G. Tyson; third, medal.

Three-year-old filly.—1st prize, £7, W. J. Corbett; second £5, B. Hannan; third, medal, Baron de Robuek.

Two year old gelding.—First prize, £10, R. Pigot; second, £5, Viscount de Vesti; third, medal, P. R. Norton.

Two year old filly.—First prize, £7, H. Farrell, Clohern; second, £5 (no merit for second); third, medal.

Ladies' Horses and Park Horses.—First prize, £8, F. R. C. Coleridge, Dunshaughlin; second, £4, G. A. Rotherham, Trim; third, medal (no merit).

WEIGHT-CARRYING COBS AND ROADSTERS.

Cobs or roadsters, not exceeding 15.1 hands, calculated to carry 15 stone and upwards.—First prize, £10, J. McGorisk, Drumboory; second £5, P. W. Low, Tipperary; third medal.

Cobs or roadsters, from 14 to 15 hands, calculated to carry from 13 to 15 stone.—First prize, £10, G. Begg, Dublin; second, £5; third, medal, A. Weeks, Ballinrobe.

Cobs and roadsters under 15 hands, calculated to carry under 13 stone.—First prize, £8, W. T. Stewart, Dublin; second, £1, H. Fielding, Dublin; third, medal (no merit for third).

Ponies from 12 to 14 hands. First prize, £6, B. McCullagh, Newcourt; second, £4, W. T. Stewart; third, medal, Capt. R. P. Rees.

Ponies under 12 hands.—First prize, £6, D. Rogerson; second, £4, Master H. T. G. S. Johnston; third, medal, T. Walpole, J. P.

BORDER UNION.

The annual show of this Society took place on Monday, Aug. 5, in the Friars' Park, Kelso, on the Roxburgh estate, at the confluence of the Tweed and the Teviot. There were several hundred pounds offered in prizes, besides numerous silver medals, and the entries in the whole of the classes were more numerous than on any former occasion, while the character of the stock generally was of a superior description. About £70 was offered in premiums for Shorthorns, of which there was a fair representation. In the aged bull class the £10 prize was given to Royal Irwin, the property of Mr. Wm. Handley, Greenhead, Westmorland. Lord Polwarth was second with Waverley. In the yearling class Mr. Handley won with the white bull Lord St. Vincent, by Sir Arthur Windsor. He received the reserve ticket at the Royal. Lord Polwarth was second with Rapid Butterly, a roan by Rapid Rhone, out of Broughton Butterly. In the bull calf class he secured first honours with a red and white by Rapid Rhone, out of Echo. The Duke of Roxburgh was second with a pretty red. In two of the four classes for females Mr. Handley distanced all competitors, winning the £6 premium in the aged cow class with Lily Windsor, which was fourth at the Royal, but only commended at Dumfries; and the £4 prize in the two-year-old heifer class with Rose Mary, by Sir Arthur Windsor. Lord Polwarth gained the first prize in the class for yearling heifers with Scotch Rose, which was also awarded in an entry of ten the special premium presented by Sir Wm. Scott, Bart., of Auerum, for the best heifer in the yard belonging to the district over which the Society extends. Dairy cows were fairly represented, while fat cattle formed a feature of the show. There was a large entry of agricultural horses, but the quality was not fully up to the usual standard.

COQUETDALE.

The sixteenth annual show of the Coquetdale Agricultural Society was held on August the 1st, at Morpeth, and the predictions which were made as to the success which would attend the holding of the exhibition at an extreme boundary of the district embraced by the Society were completely fulfilled. In the hands of Mr. Robert Donkin the arrangements were, it need scarcely be said, of the most admirable description; while the premiums which the extensive character of the Society and the liberality of landed proprietors and of the town of Morpeth enabled the Committee to offer induced a very large number of entries. In every one of the numerous classes large premiums were offered, and the competitors in the several classes of the cattle, horse, and sheep sections were further encouraged by special prizes in the shape of cups presented by the Duke of Northumberland, Earl Percy, the Mayor and Corporation of Morpeth, Hugh Taylor, Esq. (Chiphase), John Straker, Esq., and John B. Cookson, Esq., and the town of Morpeth. The consequence of the large amount of the premiums, amounting to a total of £600, was that the entries were very numerous in almost every department, and that the stock was of high quality. The entries were as follows:—Cattle, 93 (namely, Shorthorns, 73, other classes, 20); sheep, 108; horses, 144; swine, 10; shepherds' dogs, 60; poultry, pigeons, &c., 75; dairy produce, 33; implements, 85.—Total, 608. One gratifying circumstance in connection with the exhibition was that in not more than one or two of the classes were there any ab-

sentees. The general excellence of the show and the high quality of the stock—especially the Shorthorns—were frequent subjects of remark by the visitors and there was an unanimous opinion that the exhibition was the best district show that had ever been held in Northumberland.—*Newcastle Courier*.

DENBIGHSHIRE AND FLINTSHIRE.

The annual show of this Society was held at Rhyl, on August 5th. *The Wrexham Advertiser* says of the live stock:—The show of bulls was fairly good on the whole, though scarcely equal to that of the last show at Rhyl. Mr. Peel's roan, "Factory Boy," was a fine animal with a deep, broad chest, strong loins, and plenty of length, but in the opinion of many good judges Mr. Joseph Lloyd's was the finest animal on the field. There were larger animals, but none so symmetrical, and on the whole whose points were so equal, and struck the eye so well. The yearling bulls were only two in number, neither of which were of very extraordinary merit. The show of cows was limited, but the quality was fully up to the average. The prize was given to one the property of Mr. John Roberts, Well House, who is always formidable in this class. The two-year-old heifers were also good, and in this division Mr. Roberts and Capt. Conwy took first and second prizes. The show of yearling heifers was very much below the average, the animal which took the prize being scarcely equal to the commended of ordinary years. Here the prize went to Major Conwy and Mr. Roberts. The show of Welsh or hardy cattle was certainly above the average in merit as in number.

The show of horses, taken in all, was decidedly below the average. The cobs were not worth showing, and the hunters were nothing to brag of. But there were some exceedingly fine agricultural horses, to whose appearance the frequenters of the agricultural show have now become perfectly familiar.

The show of sheep was excellent as far as it went. What there was, was of excellent quality, but the number of entries and the number on the ground was very small taking into consideration the area in which the competition might be expected.

The show of pigs were also smaller than usual, but with one or two exceptions which should have been kept at home the quality was very fair.

We cannot find space for the prize list.

EAST DERBYSHIRE.

The thirty-sixth annual show in connection with the Norton Farmers' Club and East Derbyshire Agricultural Society came off last Thursday, in the Recreation Grounds at Chesterfield. The show, as regards entries, was certainly not such a success as last year—why we cannot say. We understand, however, that the management of the Society has been placed in better hands, and great things are expected at future shows. Last Thursday being a beautiful day a large number of persons availed themselves of the opportunities which the Midland Railway afforded of visiting the show. People came in not only from different parts of Derbyshire, but also from Notts. and Yorkshire, and it is expected that the gate money will amount to a very considerable sum. The following figures show the entries in the various classes for this year and last:—

	1877.	1878.
Farms.....	5	7
Horses.....	121	103
Cattle.....	37	36
Sheep.....	40	28
Pigs.....	33	29
Dairy Produce.....	33	21
Implements, &c.....	15	6
Dogs.....	268	106

From this it will be seen that the sole exception to the decrease in the entries is the competition for the farm premiums. Dr. Holmes was much praised for the admirable appearance which his farm presented. His holding was adjudged to be the best, and it carried off the first prize; whilst in the second class for the best managed farm (limestone or light land) of 50 acres and upwards Mr. H. Grimes was successful with his farm of 400 acres. Of horses the show, though not so large as last year, included animals of the highest quality. Mr. Barnes', chestnut gelding Tommy was without doubt the best in the Hunters' class, and the judges had not much difficulty in awarding the first prize. This class was the best represented in the show, and the exhibits were of a high character. The roadsters and mares with foals were also well represented, while the nags, though very few in point of numbers, were remarkable for their quality. The same remark was equally applicable to the harness horses and horses for agricultural purposes. This part of the show attracted a good deal of attention, and the merits and demerits of the animals were keenly criticised, and remarked upon by the spectators. The cattle were also excellent, especially the Shorthorns, which were noticeable for their extent of flesh and milking properties. Mr. Hopkinson furnished a winner in Ruth the Fifth—a very fine beast. The bulls were not a bad show, Mr. Oakes, of Riddings House, bearing off the palm. The same gentleman also carried off several other prizes in this class. Perhaps one of the most satisfactory portions of the show, however, was that of the pigs, which were a great advance upon the quality of those shown at last year's show. Conspicuous among them was Mr. Eob's sow Betty and his boar, both of which are well known prize-winners. Mr. H. Smith, of Cropwell Butler, carried off the honours in the sheep competition.—*Derby Reporter*.

EXPERIMENTS WITH COLORADO BEETLES.—The report of the Entomological Society of Ontario, Canada, gives a statement of a series of experiments with the Colorado potato beetle, the result of some of which will be interesting to our readers. They were performed by W. Brodie, of Toronto. Thirty beetles, after being starved for twenty-four hours, refused leaves of carrot, parsnip, beet, pumpkin, lettuce, sunflower, sage, and cabbage. After eight more hours, when supplied with potato leaves they ate them freely. A similar experiment was made and repeated with a large number of common weeds, but none were eaten. Again, thirty beetles, after being kept eleven days without food, were given the leaves of a large number of weeds, which remained untouched. Potato leaves were then eaten freely. Three repetitions gave the same results. To ascertain how long they would live without food, of forty-five beetles, which were allowed nothing to eat after changing to beetles, four died the fourth day, thirty-three the fifth day, two on the sixth day, and three more by the eleventh day. Over 75 per cent. died within five days, the males dying first. The next experiment was to take thirty mature beetles, which had partaken of food; they were then kept without it. Two died by the fourteenth day, six by the nineteenth, five by the twenty-third, three more by the twenty-seventh, while 20 per cent. survived forty-seven days' fasting. This experiment, which was repeated with like results, shows that beetles may be secreted in the packing of merchandise in ships, and may easily cross the Atlantic and come out alive. Other experiments were made by which it was ascertained that on an average one beetle will eat an inch square of potato leaves in thirty hours, the maximum rate being ten hours, and the minimum thirty-seven hours. One beetle is able to defoliate entirely one plant of potatoes during its beetle life. The experiments on feeding the beetles, and the time required for their death by starvation, seem to show conclusively that if no potatoes were planted within their reach the race would soon die and disappear.

THE ORIGIN OF DURHAM SHORTHORNS.

In accordance with the request of several breeders we republish the following history of the "Origin of the Durham Shorthorns," which appeared in *The Work-Love Express* and *The Farmers' Magazine* in the year 1858; to be followed by an account of the "Origin of the Duchess Family," contributed to these columns in the same year by Mr. Willoughby Wood, to be found on another page:—

STR.—In your journal of the 22d March, alluding to the sales of Shorthorns about to take place and now coming off, you say that at one of them, namely, that to take place on the 21st of April, several animals will be offered which are right line descendants through females of the celebrated cow "Favourite," bought by the Messrs. Colling of Mr. Maynard, of Eryholme, and by them christened "Lady Maynard." This mention of "Favourite" and the Colling's stock brings to my recollection a discussion introduced a few weeks ago in the agricultural article of *The Economist*, on the origin of the improved Durham Shorthorn, suggested by the publication in a contemporary, *The North British Agriculturist*, of extracts from a journal of the late Major Rudd, of Marlow, in Yorkshire, called "An Account of some of the Shorthorn Stock, late the property of Mr. Charles Colling, of Ketton, in the County of Durham."

As I think these extracts may be interesting to some of your readers, and as I have not seen them elsewhere, I have transcribed them, and have at the same time ventured to send you some observations on the origin of the improved Durham Shorthorns. In making them I may be permitted to say I do so as a Durham man, with a perfect knowledge of parties and localities, myself for upwards of twenty years a breeder of Shorthorns, and one who has long and diligently investigated the subject. I am especially induced to do this at present because I have of late frequently seen the matter discussed by strangers with an interest that may well put us lukewarm natives to the blush, but in which discussions, as might perhaps be expected, we hear assertions made that to us, who are "to the manner born," are not a little astounding.

Speaking, then, in the character in which I have represented myself to do, I have long since arrived at the conclusion, wherein I entirely agree with the writer in *The Economist*, that in forming the improved Durham Shorthorns the Messrs. Colling proceeded, generally, "by care and selection from the local breed of Shorthorns which had already attained considerable perfection," and not by crossing distinct breeds of cattle. I am bound, however, at the same time to say that he is mistaken in alleging that "the story of the brothers Colling having used a cross of Galloway blood in the improvement of their Shorthorns has no foundation in fact." It is indisputably true that Mr. Charles Colling had recourse to such a cross in one family of his Shorthorns, which is known, technically speaking, as "the alloy," to which I shall take occasion particularly to advert, and in so doing it will perhaps be seen why we find "no trace of such crossing in Major Rudd's journal."

The following are the extracts from that journal to which I have alluded:—

No. 1. Old Favourite, was bred by Mr. John Maynard, of Airy-holme-upon-Tees. She was got by a Shorthorn bull belonging to a Ralph Alcock, who lived near Airyholme, which bull was remarkable for his nice handling. The dam was got by a Shorthorn bull belonging to Mr. Jacob Smith, of Givendale, near Boroughbridge. Her grandam was a beautiful roan cow, called Strawberry, bred by Mr. Maynard's father, and got by a Shorthorn bull belonging to Mr. Polly, of Worrall, then held in high estimation.

No. 2. Young Strawberry, was also bred by Mr. John Maynard. She was out of Old Favourite, and got by a Shorthorn bull (bred by Mr. John Charge, of Newton, who sold him to Messrs. John Maynard and Duke Wetherill). This bull went by the name of the Dalton Bull, and was esteemed a first-rate bull at that time. Young Strawberry was of a

beautiful roan colour. In the year 1785, when Mr. Charles Colling first turned his attention to the improvement of the Shorthorn breed of cattle, he was desirous to procure the best cows and bulls, and such as had the greatest propensity to fatten. Old Favourite and her daughter Young Strawberry particularly attracted his notice, and he was desirous to purchase them. He had some difficulty in prevailing upon Mr. John Maynard to sell them, but he at length succeeded and they became his property.

No. 1. Hubback, when four years old, was purchased by Mr. Robert Colling, of Barapton, and Mr. Waistell, of Alichill, for the purpose of serving their feeding cows. He had such an uncommon inclination to fatten as to excite the particular attention of Mr. Charles Colling, who purchased him of Mr. Robert Colling and Mr. Waistell, about the year 1785. The judicious selection of Hubback, and of Mr. Maynard's two cows, as before mentioned, may be called the origin of the celebrated stock of Ketton Shorthorns, which for early maturity, inclination to fatten, and to acquire the greatest weight with the least calf, are unequalled by any breed of cattle in the world.

The bull Hubback was descended from the stock of Sir James Pennymann, Bart., of Ormsby, in Cleveland, Yorkshire, who, about the year 1770, paid much attention to the improvement of the Shorthorned cattle, and purchased the best bulls and cows which he could procure. He purchased several cows of Sir W. St. Quintin, of Scampston, who was then celebrated for his breed of Shorthorn cattle. It is probable that Hubback may have been descended from their breed, but the fact cannot be ascertained. Hubback was of a red and white colour, the red inclining to yellow.

No. 2. Foljambe, was out of a cow by Hubback, and was got by a bull belonging to Mr. Richard Baker, of Oxney Field, near Darlington, then in estimation as one of the best bulls of that time.

Of these extracts the following corrections or explanations suggest themselves:—

The name of the owner of the sire of Favourite's grandam was Mr. Jolly, of Worsall; not Mr. Polly, Worrall. The Dalton Bull, better known as Dalton Duke, was bred at Dalton by Mr. Charge.

The received version of Hubback's pedigree is that he was out of a cow belonging to Mr. Snowdon, of Hurworth, in the county of Durham, given to him by his landlord, Sir James Pennymann, of Ormsby Hall, in Cleveland, which Sir James had obtained from Sir Wm. St. Quintin, of Scampston, in the East-Riding of Yorkshire; that he was got by a bull belonging to Snowdon; that Snowdon's bull was by William Robson's bull, Robson's bull being by William Masterman's bull, and Masterman's bull being by the Studley bull. As Hubback appears to have been calved in 1777, and is said by Mr. Youatt, in his work on cattle, to have served cows but a short time owing to his propensity to fatten, there seems an inaccuracy in saying that Mr. C. Colling, when he was beginning as a breeder, bought the bull at four years old, both these dates being assigned to 1785.

The following somewhat amusing account of the purchase of Hubback by Messrs. R. Colling and Waistell is given by Mr. Youatt in the work already alluded to.

Mr. Waistell (from whom Mr. Youatt had this information, in October, 1832) used to admire this calf (Young Hubback) as he rode almost daily by the meadow in which it grazed, and at length he attempted to purchase it from the owner. The price asked, £8, seemed much for a calf not a year old; and the reputation of the Shorthorns not being yet established, the bargain was not struck. Still he longed for the young beast; and happening to meet Mr. R. Colling near the place, he asked his opinion of the animal. Mr. Colling acknowledged that there were some good points about him; but there was something in his manner of acknowledging this which induced Mr. Waistell to think that Mr. Colling thought somewhat more highly of the calf than his language expressed, and therefore he hastened the next morning to conclude the bargain, and paid the money. He had scarcely done so, before Mr. Colling

arrived for the same purpose; and as the farmers rode home together, they agreed that it should be a joint speculation. Some months passed by, and either Mr. Waistell's admiration of the calf a little cooled, or his partner did not express himself very warmly about the excellencies of the animal, and Messrs. Waistell and R. Colling transferred Young Hubback to Mr. C. Colling, who, with the quick eye of an experienced breeder, saw the value of the little beast.

Foljambe was got by Mr. Richard Barker's bull, of Oxenfield; not Mr. Baker, of Oxneyfield.

Shortly after the Durham Shorthorns had acquired the name of "improved" Durham Shorthorns, a vehement controversy arose as to the origin of these same improved Shorthorns; or, rather, as the Collings had been the chief improvers, what the system was they had pursued in their improvements, or what, in short, they had bred from.

On the one hand it was maintained that this system had been that alleged by the writer in the *Economist*—"Careful selection from the local breed of Shorthorns, which had already attained considerable perfection" in doing which they skillfully perpetuated excellencies and obliterated defects. On the other, that it had been one of crossing in the extreme sense of the term, namely, the commixing of the bloods of totally different breeds of cattle.

The maintainers of the latter position were two-fold, who arrived from it at totally different conclusions. The first of them, being owners of Herefords and other rival breeds, asserted it to be a law of nature, that by crossing from animals of distinct breeds, no third or improved one could be obtained having the power of perpetuating itself; that the progeny always and shortly reverted to one or other side of the parentage; and that the improved Shorthorns, having been produced by this kind of crossing, would speedily come to an end and totally disappear.

Upwards of fifty years have, however, elapsed; and the improved Durham Shorthorns still hold their own, still continue to propagate their kind, their offspring showing no departure from the long-established type and character of their ancestry; and either, therefore, the theory of these objectors as to the effect of crossing was erroneous, their arguments fallacious, or they were in error as to the facts, the latter being undoubtedly our opinion.

The other class of supporters of the doctrine of extreme crossing were parties who, being owners of stock having in it the Galloway cross or "alloy," contended that this crossing was the system on which the Collings had proceeded universally, and that it was, in truth the right mode of improving.

It may be here not unaturally asked, How came it to pass that this subject had become a matter of conjecture and of controversy? Was nothing known as to the system the Collings had pursued? What were the facts? The brothers Collings appear to have been retired, reserved men, little thinking that their cattle-breeding proceedings were to become matter of public curiosity, or were to provoke controversy. They kept no record of their proceedings while they were in operation, nor did they leave any at the last; and seeing, as we have said, that the interests or supposed interests, of various parties conspired to make it expedient to mystify the facts, it is not surprising that they were so mystified to a great extent. Now, however, that this mystification is passing away, the facts are, in our opinion, abundantly obvious. There had existed time out of mind on both sides of the river Tees from Barnard Castle downwards to Yarm, a peculiar breed of cattle—the Teeswater or old-fashioned Durham Shorthorns. And long before the names of the Messrs. Colling had been heard, those of the following breeders and improvers of them had obtained celebrity, namely, Milbank, Brown, Hill, Wright, Charge, Maynard, Jolly, Hutchinson, Sharter, and others. And long before Ketton or Baruppton were known as Shorthorn localities the following places were in repute, namely, Barmingham, Aldborough, Barton, Cleasby, Manfield, Stapleton, Dalton, Newton, Morrell, Blackwell, Oxenfield, Hurworth, Eryholme, Worsell, Soekburn, &c. This being so, there was it likely the Collings (living in this immediate neighbourhood), when they had determined on becoming breeders, went for their originals, but in the direction where a breed had long been in esteem, and where they had ample materials from which to make their selections?

reference to this, Mr. Hutchinson, the author of the

curious little history of the Sockburn Shorthorns, written nearly forty years ago, says, "The editor of the *Farmer's Journal*, some time ago, asked whether the improved Shorthorns originated in select individuals, or were obtained first by a cross? To which let me here answer, from individuals (I can hardly say *select* as regards Mr. C. Colling's stock) picked up by that gentleman at his own back-door, without trouble or expense: and no doubt he took the best he could come at." Knowing, as we do, the skill and tact of these gentlemen, we may feel assured that whatever this author may say of the absence of trouble or expense, what they "took" in this way—"the best they could come at"—were by no means despicable animals. Indeed, he says, as an instance of their judgment in such matters, that at the time they succeeded in buying "Old Favourite" and "Young Strawberry" of Mr. Maynard, they tried to buy one of the Sockburn Shorthorns bred by his great uncle, Mr. J. Hutchinson, but could not succeed.

But though it may be fairly assumed that generally they did go to their own back-doors—into their own immediate neighbourhood—to get what they wanted in the way of native Shorthorns, and the great majority of their pedigrees conclude with a dam by Hubback, without giving any pedigree to her dam, yet we have not a few memorable instances of the pedigrees of their stock going beyond this.

Assuming, then, that Durham Shorthorns are an indigenous race established time out of mind in the localities mentioned, of which further evidence will be adduced, we have in the old-fashioned animal really a pure-bred animal. And if, as often occurs at sales of professed improved Shorthorns, the pedigrees do not go back more than four or five descents, a purchaser may feel safe as far as purity goes. I by no means, however recommend such pedigrees to persons beginning breeding in earnest, but that, like the Collings, they should get "the very best they can come at." And with a little diligence they may obtain stock descended in a right line through females from the best animals the Collings possessed, as well as others descended in the same way from the stocks of those who, as we have seen, were even their predecessors, namely, the Milbanks, Hutchinsons, and others.

With a view to aiding them in their search, I shall mention several extant descendants in a right line through females of some of the Collings' best known cows, and also descendants of the same description from the stocks of the other parties we have alluded to. I take in the first place the descendants of those of the Collings' cows whose pedigrees go even beyond Hubback, namely—1, Favourite; 2, Princess; 3, Duchess; and 4, Fortune. And first, with regard to the descendants of Favourite or Lady Maynard, who may indisputably be taken as "No. 1" when treating of Shorthorn pedigree. Favourite had of daughters, Young Strawberry, Miss Lax, and Phoenix. Young Strawberry was by Foljambe, the dam of "Lord Bolingbroke," who was sire, by the O'Callaghan Galloway, of the bull "Son of Bolingbroke," who by "Old Johanna" was the sire of "Grandson of Bolingbroke," wherein we see the origin of the Galloway cross or "alloy," hereafter to be discussed. Phoenix having had by Bolingbroke the celebrated bull Favourite, had also by "Grandson of Bolingbroke" the cow Lady, from which chiefly are descended the branch of Shorthorns having "the alloy." Phoenix also had, by her own son Favourite, Young Phoenix, who by the same Favourite had the renowned "Comet," the first, and for many years the only bull sold for one thousand guineas. Of these two daughters of Favourite, viz., Young Strawberry and Phoenix, I am not aware of there being any right line descendant through females; and so proceed therefore to her other daughter Miss Lax, who was, as well as Young Strawberry by Dalton Duke. From her descended through females, No. 4 at the Chilton sale, and through her many other animals at the same sale, several of which went to Ireland. Lord Spencer, then Lord Althorp, bought Nos. 13 and 55, esteemed amongst the best. They were both daughters, as we have seen, of No. 4, No. 13 being by St. Alban's of the "Princess" family, and No. 55 by Monarch, of the "Favourite" family.

During Lord Spencer's life female descendants of these cows were rarely if ever to be obtained. But by the three sales of his stock at Wiseton they were dispersed. The No. 13 line, belonging to Lord Spencer, seemed at one time to have concentrated in Roguery by Mercury who was a granddaughter of No. 13. She, however, was very prolific, and

had of cows, Zeal, Zinc, and Zene, and of bulls Zedig, Zenith, and Zoroaster. Zeal, a very fine cow, bought at the first Wiseton sale by Mr. Wilkinson, of Lenton, had many descendants both while belonging to that gentleman and previously when belonging to Lord Spencer—Prophets Prudence, Wiseton Lady, &c. The same as to descendants was the case with Zinc, who had Teturia, Metal, &c. It appears that it is through Zeal and Zinc that there are descendants of No. 13 to be offered at the sale you allude to.

No. 55 had also many descendants who were brought into the market at the Wiseton sales. Of these, Enigma was purchased by Mr. Topham, and Florentia by Lord Ducie. From Enigma and Florentia there appear to be, at the same sale, descendants of No. 55.

THE PRINCESS FAMILY.—The pedigrees given of Princess are not only various but conflicting. At the sale of Sir H. V. Tempest's herd in 1813 she is said to have been by Favourite, her dam by Favourite. The same pedigree is given in the 1st volume of the Herd Book, published in 1822. The 3rd volume of the same book, published in 1836, gives her pedigree, as being by Favourite, dam by Favourite, g. d. by Hubback, gr. g. d. by Snowdon's bull, — by Waistell's bull, — by Masterman's bull, — by the Studley bull. This is to be found in the pedigree of her grandson St. Albans (1412). Again, where the pedigree of the bull Belvedere (1706) is given in the same volume of the Herd Book, she is said to have been by Favourite, dam by Favourite, g. d. by Hubback, gr. g. d. by Snowdon's bull, — by Masterman's bull, — by Harrison's bull, — bought by Mr. Hall, of Sedgfield, of Mr. Pickering, Princess was, as we have always heard, an extraordinarily fine cow, and the late Sir H. V. Tempest, of Wynyard, in the county of Durham, who was an admirable judge of the points and excellences of the whole animal kingdom, from a racehorse or Shorthorn down to a gamecock, resolved it seems, on being her owner at any price. It was never known what he gave Mr. R. Colling for her, secrecy on that head appearing to have been part of the bargain; but it has been said to have been as much as 700 guineas. Princess and her numerous descendants were sold in 1813, after Sir Henry's death. The late Mr. J. Wood, of Kimblesworth, bought one of her daughters, Nell Gwynne, then in-calf to Wynyard, and she afterwards produced St. Albans. We believe the pedigree of St. Albans, and consequently of Princess above alluded to, to have been furnished by that gentleman, and we are sure, from our thorough knowledge of him, with the most perfect good faith. We cannot but suspect, however, that an error has crept into it, from a confusion of the pedigrees of sires with those of dams—Waistell's bull having been by Masterman's bull, Masterman's bull by the Studley bull. At this sale Angelina, the daughter of Anna Boleyn, another daughter of Princess, was reserved; and at a subsequent sale a daughter of Angelina was bought by Mr. J. Stephenson, of White House, Wolviston, a neighbouring tenant farmer. From her descended Belvedere, who became the property of Mr. T. Bates, by whom, we believe, the pedigree of Belvedere, and consequently of Princess, was furnished. We have heard Mr. Bates say, speaking of the pedigree of Princess, that such it certainly was, because her dam was own sister to Mr. R. Colling's white bull. Yet, according to the pedigree of that bull, given in the Herd Book, he would have been own brother to Princess. Who shall decide when such doctors disagree? We feel, however justified in assuming that Princess belonged to the class of those descended of cows belonging to the Collings, which had a pedigree before they obtained them, whether her first-recorded ancestress was "bought by Mr. Pickering of Mr. Hall, of Sedgfield," or was by "the Studley bull." Of whom they obtained her it is not we believe known. Nell Gwynne, Mr. J. Wood's purchase, became, as we have said, the mother of the well-known St. Albans: and Mr. Mason, of Chilton, having obtained of him St. Albans' services for some time, he became thus, as we have seen, the sire of No. 13 at the Chilton sale, the ancestress of Lord Spencer's Old Roguery, and her numerous progeny of Z's. Nell Gwynne had but one heifer-calf having descendants: this was by Layton (366). Mr. Wood sold it to Mr. Frombeck, of Blencoe, in Cumberland, who had been his pupil. By Mr. Troutbeck this heifer was christened 2nd Nell Gwynne. Of Nell Gwynne the 2nd many descendants in a right line of females have of late years appeared in the market, and not a

few have attained show-yard honours. At one time, however, a notion existed that Mr. Troutbeck had not been very select in the choice of some of his bulls.

From Angelina, the granddaughter of Princess, descended Belvedere, obtained, as we have seen, by Mr. Bates, from Mr. J. Stephenson, and to this cross with his Duchesses Mr. Bates always attributed the greatest advantages. Those who knew his worth knew also his strong prejudices, one of which was against the "alloy," and a strong suspicion exists that Lawnsleeves ought to have had a place in the pedigree of Belvedere; but a belief having existed that, according to the Herd Book pedigree, Lawnsleeves had the alloy in it, he was accidentally omitted. Some years ago the writer, when on a visit at Elmore, the well-known residence of the late George Baker, Esq., the owner of Lawnsleeves, discovered, on reference to dates, that Lawnsleeves' dam could not have been the daughter of the "alloy" George, but probably by Mr. Mason's George, who was much nearer at hand, that gentleman moreover, being well known to Mr. Baker. Had this been but sooner known the discussion need not have occurred.

Mr. J. Stephenson still has right-line descendants through females of Angelina, though he is not easily persuaded to part with them.

Those which we have mentioned were considered for many years the only right line female descendants of Princess, but recently a new family has appeared from Northamptonshire, claiming so to be, as to which we are not prepared to speak authoritatively in the negative.

THE DUCHESS FAMILY.—Mr. Bates's Duchesses they may be called, being all of them, at one time, in his possession, and being all christened by him Duchess, with a numerical distinction. They descend from the cow Duchess, bought by him at Mr. Charles Colling's sale, in 1808, and whose pedigree was then given as being by Comet, dam by Favourite, g. d. by Daisy bull, gr. g. d. by Favourite, — by Hubback, — by James Brown's red bull. We are not aware whether the cow by Mr. J. Brown's red bull was purchased or bred by him. Assuming the former to be the case, which we believe, she belongs to the class of cows having pedigree when he bought her, though of whom he did so we are also ignorant. It is generally understood that the Duchesses were not going the right way, when Mr. Bates thought him of introducing the Princess cross through Belvedere. Hearing of his existence, and of his being the property of Mr. J. Stephenson, he went to Whitehouse to have a look at him, and, as we have heard him say, the door of Belvedere's house being locked in the absence of Mr. J. Stephenson from home, he had his first inspection of him through a hole in the wall, and the bull appearing just what he wanted, he too seemed to have exclaimed Eureka! Eureka! Having ultimately succeeded, as we have said, in obtaining him from Mr. J. Stephenson, from thence dated the fame of the Duchesses. Since Mr. Bates's death they have passed into many hands.

THE FORTUNE FAMILY.—The first recorded ancestress of this family was obtained by the Collings, from Mr. Maynard, as were Old Favourite and Young Strawberry. The pedigree of Fortune is, that she was by Bolingbroke, her dam by Foljambe, g. d. by Hubback, gr. g. d. bred by Maynard. She was the dam of many celebrated animals, both male and female, namely B (45), Irishman (329), Cripple (171), Trunnell (659), St. John (572), Gaudy (p. 320), and Nell (p. 422). B (45) was the ancestor of Portia (No. 2 at the Chilton sale) who was the dam of Lady Sarah (No. 20), the highest priced cow at that sale. No. 4 at the same sale was a right line female descendant of Nell, and Nos. 35 and 51 were daughters of No. 1. There are still right line descendants of Nell, and we owe it to that most distinguished breeder in another department, Mr. Jonas Webb, to mention his name as being a possessor of such descendants.

THE DAISY FAMILY.—Of the Collings' cows from whom right line female descendants are existing to this day, but which cows have no pedigree assigned them previously to their being in the Collings' possession, we believe there are but few. There is however one well-ascertained family, which must not be omitted, namely, that of Mr. C. Colling's "Old Daisy." Her pedigree is—got by Favourite, her dam by Panel, g. d. by Hubback. She was own sister to the "Daisy Bull," of whom Mr. Bates always made especial mention when recounting the pedigree of his Duchesses, the Daisy bull being one of them, in his opinion, most-valued ancestors. Of the right line female

descendants—through females of Old Daisy, we remember to have seen two or three at Mr. Jefferson's sale, at Fulford, near York, last summer, which brought high prices, and there are some, we see, at one of the sales this month—that of the 21st.

Of the right line descendants, through females, of cows belonging to breeders of Shorthorns antecedent to the Collings, now existing, we have an instance in what may be termed

THE MILBANK FAMILY.—The Milbanks of Barningham were amongst the very oldest recorded breeders of Shorthorns. One of their cows appears to have come into the possession of Mr. Coates, and was by him named "Milbank," from which there are existing right line descendants through females at this day. At two of the sales you allude to, members of this family are to be disposed of.

THE SOCKBURN FAMILY.—Another family of this description is "the Sockburns," originally belonging to the Messrs. Hutchinson, of Sockburn, one of whom, as we have said, wrote a history of them. Either while in their possession, or as we believe subsequently, the last of the Sockburns having right line descendants through females was put to Major (397), a son of Lady, imbibing thus the "alloy." Notwithstanding his antipathy to the "alloy," Mr. Bates became the owner of one of her thus alloyed descendants—a strong proof of its merits; and from her he bred, using Belvedere, and again one of his Dukes. From this cross have descended animals of first-rate character at this day, one or more having been purchased by Colonel Towneley, and have distinguished themselves in the Show-yard.

It must not be thought that in having confined myself to the pedigrees of those families of Shorthorns which can establish right line descent through females from cows having pedigrees at the time the Collings purchased them, and from cows belonging to their predecessors as breeders, I in the least undervalue those pedigrees which are computed merely from sire. It was to establish and illustrate my arguments, that *Duchess Shorthorns of celebrity were in existence before the Collings began their career as breeders, and that there are at this day right line descendants through females of the principal cows they bred from, and from cows belonging to their predecessors, that I adopted this course.*

Though Shorthorn breeders compute the pedigrees of their cattle, as do the Arabs their horses, by their dams, either animals are in fact as much descended from the dams of their sires as from the dams of their dams; and thus in the pedigrees of Shorthorns, containing such names as Foljambe, Bolingbroke, Favourite, Comet, &c., those to whom such pedigrees belong are in fact equally descended from Old Favourite, Young Strawberry, Miss Lax, &c., as those which trace their descent from cow to cow.

I proceed now to address myself, as I have promised, to the subject of "the alloy." It originated, as we have seen, from what has been unceremoniously called O'Callaghan's polled galloway. Now, this same O'Callaghan was Colonel James O'Callaghan, of the noble house of Lismore, and a great friend of the late Duke of Cleveland, one of whose boroughs he represented for many years in the House of Commons. The Duke, as Lord Lieutenant, also made him Colonel of the Durham militia. Having pitched his tent, in the decline of life, at Heighington in that county, he there ended his days as he had lived, a very popular character. Having bought a couple of polled galloway cows, he had no difficulty in getting Mr. C. Colling, his near neighbour, to allow him to send one of them to his bull Bolingbroke. She produced a bull calf. It was a roan, in due time had horns, and showed all the other indicia of a true-bred Shorthorn. Such was "Son of Bolingbroke." Mr. C. Colling bought him and his dam of Colonel O'Callaghan, and put his cow, old Johanna, to this son of Bolingbroke. She produced a red and white bull calf, who, like his father took in all respects after the Shorthorns. He was yelet "Grandson of Bolingbroke (208)." To him Mr. C. Colling put Phoenix, daughter, as we have seen, of "Old Favourite," and she produced "Lady," as she had before done, by Bolingbroke, the bull "Favourite," the father of Comet; and also (by her own son, Favourite) Young Phoenix, the mother of Comet. Lady was the dam of Washington (671), Major (397), George (276), and Mr. Wright's Sir Charles (592), and also of Countess and Laura. At Mr. C. Colling's sale, in 1810, this alloy stock sold at very high prices—Major for 200 guineas, George for 150 guineas, Lady herself, at 14 years old, for 206 guineas; Laura, her daughter, for 210

guineas; Laura's daughter, Young Laura, at 2 years old, for 101 guineas; and Countess, the other daughter of Lady was bought of Major Roidl, of Marlon for 190 guineas. When we meet, therefore, with descendants of "Grandson of Bolingbroke," or of Major, George, or Sir Charles, such as "Western Comet" (689), Frederick (267), Koswick (453 and 1266), or of Countess or Laura, we encounter the alloy. But what do we therein encounter that is base or injurious? What is the meaning of alloy? Here we have a cross with a breed of cattle of first-rate character and quality, and polled Galloway breeders might equally say they had been alloyed by the Shorthorn cross. We are satisfied, however, that, in fact "the alloy" never took—that it was utterly and speedily thrown out—and that, as did the son of the polled Galloway by Bolingbroke, so did all his descendants adhere to the Shorthorn side of the house. I have never heard that any of them were without horns, or exhibited the least trait of the polled Galloway, except, it may be, in the analogous good qualities of that breed. I incline to think there is truth in the theory that, in crossing distinct breeds, the offspring does take exclusively at once, or very shortly, to one or other side of the house.

We appear then to have, in the instance of the alloy, an illustration of M. Malinge Nordé's ingenious theory of the difficulty of changing the type or characteristics of a long-established breed, and that this difficulty is in proportion to its purity of blood, or, in other words, to its antiquity.*

If this be true, the non-infectious of Shorthorns by the alloy affords an additional argument in favour of the ancient and indigenous character of the breed. But had the first offspring of this cross partaken equally of the bloods of its different parents, in what proportion would the Galloway blood exist in any modern Shorthorn? Seeing how early capability of procreation exists and is called into operation in that breed, and also how rapidly generations of cattle pass away, I do not believe there is an extant Shorthorn which has an appreciable particle of the Galloway blood in its veins. I must say I think this kind of crossing, or, perhaps rather attempted crossing, a mistake—a mere waste of time.

Take the case, well known to greyhound coursers, of Mr. Goodlake's bull-dog cross. Considering the position the dogs thus "alloyed" hold as to their "public performance," does any one think this cross has been injurious, or can any one from their appearance discern it? Yet I think it was a mistake.

Being of opinion, then, that the alloy has done neither good nor harm *directly*, I am not so sure that indirectly it may not have done good. Those who had it in their stock became less scrupulous on the score of pedigree, and, unlike pedigree martinets, looked less to that than to the good qualities of a bull. It may be thus, perhaps, explained how it has come to pass that many animals having in them this once dreaded bigbear, the alloy, have taken the highest places in the showyard. I do not allude more particularly to these animals, lest I should revive against them this stupid prejudice of "the alloy," and a more stupid prejudice, a more complete phantom, cannot exist. Breeders however, will understand my allusion. We maintain it then to have been established by this narration that *the Collings in general, notwithstanding what Mr. Charles Colling did in a particular instance, formed the improved Shorthorns by careful selection from the local breed, which had already obtained considerable perfection;* that such is the antiquity and indigenous character of the old-fashioned Shorthorns, such its native purity, that even should any commixture of ingredients of another kind have taken place, yet like an infusion of the same sort with the waters of father Tees, it has been speedily thrown off without affecting its perennial purity.

The owners of our native Shorthorns, therefore, may snap their fingers at the ancient myths, as to "wild cattle from Chillingham Park," and "Dutch or Holstein cattle from across the German Ocean." Those who have seen the wild cattle at Chillingham will bear me out in saying there is not a single characteristic or point of resemblance exhibited by them which is possessed by the Shorthorns, except that Shorthorns are occasionally *white*, but they are also sometimes *red*, yet no one has ever ventured on that score to point to the Devon or Sussex breeds as their original. As to the Dutch or Holstein importation, of which one used to hear so much, the writer

* See Vol. xiv. p. 214, of the Agricultural Society's Journal.

happened some years ago, is founded on a fact, tending to turn the tables on the Holsteiners. It seems, according to Anderson (in his treatise on Commerce), who quotes from Rymér's *Fœdera*, that Edward IV. allowed a favourite sister, Margaret, Duchess Dowager of Holstein, to export from this country annually, and for many years, into Holstein and the low countries, great numbers of cattle and sheep, for the purpose of improving the breeds of them in those countries. Whence is it so likely they were exported as from the ports of Hull and Newcastle across the German Ocean? And if it be true, as has been said, that some centuries after a herd of cattle was found there greatly resembling our native Short-horns, whence may it not fairly be assumed the originals came? And when, as it is said—for it rests only on tradition—some of these were brought into this country, what was this but a re-importation, what was it but that England had her own again? I remain, yours, &c.,

DUNELMENSIS.

ORIGIN OF THE DUCHESS FAMILY.

SIR,—I believe I can supply some facts respecting the origin of the first cow recorded in the Duchess pedigree, alluded to by your correspondent "Dunelmensis" in his interesting letter of the 19th, which, not being generally known, may interest your readers. Your correspondent says: "We are not aware whether the cow by Mr. J. Brown's red bull was purchased or bred by him (I imagine from the context that your correspondent here alludes to Mr. Colling). Assuming the former to be the case, which we believe, she belongs to the class of cows having pedigrees when he bought her, though of whom he did so we are also ignorant."

I have in my possession a catalogue of a sale of Shorthorns belonging to Mr. George Vail, of Troy, U. S., to which, in addition to the usual particulars, that gentleman enters into details respecting the mode in which he first acquired the originals which he imported from England. These were Duke of Wellington, roan bull, bred by F. Bates, Esq., by Short Tail (2621), dam Oxford premium cow, &c.; and Duchess, white heifer, also bred by Mr. Bates, got by Duke of Northumberland (1940), dam Nonsuch the Second, by Belvidere (1706), &c. He then appends the following interesting account of the origin of the Duchess family, which, as will be seen, purports to be given by Mr. Bates himself. Mr. Bates bases the superiority of his Shorthorn cattle upon the merits of what he terms his "Duchess tribe;" and in his communication to the publishers of his premium bull, Duke of Northumberland, he remarks, "The whole of this family of Shorthorns are alone in my possession, having purchased my original cow of this tribe of the late Charles Colling, of Ketton, near Darlington, thirty-five years ago. They had been in the possession of Mr. Colling twenty years, who purchased his original cow of the agent of the late Duke of Northumberland, and called her Duchess (which is the reason I have named the bull after that family), as they are justly entitled to be held in commemoration for having possessed a tribe of cattle which Mr. C. Colling repeatedly assured me was the best he ever had, or ever saw, and that he never was able to improve upon her, although put to his best bulls; and I have undoubted information from the best authority for saying that this tribe of Shorthorns were in the possession of the ancestors of the present Duke for two centuries; and that Sir Hugh Smytison, the grandfather of the present Duke, kept up the celebrity of this tribe of cattle by paying the utmost attention to their breeding, and that he used regularly to weigh his cattle, and the food they ate, so as to ascertain the improvement they made in proportion to the food they consumed."

Respecting the authenticity of the foregoing, I need only remark that the name of Mr. Vail, appended to the entire document from which it is extracted, appears to be a sufficient guarantee. The date of the handbill is May 14th, 1849.

The Duchess family would thus appear to have been bred with care at a period considerably antecedent to that usually assigned as the origin of the improved Shorthorns. More is known of its origin than is the case with most others, even of the most celebrated originals of the race. We also find that Mr. Colling expressed a high opinion of this family at a pe-

riod long antecedent to that of their being crossed with Belvidere. Indeed, the very considerable price which Mr. Bates paid for the Duchess which he bought at Mr. Colling's sale affords a strong presumption that she can have been no ordinary heifer. Of course, in speaking of events which occurred long before my own recollection (I am dependent upon the evidence of others). Subject to this proviso, then, I may state that I have it upon the authority of one who well knew the Duchesses in early days, that as a family they always possessed the high quality which characterises them at the present day. My informant, however, adds that the cross with Belvidere appeared to impart to them a character of majesty, strongly exemplified in the Duke of Northumberland, which now seems as peculiarly to distinguish the bulls as refinement does the cows. At all events, this, like every other important cross to which Mr. Bates resorted, has been stamped with the approval of the public, including the remarkable one with the blood of the Matchem cow. Not only have both bulls and cows of the Duchess family realised prices which, taken one with another may be termed unprecedented, but other animals have, by means of a few crosses of this blood, in spite of short pedigrees, been sold for more money than best blood of other families was apt to command. Thus, at Mr. Tanqueray's sale in 1855 three cows and a bull of the Oxford family (descendants of the Matchem cow) realised 1,100 guineas. Yet the pedigree of this family is not traced further back than Young Wynyard (2859). Is this preference for Mr. Bates' blood, and especially that of the Duchess tribe, a mere caprice on the part of the public, or is it founded on reason?

As far as I am competent to form an opinion, I certainly think the Duchess tribe possess in an eminent degree those qualities which are desirable in improved cattle. Indeed, when the buyers of the world are congregated together it will generally be found that their judgment is right. The question then arises, wherein the peculiar merit of Mr. Bates' stock consists? Mr. Bates required a Shorthorn to present a *union* of good qualities, instead of, like too many breeders, developing one or two points out of all proportion, while sacrificing others equally valuable. Beginning with the Duchess heifer, he endeavoured to establish a family every member of which should as nearly as possible approach the type of a true Shorthorn. That they possessed both symmetry and early maturity is attested by the numerous premiums which they won at the meetings of the Royal and other Agricultural Societies. The Rev. H. Berry mentions the Duchess tribe along with that of Daisy as remarkable for their milking powers. Mr. Bates, however, soon arrived at the conviction that the degree of forcing which is necessary to command success in the show-yard is highly prejudicial to a breeding herd, and he consequently discontinued the public exhibition of his stock. It is possible that the fine quality for which his herd and its descendants are remarkable may be in part owing to his judicious treatment, in keeping his stock generously without forcing it unduly. Since his death, and its consequent dispersion, its value has rather increased than otherwise, as witness the marvellous Tortworth sale, and that of Mr. Tanqueray. In public competition, too, this blood has been eminently successful, whether in conjunction with other blood, like Mr. Ambler's Grand Turk, or undiluted like Lord Feversham's Duke of Oxford. I should be sorry if it were to be imagined from what I have just written that I am so biased an admirer of the Duchess blood as to be insensible to the merits of any other. I am sure that all who are acquainted with my writings will bear witness that I have never hesitated to commend whatever strain of good blood has been brought under my notice. I hold it, indeed, to be a besetting weakness of breeders to persuade themselves that all blood is worthless except that which they themselves possess. Singularly enough, too, the more decided success a man has achieved the stronger is his temptation to follow this delusion. It is after he has attained his idea in practice that the danger besets him of being so satisfied with what he has accomplished as to imagine that further exertion is unnecessary. He is too apt to forget that the very eagerness with which he has cultivated certain favourite points has led him to payless attention to others no less essential. It is thus that deficiencies become no less stereotyped in certain strains of blood than their merits. However trying, therefore, it may be to the feelings of a breeder to resort to other blood, whoever wishes to maintain

his stock at the highest pitch of excellence must, from time to time, have recourse to a cross as far removed from his own as is compatible with purity. There is no difficulty in making a selection from the numerous families which are descended from the times of Colling and his contemporaries; and the letters of "Dunelmensis" afford much useful information to those who desire to become acquainted with the annals of those early days.

In another respect your correspondent is doing good service, viz., in stating the real facts of the case with regard to the origin of the improved Shorthorns. It is important that it should be generally known that long before the time of the breeders contemporary with Charles Colling, who have now attained world-wide celebrity, there was an excellent breed of cattle in existence in Durham and considerable districts of Yorkshire. It is important to have the authority of your correspondent in support of the fact that selection from the materials around them was the principal foundation on which the wonderful fabric of the Shorthorn race has been reared. It is satisfactory to know that they are not, as has been sometimes affirmed by parties ignorant of those districts, an artificial product patched up by the forced union of many incompatible races. That Mr. Colling did introduce into part of his stock a cross with the Galloway cow is well known to every person even moderately versed in the history of his proceedings. If there had been any doubt upon the subject it has long since been set at rest by the inquiry which the late Lord Spencer caused to be made among the papers of that eminent breeder. But although an incident like this strikes the imagination of persons not practically versed in breeding, and is admirably suited to the purposes of bookmakers who copy it from each other, to the neglect of more important matters, it is absurd to attribute to this cross the origin of the improved Shorthorns. No one can read an authentic account of the manner in which Mr. Colling introduced the foreign blood without being struck with the judiciously sparing measure in which he used it. Permanent excellence in a breed was never yet attained by the crude union of incompatible qualities. It is only to be looked for from the judicious selection of individuals characterised by those properties which we desire to perpetuate.

I am, yours, &c.,

Holly Bank, April 26, 1855. WILLOUGHBY WOOD.

THE JOYS OF HARVEST.

It has always been the custom to represent harvest as a time of joy, and hundreds of verses and volumes of prose have been written in praise of the season of the ingathering of the crops. Like many other ideals, that of harvest will hardly bear close examination. To see the yellow corn falling to the stroke of the sickle or the scythe; to meet the loaded waggon joggling slowly along with their bright freights of sheaves; to let the eye rest on the forms of the gleaners—graceful in the distance—as they stoop to pick up stray ears, deftly passing them into the hand held behind the back;—all these are pleasant sights to a man who drives along quiet country roads and lanes, with a cool breeze blowing in his face. It would be a pity to go closer, because to do so would spoil the enchantment. Closely viewed the mowers are by no means too clean. Very likely they are noisy and quarrelsome, the effect of too much beer or cider. The sun is darting burning rays upon their heads—covered, for the most part, with black-felt hats—and upon their bare red necks, until the looker-on wonders that they are not summarily attacked with sunstroke. The driver of the waggon team in the lane is hegrimmed with dust and sweat, and his poor fly-tormented horses render driving by no means a sinecure. As for the gleaners, if they are not quarrelling they are probably talking scandal in loud and coarse tones; while here and there a baby, in a ramshackle old perambulator, covered with an old umbrella perhaps, is uttering cries as exasperating as plaintive.

But the farmer—he surely must rejoice in a time when he is gathering in the bounteous fruits of a year's planning and expenditure. Alas, no! To the farmer harvest is a period always of anxiety, often of great annoyance and difficulty, and not uncommonly of bitter disappointment. The corn that looks so yellow and thick to uninitiated observer may be, to the practised eye of the farmer, blighted and scanty; what the former glowingly depicts as the gifts of a bounteous Providence, the latter may hopelessly look upon as a crop which will

not pay expenses, much less clear off that alarming overdraft at the bank. Even if the harvest is a good one, the work of getting it in is not in itself pleasant to the farmer. His men are more troublesome than they are at any other season of the year, because they feel their power at a busy time, and like to show it. They grumble about the beer, quarrel amongst themselves or with their master, get drunk perhaps, and become ill in consequence. Then there is always the fear of wind to blow out the ripe corn, or rain to damage it. In short, the worry and anxiety which afflict the husbandman in harvest are almost unceasing.

Machinery, which has robbed harvest of half its poetry, has also robbed it of half its pains. From a picturesque point of view, it was bad enough when the scythe took the place of the sickle in wheat-cutting; but the reaping-machine has reduced this department of harvest work quite below the artistic sphere. Yet the reaping-machine relieves the labourers of their hardest toil, and saves scores of lives annually. When the self-binding machines come into general use, as they soon will, and the use of stacking-machines becomes even more common than it is, the labour of harvest will be as light as that of any period of the year. Nor is the modern machinery of the harvest field and the stack yard less of a blessing to the master than it is to the man. The reaping-machine has placed the farmer in a position of comparative independence with respect to his labourers. His corn need not stand and spoil if the men are unreasonable and exorbitant. The reaping-machine will cut it, and any scratch lot of men, women, or boy can tie it. Yet there is abundant employment for all farm labourers in harvest work, and at very liberal wages too. The machine simply does work which the present number of skilled labourers is insufficient to perform in proper time, and without it land would go out of cultivation by wholesale, because harvest work would be too costly for a crop of cheap corn to bear. The stacking-machine is also a great relief to all concerned in harvest work. If the reader doubts this let him have a day stacking barley, taking his turn in pitching the loose corn from the wagon on to the stack.

The men like harvest, in spite of its pains and penalties, because it is a time of high wages, good food, and unlimited drink. Their wives and children like the season too, because they live better and get many much-needed and long-waited-for commodities. They like also the change and the gossip of the gleanings-field, if they do not actually enjoy the frequent quarrels that take place there. But the most genuine picture of the joys of harvest may be seen on a Sunday evening at the end of the harvest between five and six o'clock; and the stroller up the country lanes gets hasty glimpses of it as he passes the open doors of the cottages. Unless he has a good excuse for calling at one or two of them, however, he can hardly really see the picture without impertinence. If he enters these abodes he will see English cottage life in its most inviting aspect. The evening meal, consisting of tea, bread, butter, cheese, harvest-cake, and perhaps meat or a pie, is on the table, and round it are gathered the cottager and his family, with probably a few visitors. All are clean and well dressed, and all look happy. Sons and daughters from distant towns or the great city itself, with their wives, husbands, or sweethearts, are home for a holiday—always taken if possible in harvest. There is plenty of pleasant chat, and the meal is loitered over, as a harvest tea should be. The visitors are planning an excursion; lovers are thinking of some long promised trip by themselves, or perhaps of that cottage which they now see their way to furnish; the old people are admiring the new clothes which harvest earnings have bought for their young ones; and all are enjoying the harvest fare. Having seen this picture, the stranger who wishes to keep his faith in the joys of harvest should retire, and not loiter about till he see some of these country people in a stuffy little chapel, where the most sulphurous theology is thundered forth; and others tipping outside the beerhouses or inside the inn taprooms. The lovers of course he will not follow as they wander in loving contact down those dangerous dusky laes. Harvest fare and harvest gifts, even to these happy young couples may not prove unmixed blessings. Having seen what he had been told to look for, and nothing else, the visitor may go away with one genuine picture of the joys of harvest to store in his memory, and he will be sadly hypercritical if it occurs to him to remark that the joys of harvest are of it rather than in it.—*Horrid.*

FARM PONDS AND HOW TO UTILIZE THEM.

BY JOHN H. KEENE.

No 3.

I now proceed to give some minute particulars which I conceive are necessary to the tyro if he intends artificially spawning and breeding his fish. This artificial fecundation and rearing is only directly practicable in the case of the salmonide and perhaps perch; and indeed other fish being comparatively plentiful, breeding by hand is not very necessary, if useful, to understand as an art. In the case of the salmonide, however—the difficulties of transport being great, and the stock fish being valuable if of good breeding and size—it becomes indispensable that the would-be breeder should be able to detect the right moment, and perfectly capable of handling the parent fish without injury to them, and with credit to himself. A good agriculturist can administer a dose of physic, or deliver a difficult birth; why should he not be able to successfully manipulate the fish under his care with success?

Assuming that the proprietor has a desire to grow trout he very naturally sends to some fish culturist, such as Mr. C. C. Capel, Footsray Fishery, Kent; or Mr. Edon, Museum of Fish Culture, South Kensington; or Mr. Parnaby, Keswick, Cumberland; or Col. Goodlake, Denham Fishery, Uxbridge, either and all of which gentlemen will readily supply ova in season. Having obtained his one or two thousand ova, the next trouble is to successfully hatch them out. Here it becomes necessary to explain the apparatus used for the artificial incubation. First the indispensable requisite is a good well or spring of water. This should be arranged by periodical pumping into a cistern placed in some elevated spot, or by a natural fall, so that a gentle and constant supply can be obtained. The trough in which the eggs are deposited should be glass or slate, or well-seasoned wood—white deal is best—a few well-boiled and washed pebbles are now to be strewn along the bottom of the trough, and amongst them some small pieces of well-washed graphite or gas carbon may be placed. This is for the purpose of warding off contagion in the event of an unobserved dead egg remaining long enough to become offensive. The water should now be turned on, and I have found that a cover of wood nearly shading the entire trough is necessary because of the peculiar structure of the eye of the fish, which during the earlier life does not sensibly contract on the perception of strong light; hence pain and often death by a sort of sunstroke results to the embryo in the egg, or soon after birth.

After the water has been turned on into the trough for some few hours or days it is ready for the eggs. They are usually packed in damp moss in a wicker bottle or small box. Great care should be exercised in transferring them and in rare cases only should the fingers be used, because of their warmth, which is excessively uncomfortable to the embryo usually alive within a few hours of being born. A feather is very handy with which to distribute the ova in an open layer. The eggs ought not to touch each other, but this point is not of very great importance.

I have dwelt upon the importance of these dry details because I know from personal experience that they are excessively useful to be known and borne in mind. The ova being therefore distributed the only two precautions to be used are care and cleanliness—care that the water does not freeze nor rapidly mount up in temperature and cleanliness that no putrid eggs or other foul

matter remains in the water. After a short period—the time of incubation is from 90 to 120 days—on one fine morning you will see a tiny red speck of gelatinous matter lying *perdu* at the bottom. Take your dipping tube and try to catch it. See how it with vigorous but ungainly movement strives to escape and bury its head ostrich-like in the earth. However, you capture it and see what a curious awkward pot-bellied little rascal it is with its oily umbilical vesicle and its tiny pink pumpkin-like heart. Its eyes are brilliant and large and unfitted for much light at present. There put it back again and let it seek retirement as it desires! This is possibly the first of a wholesale advent of young trout. Perhaps as you watch you witness the mighty struggle of the pigmy when emerging from the strong egg-shell. See after ridding itself of the shell how it exultantly swims round and round rejoicing in its freedom and then falls prone. Disturb it not now, only be careful to pick out all refuse you can get hold of. The unimpregnated eggs at this period turn white and dead; out with them if you value your new-born infants.

Little by little, regulated chiefly by temperature, the umbilical vesicle becomes absorbed, and when this is completely gone the alevin roams about in search of food. Now is a critical time with the amateur and his fish. They must be fed but sparingly. They must be fenced in from any possible chance of exit or they will go most unaccountably. Altogether they are now most troublesome babies and demand immense perseverance and unceasing care.

They must be fed, and here it is as well, perhaps, to first say that it is desirable to enlarge their quarters. They may be drawn off by means of a large india-rubber tube, used as a siphon, into a pail, and so transferred without injury. Their new habitation should be roomy, but absolutely protected, and should admit of no exit unless guarded with zinc grating of small mesh. The food to be given should be boiled and grated liver, or, better still, the tiny blood worm obtainable from Mr. Edon, of South Kensington Museum. It is highly necessary that a check should be held on their feeding, or the insatiable little gourmands will, in the fulness of their joy in having found out a new source of delight, overfeed themselves and die. A little food, and often, should be adhered to, and they will prosper. They may thus be kept until large enough to seek food for themselves, which they will not fail to do, and with success, if there be anything on which they can lay their jaws.

I have ever considered it better, if practicable, to turn the young fish, directly they lose their umbilical appendage, adrift in the stream or pond and let them shift for themselves. I say practicable advisedly, because there are two considerations which must influence this operation—one is the probable amount of food natural to the water, and the other is the presence or absence of fish of prey or other enemies, such as rats, herons, kingfishers, &c. As to the first of these two the evil of insufficient food may be obviated by introducing the larvae of flies and quantities of the fresh-water squillid and the entomostraca; the only remedy of the latter evil is war to extermination. Young trout are too precious to be allowed the luxuries of enemies and all fish, flesh, or fowl likely to molest them must be ruthlessly destroyed. Eel and lampers (or "nine eyes," as they are sometimes colloquially termed) are

among the deadliest destroyers of young fish and ova. Barring these disabilities, however, the process of turning the young fish adrift to find food on their own hooks is often attended with a splendid measure of success. Trout are ready for the table at about the third or fourth year, and begin to spawn about then with precision and certainty.

After the first year or two our suppositious tyro, if he has good luck, will be possessed of a stock of rapidly progressing fry, which it is only a work of short time to develop into good useful stock fish. Probably by the third year if he feed his fish on cooked flesh chopped fine, worms, &c., &c. (which food I will describe in full presently) he will be able to take up some of one or two pounds ripe for spawning. Given such good luck and rapid growth of course it is necessary that he should avoid expense by artificially spawning his own fish. I will therefore give a plain description of the operation, which if followed carefully will enable anyone to effect it.

About November, sometimes earlier and generally later, the observant fish-culturist notices on some fine morning that the female is carefully turning the gravel over with her nose, as if seeking to bury something in it as a dog does. In such case, he with the greatest care by means of a net, takes her from the water and placing the left hand round the shoulder below the gills (leaving the gills free) gently manipulates the abdomen. If a few eggs are exuded he had best return her to the water, in a confined space, so that she may be easily re-captured, and a male fish should be netted for. The same process of manipulation will discover the ripeness or otherwise of the cock fish and if both male and female are found fit, well and good, if not they should be returned to wait a few days, the probable number of which will be determined by experience.

The actual operation is easy. The fish of either sex, but usually the male, should be taken and *without ungentle* force the ova should be exuded. Sometimes it will pass out without any pressure at all. The receptacle should be a vessel holding about half a gallon and containing some water, but not much. The ova and milt should be stirred with the hand gently together, and the ova then lifted out and placed in clean water. Of course the parents are previously replaced in the water. One male fish in full milt will impregnate the ova of several females of much larger size. The ova, if good and alive, should be of a beautiful semi-transparent pink colour, and be highly elastic and tough. To show the strength of healthy ova, I may mention that I have placed a weight of ten pounds on a salmon egg, and the egg has afterwards at its full time hatched out.

Thus the operation of artificial spawning and breeding is detailed. There are almost insuperable difficulties in the way of artificially spawning other fresh water fishes, but the ova may be sought for and vivified in the same way as that of salmon or trout. For example, the perch sheds its spawn somewhat as a frog does, in and out the weeds by the side of lake or river, and by a similar treatment to that followed after spawning in the case of trout, and described above, young "perches" may be reared and fattened, and delightful fish they are when properly attended to in this way.

The food of trout is chiefly fish and such crustacea, flies, larvae and worms as it is possible to obtain in the water. When artificially feeding trout it is best to use horse-flesh, leeches, and, above all, the *pulex gannari* or fresh water shrimp. By colonizing a stream with caddis worms at the proper season one does an incalculable service to the food-producing power of the water, and the cad bait (which is another sort of caddis) is a very desirable acquisition.

[Conclusion.]

In this, my concluding article, I will give such directions as occur to me for the practical making and stocking of a hypothetical pond. Really, this is not necessary, seeing that I have in the foregoing articles embodied or implied what I am now about to write, but lest the tyro, being necessarily inexperienced, should start to make and stock his pond, only to find in the end nothing but failures, I will, with my readers' permission, assume a case and sketch its practical consummation.

We will suppose a pond having a tolerable supply in dry weather of spring water, and an increased amount resulting from surface water. The pond, for the sake of illustration, may be imagined to be merely a cattle pond, but the proprietor is anxious to use it. Of course it is first necessary to regulate according to design the depth, area, and fish intended to be cultivated. Supposing, however, that it is fixed that the water shall occupy, say, a quarter of an acre, which possibly is an increase of its original size, amounting to quite one half, we will further assume that the soil is clay; in such case it is necessary to dredge out the soft mud until the gravel or solid earth is reached. If it be practicable it is advisable to let out all water or drain it out. A pond-head of elm stakes well puddled with clay from behind is necessary. The pond-head should be, of course, opposite to the inlet. The earth taken out may be utilised for the puddling process. Dr. Lebault, "a learned Frenchman," is quoted by Walton to the effect that the two or three rows of piles should be scorched in the fire before being driven in to form the pond-head, which is very good advice, as the carbonized ends resist for a much longer time the inroads of decay caused by the water than they otherwise would. A row of piles, such as described, should be driven round the border of the pond in any event—whether the soil be gravel or clay. If it is desirable that the cattle should still draw their water supply from the pond, a slight incline can be cut into it, paved with wood, or stone, or cement, and a part should be fenced that they may not wander into the water any further than is absolutely necessary. The excrement of cattle is not believed by fish culturists to be injurious to the *cyprinidae* or carp family. I know of a small pond at old Windsor which is opaque during the summer months, by reason of the continual presence of cows, but some splendid gold fish still increase and multiply. Purity of water is, nevertheless, to be desired, as I have before indicated, for all fishes, and especially if the owner of the hypothetical pond referred to chooses to grow the *salmonide*.

Assuming that the pond has been dug out and made; if the effluent water be deemed by reason of a natural fall of use at a distance, a leather, iron, zinc, or lead pipe may be syphon-like conducted over the pond-head, down into the centre of the water. A cylindrical box, of perforated zinc or wood, should be attached to the submerged end, so that as occasion requires a greater or less quantity of water containing possibly mud or comparatively thin sediment may be drawn off. If the fall be possible of regulation it will readily be seen that here is a latent source of power which may be used in many ways by the exercise of a little ingenuity; indeed, without ingenuity it is certain that no fish culture can succeed.

Walton advises from the author above referred to that alders and willows (or owless), be planted round the pond. This is for the purpose of furnishing shade and such insects as may drop into the water through wind and rain from the leaves. It is necessary to be borne in mind that an excess of foliage is extremely injurious, owing to the decay of the leaves as they fall in autumn. I have seen a large lake surrounded with its stately beeches, and

chestnuts and a profusion of under growth entirely depleted of fish and its waters rank and poisonous because of the sulphuretted hydrogen evolved by the decaying vegetable matter. A favourite amusement with the juveniles was provided by this gas. An old pail with a hole punched in its bottom, and a tobacco-pipe inserted, used to be inverted in the water. The tobacco-pipe was by the finger stopped, and while one of the party held the ready-made receiver perpendicular another would stir the weed immediately beneath. The gas, of course, was disengaged, and rose, displacing the water in the pail. When full the finger was released from the tobacco-pipe, and a match applied. The hydrogen instantly ignited, of course, and burnt until the pail was again empty. I mention this incident chiefly for the purpose of enforcing the desirability of being sparing with the deciduous surrounding foliage. It is extremely desirable that harbour should be provided for the fish, whatever they may be. If they are of the *salmonide*, concrete blocks, bricks, rock-work, drain-pipes, old stumps, &c., are exceedingly useful. The sweet flag is very acceptable also, and the growth of *conferra riverialis* may be promoted. If it is intended simply to cultivate coarse fish, the stones and boulders are best away, and water lilies may be planted by obtaining the roots in early spring, and attaching them with string or floss to a drain pipe, brick, or anything else that will sink, and the water crows-foot (*ranunculus aquatilis*), the olisma or water plantain, and such other weeds as are capable of control, may be imported with advantage. I say "capable of control" advisedly, because the *anacharis alsinastrum*—American weed as it is colloquially termed, is an unmitigated nuisance. It clogs the streams and ponds and is almost as impossible of extirpation as a bet-vine is from the ground. A useful plan to prevent poachers taking the fish with nets is to drive stakes in the ground into which a number of hook-nails are driven. If a stream be under cultivation it is a splendid plan to sow up and down it a quantity of ginger-beer wires in the state they come off the bottle. I will guarantee no poacher having experienced the inextricable difficulties brought about in his net by these means will attempt a second visitation if he has any respect for the instrument of his depredations.

It is even better if it can be done to run off the water from the pond or lake previously. In Prussia it is a common practice to do this once every five or seven years. The fish can then be taken out to a certainty and the laws of their progression in size and weight watched. There is to the former value of another species in this assertion also. The accumulated mud is valuable and after a few days' or weeks' exposure to the sun, wind, or frost, it may be excavated at comparatively little cost and forms a very effectual manure for poor lands. I have seen at one time some disastrous consequences ensue from an indiscriminate application of the soil of a pond's bed into which for a couple of years, it being semi-liquid, the docks in the vicinity sowed their seed, but if the water cover the soil till almost ready for excavation, the latter forms a very useful manurial adjunct, which is of some importance when the owner is far from a railway or other convenience for market purposes.

Another advantage is also to be noted. The German method, after taking out all superfluous soil from the emptied bed of the pond, is to sow ryegrass or clover on the whilom bottom of the water. In the case of ryegrass half-a-dozen crops may be cut in the course of the year if the suppositious water supply be properly regulated. The growth of the grass also favours the production of earthworms, and, therefore, several purposes of feeding results are obtained: First, when the water is turned in

and the fish again inhabit it the young stock of grass and stubble as they soften, are excellent food for certain sorts of fish, as well as being instrumental in preserving the wholesomeness of the water; secondly, the very grubs and worms secreted in the hitherto *terra firma* seek the surface and so become a prey; and thirdly, but not least, the crops before mentioned must be counted. Hence judicious water-farming, combined with land-culture cannot fail to be productive. The introduction of frogs must be carefully guarded against, for although they are good food for pike, they are destroyers of slugs, worms, and flies. Let the pond be farmed as I have directed, and cleaned periodically, and I have no fear for the result. Of course in the case of a smaller pond, where it is desired to feed the fish by hand, it is much better that the bottom should be concreted. A syphon pipe, however, such as I have described, is even then necessary to withdraw impurities, but not so necessary as in the preceding example.

And now a few concluding remarks and I have finished a not unpleasant task. In the utilization of water power, whether by using its latent force mechanically or its undeveloped resources, it is equally necessary to bear in mind that extreme care, and often extreme ingenuity, are necessary. That water is capable of infinitely more cultivation in every way I think I have shown, and especially may it be productive of increased good, wholesome food. The Chinese have appreciated the benefits of fish culture long ago; indeed, I believe Mr. Buckland was guilty some fourteen years ago of publishing in *The Illustrated London News* an account of how the Celestials were used to place fish eggs under a hen in an empty egg-shell. Certain, however, it is that the Chinese understood the art some six hundred years before Christ, for it is recorded of Kung-foo or Confucius that a brace of preserved carp were presents at his birth.

Of course, in the few articles I have recently published in *The Mark Lane Express* it is not pretended that the subject of utilisation of fish ponds has been exhausted. Far from it, indeed. There remains a great deal to be said in reference to the most practicable method of water utilisation under what may be fitly termed difficulties. The object of the articles has been to awake an interest which cannot be misplaced, and to give a general idea of the magnitude of the subject however feebly.

For observe, in not one case out of fifty, perhaps, do my suppositious cases tally with actual experience word for word. The chances are against many agriculturists having farms on which are ponds, streams, or utilisable rivulets. Nevertheless, there is a necessity on every large tract of land for drainage, and the advantages accruing to the owner or proprietor if he encourage water culture as well as that of land culture need no further enumeration. They are not obvious, because, to all intents and purposes, unknown. Nevertheless, sooner or later, aquaculture and agriculture will infallibly go hand in hand.

Englishmen are Conservative as a nation, and foolishly so when the conservation of latent resources is concerned. Yet a little while and the appreciation of the utmost resources of our land must become apparent. During the progress of these articles the Fresh Water Fisheries Bill has all but become law. New interests are, therefore, now cropping up, and new developments will infallibly succeed. The enlightened agriculturist will not hesitate in being in the front; and if my task has aroused interest in so important a subject as the culture of our native fishes I shall be more than rewarded.

BIRMINGHAM SHORTHORN SHOW AND SALE.—The annual spring sale of young bulls and other Shorthorn cattle is fixed for Wednesday and Thursday, March 5th and 6th, 1879.

L I V E S T O C K N O T E S .

Every horseman must have noticed the dogged pertinacity with which his steed is pursued at this time of the year by a rather handsome fly, somewhat wasp-like in front, but with a remarkable length of pipe-like body, which it keeps ever almost semicircularly inturbed as it sails evenly, no matter what the pace. You may gallop, it is there; you may walk, it is there, alongside, watching determinedly every chance it has of affixing itself to the poor creature's body or legs. The horse dreads and springs from its approach: its business is to deposit its eggs. In reaping the same thing occurs. If the driver alights and is smart he may hit it down as it is just settling: I saw a driver kill two so to-day—one a female, as full of roe as a salmon, the other clearly the male. They were doing their best to follow Nature's call, but they have died heirless this time. It is a species of gad-fly. Whilst darting rapidly, as they do, towards the knees and sides of the horse the female is depositing her eggs on the hair, to which they adhere by means of a glutinous fluid which surrounds them. In a few days the eggs are ready to be hatched, and the horse licking himself bursts them with his tongue, whereby a small worm escapes, and, adhering, is conveyed with the food into the stomach. There it anchors by a hook on either side its mouth, feeding on the mucus through the winter and until the end of the next spring, when it escapes in maggot shape, to bury itself in the earth, becoming chrysalis, and bursting therefrom in a few weeks in the form of a fly, to travel in its turn on this extraordinary mission. They are not considered by the authorities to do harm, nor even to give pain to the horse's stomach: they may, possibly, be scavengers of some sort, or only absorb acidity and deodorise, as burnt dry toast does for the inside of the invalid old gentleman. The most harm they do is when they affright the horse, sometimes to a dangerous degree, by their resolute attempts to affix their nursery hopes. The eggs you cannot scrape off: the only plan is to singe the hair; but with their removal comes the question whether you are not, after all, defeating some benevolent design of Nature's.

Sauntering amongst the herd the other evening I was delighted to see a young hedgehog making tracks for the fence, for cockroach hordes infest the kitchen floor, which those mailed gentlemen are good at destroying. I brought him home in my handkerchief, and he set at once about consuming some bread and milk. I hope he will work proportionately at the insect horde. It must have been his mother's milk he was reminded of, for it is a cruel libel to say that he sucks cows on occasion. He was certainly amongst mine, but he can only have been admiring them, as they were all afoot. He got a tumble into the cellar, and was found upon his back. That cannot, however, have hurt him, for naturalists record that they not only descend high walls twelve or fourteen feet down by rolling themselves into balls and taking headers, but that they steal apples by the same process. Having run their prickles into a fair specimen they pitch themselves off the tree with their burden and run off with it home on their backs. *Credit Judeas.*

The Shorthorn world is looking forward with a pleasant anticipation to the coming sales in the North. "The Holker herd is always worth seeing," an eminent breeder writes, and Mr. Wilson's is said to comprise a fine uniform collection, with a large sprinkling of very fashionable blood in it. The bull and heifer calves, for which he got a prize and com-

mendation, were fine specimens of the Wild Eyes tribe, and are to be set forth in the sale. Mr. Thornton will have a hottish week of it, including August 21st and 23rd, when he will be selling a large selection for Mr. Downing, who was recently so victorious in the showyard, and whose bulls are much appreciated in the Emerald Isle. He gets his reward for enterprise in obtaining the best he can of Booth blood, the head he aims at in his herd, a photograph of a pet specimen of which he once sent me, rather of the Fawsley type. Mr. R. Chaloner also is parting with "the bulk" of his herd. Can he be going in for the black Welsh, on which he poured the vials of his wrath at Liverpool, but which have come so eminently to the front of late? Mason blood, Bate's blood, Knightley blood topped up with Booth, the fifty lots include. I repeat my frequent counsel to the beginner, to search the catalogues diligently. He will find many cows set up for early sale whose pedigrees trace to the first volumes of the Herd Book, and there is nothing like old blood.

Again, some Celias are to be in the market at Cluny Castle, on August 27th. I hear that there is a wonderfully choice collection of the old family in Cornwall. Now if ever is the time to purchase dams for the future. I see this morning's papers give already some hope of really reviving trade. With that revival there must be a new demand for improved stock. What encouragement it should give the mind of the breeder to see the excellent average Mr. Morrison obtained for his Hampshire Down rams. Whatever material he began with he has fairly fought his way up to celebrity. His Bristol prize sheep was a marvel. Mr. Sheldon's Shropshires, again—this gentleman's name as a breeder is a guarantee for a tasteful animal—how much this speaks for real pluck and perseverance, combined with judgment and spirited outlay. What a pleasure it must be to farm so independently of grain crops nowadays, although in that respect also Brailes is to the front. His 17 rams averaged £30 13s. Mr. Morrison's 130 brought £2,000. Mr. Treadwell's Oxfordshires made the profitable return of £16 4s. 4d. per head. Go in and imitate, you youngsters coming on. You answer, "But if all do so the prices will go down, and it will be the same thing again." Ay, but all won't; you needn't fear, so don't take that despondent view, or you will do nothing. Suppose all the notes were brought in one morning, the Bank of England itself might not stand it. But no fear, they will not be all brought in. Study the law of probabilities, and stick thoughtfully to your business.

The gapes are decimating the chickens. When once the disease comes to gasping, there is little hope. Here women do not take enough of care to keep the young hatches clean and warm, and on fresh ground. It does take such a multitude of hints to produce improvement in this respect. An old doc on the floor for them to rest on will prevent the insidious disease, as it would also kennel lameness in the brood.

How much better the cattle are beginning to do upon the pastures. The grass seeds they have consumed begin to tell, as corn, upon their condition. And the flies leave them more at peace. A tar-soaked rag rubbed upon their horns affords them decided relief. It keeps the pest away; still, they like to assemble at different times of the day, whether to gossip or not one cannot tell, for how do they communicate their ideas to one another? their lowing cannot be ordinary conversation. However that may be, it will pay you to cart under the trees, where they

are used to shelter, whatever rough herbage, clippings, bush stuff, &c., can be shorn in the lanes and wild places, and along the hedge rows. They soon trample it down and it becomes a vehicle for their droppings: which can thus be spread uniformly over the fields, instead of being lodged in the one place.

By the way, I note a remark in a recent number of this paper that there was better wheat in a field where mangel had been pulled and hauled off than where sheep had been fed with swedes. It has long been taught that white turnips, smashed up and ploughed in, manure better than the same crop fed off. Seeing that four out of five parts of the air are nitrogen, and that the leafy growth is composed mainly thereof, to plough in the leaves is obviously to bury nitrogen. The mangel leaf is especially rich. Where roots have been drawn and left upon the field every shower washes old adherent manure off them and under the heap, so that their respective whereabouts get visibly dotted over the field in the ensuing corn crop. Why is it that the soil under stacks in the fields get enriched? Surely from the decay and consequently accumulated nitrogen.—*VIGIL*, Aug. 24.

NOTES FROM A CORNISH FARMER.

How varied is the climate of the British Islands! While crops have suffered from drought in Scotland and in the Eastern and Midland Counties of England during the past month, in Cornwall cereal crops have suffered greatly through excess of moisture, heavy crops, which are general, being seriously laid and rusted, rendering them expensive to harvest and indifferent in quality. The baneful effects of folding off heavy root crops on all but very light poor soils being everywhere apparent, I would advise those young men who are determined to "steal a march" on old-fashioned farmers, if they will persist in folding off root crops, to manure the land less freely. Cornish farmers employ three times as much manure per acre as farmers do where folding is generally adopted, and grow double the quantity of roots. I never knew any one continue the folding system long in Cornwall. The adage "There is never a good year of both grass and grain" is again verified. It strikes me that much labour has been wasted this summer in saving hay that might have been more profitably employed in ridding grass land of thistles—a great pest, filling the atmosphere with their winged seed. I am partial to "a living hayrick," viz., old grass, which, in order to stand the winter cold, must be grown in spring and summer—autumn-grown grass is of little value. I should observe that land is invariably laid down with mixed grasses in Cornwall, various kinds of rye and clover, and remains in grass some years. "A living hayrick," such as is here described, I find to be superior to any kind of roots for young stock, particularly sheep. I do not understand the phrase "unripe grass," which frequently appears in your columns however, and which is said by scientific men to be very injurious to young sheep. I have been accustomed to sheep for fifty years, and have invariably found that while some of a flock feeding on succulent pasture are dying from scour, that the excrement of others is quite firm, and the animals in perfect health, showing that the fault is in the stomach and not the food. Predisposing causes are followed by parasites, scour, &c. I believe the chief predisposing cause of lamb disease to be thick stocking just before weaning, when the ewe eats the best of the grass and yields but little milk for the lamb: one seldom finds sickly lambs where land is thinly stocked with sheep. Parasites frequently attach themselves to diseased animals, and cause death. Remedies, if given in time, sometimes prove efficacious, but "prevention is better than cure," and that will generally be found in keeping lambs well

and changing the pasture frequently, thereby keeping up the tone of the animal system so as to be capable of throwing off excessive moisture in food, and destroying the eggs of parasites, which unimpaired gastric juices invariably do. I occupy a rich unhealthy sheep farm, and once a week during the month of July I give each of my lambs a teaspoonful of salt saturated with turpentine, from which they derive great benefit. Professor Simmons described the state of a sheep's stomach infested with *Strongylus contortus* in your last issue, but these vermin are generally found in the lungs of lambs.

No rule can be laid down for the harvesting of cereal crops—their condition, the weather, and other circumstances vary so much. I, however, have for several years had every kind bound into sheaves and those pitched up immediately after the reaping machine, finding that to be the safest and most economical plan. Small clumps are preferable to large if the sheaves will stand; the size of the shock should therefore be regulated by the length of the sheaf—six of barley and ten of wheat or oats is my usual quantity. One great advantage in cutting barley with a machine is that less clover is gathered into the sheaf than when cut by the scythe, and it is taken off the land at the same time, a matter of great importance in wet seasons. Conical mows, containing about 200 sheaves, and commonly called Arish mows, were formerly very general in Cornwall, and when *properly made* would preserve grain for a considerable time. These mows would therefore remain clotted about the stubbles until all the corn on the farm, including rakings, was in that manner secured, when "corn carrying" would commence and be pursued day, night, wet weather and dry, amidst much bustle and jollification, until all was safe in the stack yard or mowhay.

Frequent inquiries are made about "harvest drinks" and strange compounds are sometimes recommended. For about thirty years I supplied my labourers during harvest with meat from my table and ale from my cellar *ad lib*, but for some years past I have paid them 2s. per week in addition to their wages, to find themselves meat and drink. That amount is less than it would cost me, and twice as much as it now costs some of them. When I supplied ale many of my men would consume two gallons per day each, and could not do their work with a less quantity, but they do their work better without any; there is now no quarrelling in the harvest; both men and master are benefited. I would therefore strongly recommend my brother farmers to pay their men "hard cash" and let them find drink agreeable to their own palates. Several of my men drink what they call "Herby beer," boiling water poured on a variety of bitter herbs—ivy would I should think suffice—to which is added sugar, ginger and yeast. One of my men asked me to taste his wife's brewing, a few days since; he was proud but grieved to tell me it was so strong that it had "busted" a stone jar which had been in his family upwards of fifty years. I put the liquor to my lips, which satisfied me that there was no fear that any one would rink deeply of it. I felt, however, that a small quantity might burst one's stomach, but inquiring I found that he adopted precautionary measures and took a bottle of essence of peppermint with him. Cocoa, cold tea, peppermint water, and other drinks substitute ale, but the men are in good health and "work with a will" during the fair intervals between daily *heavy rains*, which greatly impede the progress of harvest. Yet up to the *present time* these rains have been beneficial to grain crops, which suffered from intense heat a fortnight since, but dry bright weather is now much needed. Prospects are, however, gloomy, the eclipse having rendered it more unsettled than it was before, while the quicksilver is too low to expect fine weather; farmers must therefore be prompt, and "make hay while the sun shines."—T. O., August 14.

"THE NATIONAL ALLIANCE."

A Federation of County and other Friendly and Provident Societies.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—May I crave a small space in your Journal in order to state that under the above title an Association has been formed, the object of which is to "federate" or "ally together" local Societies in all parts of the country, for purposes of mutual agency, friendly counsel and co-operation.

The Chairman of the Committee is Mr. Wyndham Spencer Portal, the well known Vice-President of the Hampshire County Friendly Society. With him are associated Earl Nelson (of the Wiltshire), the Rev. J. Y. Stratton (of the Kent Friendly Society), and other gentlemen well known in the field of Friendly Society work. The temporary office of the National Alliance is at the office of the Hampshire Friendly Society, Winchester.

In order to prevent misunderstanding, I may state that at present there is no idea of the formation of a central governing body, or of interference *in any way* with the independent management of any Society. The motto of the promoters of the scheme is "Assistance," not interference.

The advantages derived by members of the great orders from the affiliation for mutual agency of their various Independent Lodges or Courts is well known. Indeed it is to this very system that their increasing popularity is mainly due.

In proof that no jealous feeling exists as to this step, I may state that the promoters of the "National Alliance" have been met in the kindest way by the leading officers of the great orders, who have not only commended the project as a highly desirable one, but have freely given their invaluable advice.

The subject is one of absolutely vital importance to local Friendly Societies. It is admitted that among these local Societies are to be found some of the very best Friendly Societies in existence. Founded as they have been in many cases by educated and far-seeing men, these Societies have for years past been the real pioneers of Friendly Society reform.

Many of them contain admirable features, worthy of imitation on a larger scale. It is well known that the late Registrar, Mr. Tidd Pratt, was of opinion that some of them might well serve as models for all others, large or small.

Yet, well constituted, admirably managed, and rich in funds as many of these Societies are, members do not flock into them as they do into larger Societies of a different type.

This is not because they are "patronized," for many of the good local Societies are no more "patronized" than are the Odd Fellows or Foresters. In many of them the benefit members are all powerful, and the local management all that could be desired.

It is partly because (to quote Sir George Young) there is an absence of "pullery" about them: they are separately too small to make an overwhelming display of numbers (a point which goes far with the average benefit member).

But the chief reason why these local Societies do not attract members in great numbers is that in these days when the workman is migratory, he fears that by joining a local Society he will be in a measure tied to locality.

In other words, to repeat what has been stated over and over again by the highest authorities: good as many of these Societies are *their local limitation is a serious*

draw'back to their success, and one which unless promptly met by some scheme of federation or association, may prove highly detrimental to them in the near future. This was the opinion of the many experts who were examined on the subject by the Friendly Societies' Commission, and the weightiest opinions to that effect may be found in the Blue Books.

The Hampshire Society has already passed a rule which will enable it to take immediate action as follows:—

Rule 30. This Society may agree with other registered Friendly Societies for mutual agency, and shall afford to the members of such Societies, if resident within the limits of this Society, the same advantages as they would in case of sickness or otherwise, be entitled to, under the rules of the Societies to which they respectively belong. The accounts of such Societies shall be adjusted quarterly.

As a first step (and preliminary to a general conference which will be held in London in the Autumn) I would respectfully suggest that a conference take place between managers of the principal local Societies in each county and that each Society be invited to pass a similar rule to that already passed by the Hampshire Society.

Among the many advantages offered by this alliance of the Societies for mutual agency are:—

1. The Societies will become more useful to and more popular with the members when the barrier of "local limitation" is practically removed, and when the member knows that he will be able to pay his contributions, and to obtain his sick pay and medical attendance wherever he may be.

2. The supervision of sick members living "out of bounds" will obviously be very valuable from a financial point of view.

3. Co-operation between the Societies will be substituted for competition, and friendly conferences cannot fail to be of mutual advantage.

As I write from Suffolk I may perhaps be permitted to instance the proposed plan of action as regards this county. A similar course will probably be adopted in other counties. It is this:—

The unmentioned Societies (with others) will be invited to join "The National Alliance" as the Suffolk Contingent.

The West Suffolk Friendly,
The Stoke and Melford Association,
The East Suffolk Hand in Hand,
The Samford Hundred Benefit Club,
Stowmarket Provident,
The Ipswich Mutual,
The Hartismere Friendly Society,
The Suffolk Provident Society,
The Suffolk County Medical Club.

These Societies would then be in a position (for agency purposes) mutually to assist each other, and to assist and be assisted by similar Societies admitted to "The National Alliance," in all parts of the United Kingdom or elsewhere.

It is our earnest hope that every one who is acquainted with the subject will appreciate the practical value of the proposed measure (especially as affecting rural districts), and will look upon it as a step, and a long one, towards the end which we all desire, *i.e.*, the settlement of the System of Friendly Assurance on a secure and permanent basis.

The subject is one of grave public importance as affecting the prosperity and security of Societies on which many thousands of working men rely for help in sickness and old age, and on this ground I venture to ask the insertion of my letter.

I am, Sir, your humble servant,
ROBERT JOHNSON.

Boyton, Woodbridge.

DEER *versus* SHEEP.

DR. D. G. F. MACDONALD writes to *The Echo*:—I have read Captain Fleming's letter in *The Echo* of the 17th inst. There is no doubt that deer forests are an important source of income to Highland proprietors, and that, looking to the annual revenue point of view, they are more profitable to the landowners than sheep walks, though a great loss to the nation. In confirmation I give the following statistics, furnished by Mr. Brown, for many years factor over the extensive estates of Colonel Farquharson, of Invercauld, Aberdeenshire.

	AREA.		RENTAL.		
	Acres.	Farms.	G	Shootings	
Arable	3,015	£1,699	—	—	
Permanent Pasture ...	2,623	2,395	—	—	
Heath	178,611	—	—	—	
Woods	9,811	—	£4,162	£6,573	
Water	717	—	—	—	
Sundries	196	75	—	—	
Total	195,603				£18,204

POPULATION.			STOCK.	
Families.	Males.	Females.	Cattle.....	Sheep ...
442	1,036	1,068	327	35,750
Total.....	2,104		Total...	36,117

Grouse and Deer Extent.	RENTS.		Annual Average Killed During 12 Years.
	1862.	1869.	
A. 43,629	£600	£975	1,005 birds and 9 stags.
B. 31,500	675	1,350	1,569 birds and 19 stags.
C. 31,396	960	1,275	{ 1,596 birds, 49 stags,
D. 39,279	1,125	1,575	{ 45 hinds, & 990 birds.
E. 6,300	900	1,398	{ 77 stags, 72 hinds, &
			{ 450 birds.
Acres.....155,204	£4,230	£6,573	

Although no value is placed opposite woods, the area is given, as of course the greater extent is included in deer-grounds. To represent a correct rental of the property, an average of £5,250 for woods, and £340 for salmon-fishing, has to be added, thus making the gross rental £23,791.

Mr. Brown gives the following memoranda:—
 Rent of arable, 2s. per acre.
 Rent of permanent pasture, 1s. per acre.
 Rent of whole property overhead, 2s. 6d. per acre.
 Sheep—Rent, 8d. per acre, and 2s. 5d. each.
 Cattle—Rent, 4s. each.
 Shooting—Rent overhead, 11d. per acre.
 Rent of grouse, 10s. 6d. per head.
 Rent of deer, £15 per stag.
 Average weight of stag, 13 stone.
 Average weight of hinds, 7 stone.
 It appears that there was one bird killed to every twenty acres, and one stag and hind to every 300 acres.

Mr. Brown then goes on to show how the proprietor stands financially with the deer and sheep, and it is of course to be understood that the ground taken up by the former is of equal value, acre per acre:—

Rent value brought by sheep:—	
1,806 acres permanent pasture, exclusive of cattle.....	£1,660
112,419 acres of heath ground, &c.	4,462

Total rent got for 35,790 sheep £6,122
 This gives 10s. per acre of rent, and to enable a comparison to be made it is necessary to arrive at the average percentage for deer-forests. Accordingly we find the 45,579 acres of strictly forest ground fetch an average rent of £2,500, or 1s. 1d. per acre, and £15 per stag under deduction of £756 of accompanying gross value—that is for 1,440 birds killed.
 There is thus given a distinct rent of 10d. for sheep, and 1s. 1d. per acre for deer forests, or a difference of 30 per cent. in favour of the latter; and the result is believed to be correct for the greater part of the North of Scotland.

Individually, then, it seems it is better for Highland land to put their mountains and glens under deer than under sheep. In the case taken as an example it would make a difference of £1,800 in the rent roll.

The extent of the deer forests in Scotland is about 1,320,000 acres, which, at 1s. 1d. gives an annual rental of £71,500
 And the same land for sheep, at 10d., would represent a rent of 55,000

Here are £16,500 of yearly revenue in favour of the proprietors, from letting portions of their estates as deer preserves. But now for the other, the national, side of the question.

According to the given averages these forests produce 8,800 stags and hinds. On the other hand, we find, taking three years as the average age of all sheep, that 156,000 Cheviots and black-faced could be reared and killed annually on the same area as that occupied by the deer forests.

SHEEP.		
156,000, 60lb. each, at 8d.....		£312,000
300,000 fleeces (deducting lambs), at 2s.....		30,000
156,000 skins, at 5s.....		39,000

DEER.		
8,800 stags and hinds, 140lb. each, at 6d. £30,800		£381,000
8,800 stags' and hinds' skins, at 2s. 6d....	1,510	
8,800 stags' and hinds' heads, averaging 12s.....	5,280	
		37,620

“Deer *versus* Sheep” then shows a gain of £16,500 annually in favour of the proprietors, and a yearly loss of £343,380 to the nation.

There is still another view of the subject, and a most important one, since I hold that land capable of producing crops is wasted when devoted merely to the production of game. It is wasted, not alone in a national point of view, but as regards the interests of the proprietors themselves.

If deer-forests yield an annual revenue of £16,500 more than sheep-runs, I ask what would be the increase of rent were the cultivable acres of these vast tracts reclaimed? Why, the £16,500 would be as *nil* in comparison, and the increase of food to the people incalculable, besides supporting a large re-sident population in comfort and plenty.

THE ENGLISH CART HORSE SOCIETY

We have received copies of the Rules and Articles of Association of this Society. The following rules relate to the publication of the Stud-Book and entries therein:—

The first volume of the Stud-Book shall contain stallions foaled previously to the 1st January, 1877, having pedigree satisfactory to the Council, and any stallion eligible for entry in the first volume which may have been omitted therefrom may be entered in the subsequent volumes.

The second and subsequent volumes of the Stud-Book may contain entries of stallions and mares having pedigrees which shall be in accordance with such conditions of entry as shall hereafter be settled by the Council.

The prices for entries in the Stud-Book are as follows:—Members: Stallions, five shillings each; mares, two shillings and sixpence each. Non-members: Stallions, ten shillings each; mares, five shillings each. But the Editing Committee shall have power, free of charge, to enter any horses not now alive if they consider such entry to the advantage of the Stud-Book.

No horse shall be entered in the Stud-Book unless bred in the United Kingdom.

The expression “Horse” includes stallion and mare.

A CHEAP PONY.—We are all familiar with learned pigs, but the following, from the *Manchester Evening News* of the 24th inst., suggests a new accomplishment, not in a pig, but in a pony:—“Pony wanted, 11 or 12 hands, suitable for collecting rents; about £6; also a trap and harness for same.—*Punch*.”

THE IRISH LAND QUESTION.

At a recent meeting of the British Association Mr. MURROUGH O'BRIEN read a paper "On the Condition of Small Farmers in Ireland and their Position with Reference to the Land Question." He deprecated the advocacy of such theories as the consolidation of farms and the reduction of the small farmer to the condition of the English labourer as unsuited to a country where the farms averaged only 30 acres, and the tenants must, therefore, feel a sense of insecurity. The Land Act, he said, had given them greater security on some estates, but not on all, nor anywhere to such an extent as to lead to much improvement. He included among the advantages of the small farm system the development and preservation of family affection, and referred to the estimate made by Dr. Hancock that in the 21 years from 1852 to 1873 the remittances from America to relatives at home amounted to £14,000,000. Those remittances had enabled some of the tenants to buy their holdings under the Irish Church Act. The wages of ordinary labourers were still very low. He had known 10d. a day, without food or any supplementary advantage, to be given, and an employer told him he had more applicants than he wanted at 1s. a day. He attributed the want of employment in a great degree to the uncertain tenure of land, and thought that the scheme recommended in 1856 by Mr. Bright was the only economical solution of the land question.

Mr. FRANCIS NOLAN read a paper on the "Creation of a Public Commission for the Purchase of Land for Resale to Tenants in Ireland." He referred to the evidence which had been given to show how little the Bright clauses had been available, and, contrasting with it the success of the provisions of the Church Act for enabling tenants to purchase their holdings, he recommended the appointment of a public Board to purchase estates from owners, with an obligation to resell within five years.

Mr. SHAW-LEFEVRE, M.P., alluded to the recommendation of the Land Committee of the House of Commons, and in reply to the objection that the effect would be to bring the State into relations with the people as landlord and tenants, said he thought it was met by the condition that the money advance should be repaid within 34 years.

Mr. W. BOTTLEY, Edinburgh, doubted the advantage of making small farmers proprietors unless they had capital to work the land.

Mr. ALBERT QUILL thought it would be disastrous to the country to make the landlords mere owners of the rent-charge.

Mr. MCKNIGHT, of Edinburgh, said the relations of landlord and tenant were far worse in Scotland than in Ireland, for in Scotland three-fourths of the land was owned by 1,700 persons, whereas in Ireland the number was 17,000.

Mr. GAMBLE, Q.C., believed that the creation of a peasant proprietor by selling to tenants who by their industry and thrift had acquired the money to purchase would be a good thing, but it would be quite different by Acts of Parliament and loans of money to force tenants, as exotics, into the position of landed proprietors. He suggested that the State, instead of selling to the tenants, should give them perpetuities at their present rent.

Mr. DAVID ROSS advocated free trade in land. This could be effected by obliging the proprietors to keep their titles clear, and then if they wanted to raise money instead of charging the land they would sell a portion of it.

Mr. B. LEECH remarked that the legal expenses of the transfer of land were already very great, and he thought they would be increased by the appointment of such a commission as that proposed.

Major LESLIE thought the great cause of the failure of the Bright clauses was the provision against alienation.

Mr. J. EDGE read a paper on "Land Tenure," and recommended that the middle-men should be enabled to purchase by compulsory sale, as English copyholders were.

Dr. HANCOCK read a voluminous paper recommending that poor people should be enabled to prove their wills cheaply and locally, in the way acted on in Scotland; that sub-sheriffs be made permanent officers; the district registries of the Probate Court consolidated with the county offices; the power of petty sessions clerks increased; and a uniform system of valuation established.

BARLEY FROM OATS.

The time of harvest is certainly an appropriate season for reviving the old notion of growing barley from oats. The stale story comes up with perennial freshness every year from one part or another of the country, and apparently the farmers are so wedded to the idea that they will not be undeceived. Stated barely, the proposition amounts to this, that by sowing oats and cutting them down and preserving them through the winter, they can be made to yield barley. The botanist protests that such a change is impossible; but, in spite of the growth of knowledge, there are not a few farmers who give the idea their countenance. It is not many years ago that a distinguished agriculturist, a member of Parliament, and a man of sterling honesty, publicly expressed his faith in the metamorphosis of oats into barley, and actually delivered himself of that opinion at the Society of Arts without a dissentient voice being raised. Ellhu Burritt and other assumed authorities are responsible for spreading the story, which, if it were true, would far out-Darwin Darwin; but those who study science were contented to aver, in spite of the evidence furnished, that some mistake had been made, and that a better conducted experiment would explode the balloon that had been floated. The Bedfordshire Field Club has taken the subject up and effectually settled the question. A committee was appointed to superintend the sowing of oats and the subsequent cutting down of the blades, and they have effectually demolished the absurd notion that oats could be transformed into barley. They sowed several parcels of oats, which, it should be observed, were found to contain barley and other seeds, and carefully superintended the cutting down of the blades, in accordance with the published directions. White oats, black Tartarian, and Friesland were respectively submitted to the treatment prescribed; and the commissioners found that oats died off in the cutting process, and most of them failed to survive through the winter. They discovered that in cutting the oats they destroyed the major portion of them, and that the barley plants sown with them passed through the ordeal comparatively unscathed. The outcome of their experiment is simply this: that when oats are sown some seeds of barley invariably get in amongst the sowing. These survive, while the oats die; and the consequence is that oats have been declared by incautious observers to produce barley. The fact appears to be that barley is more robust than oats, and, surviving the cutting down treatment, has been regarded as the produce of the oats, whereas it is simply the outcome of its own seed inadvertently sown with the oats. This subject has exercised the agricultural mind for some years, and we do not suppose that the exposure of the fallacy by the Bedfordshire Field Club will completely eradicate the erroneous opinion hitherto received; but it is a remarkable instance of the readiness with which crude and unproved ideas are often accepted by those who refuse to acknowledge the truth of the Darwinian theory.—*Echo*.

PLEURO-PNEUMONIA.

This disease is still spreading in Worcestershire, and fresh cases were reported on Aug. 23 in Oldbury. It is now a month since the first certified case of the disease occurred, but there is no doubt that the thoughtless removal of cattle prior to this had carried the pleuro to different localities. How far it may now extend it is hard to say, for there seems to have been a backwardness on the part of owners of stock in giving information to the authorities, and the first impulse has been to sell off any affected animals at once to the butcher. In one case a dairy of 15 cows has been disposed of, which it is more than probable were affected by the disease. We learn that it has lately appeared in Staffordshire as well as Worcestershire. Where information is given to the authorities the animals affected are slaughtered, and the owners are under the Act entitled to two-thirds of the value as compensation.

At a meeting of the Forfarshire Local Authority on Thursday the inspector reported that pleuro-pneumonia was raging to an alarming extent in the county. He further stated that, notwithstanding that compulsory slaughter of all animals affected with pleuro-pneumonia had now been in operation in the county for five years, the disease was more prevalent than at any time during the five years, and was as far from being stamped out as at the beginning.

MR. SCLATER-BOOTH ON SCHOOLS FOR PAUPER CHILDREN.

The President of the Local Government Board visited Ipswich on August 17th for the purpose of taking part in the opening of a home or school for pauper children, built by the Guardians of the Ipswich Union. At the luncheon, after the opening ceremony.

Mr. SCLATER BOOTH, in responding to the toast of his health as President of the Local Government Board, said the department with which he was connected had many duties imposed upon it by Parliament, and in the administration of general laws a great deal of friction must arise between those who represented the Government and the local authorities from the natural desire of the latter to manage their own affairs. But Parliament had decided that there should be supervision of a central authority, and it was always his endeavour, as President of such an authority, to make that supervision as little obnoxious and as little irksome to the feeling, to the self-respect, and to the self-reliance of the different communities as it was possible to make it. It was some half-century since the poor-law system was put into operation by Parliament, and since the original Poor-law Commissioners divided the country into various unions for the purposes of the administration of relief to the poor. Experience had proved that the greater part of the work was well done, and had justified the wisdom and skill with which the Commissioners grouped the various parishes, numbering about 15,000, into 650 poor-law unions. But as time had gone on, and as the population had increased and circumstances had altered, it had come to be felt that some of these barriers might with advantage be overlooked, and the arrangements for the relief of the poor might in some cases be improved. He had been very much struck of late with the alacrity with which this idea seemed to have taken root in the Eastern Counties. In the three counties of Norfolk, Suffolk, and Essex they had had during the last two years many indications of the feeling that some rectification of union arrangements might with advantage be put into operation. The latest instance was the building of a separate workhouse school for the Ipswich Union, which he must say had been an object greatly desired by the Local Government Board for many years past, and which he was sure would be of the greatest possible advantage to the children and ratepayers of the Ipswich Union—an advantage which he hoped would extend to the neighbouring unions of the county of Suffolk. It was no wonder that the guardians and ratepayers of this county should be of opinion that some readjustment and classification of the paupers might with advantage be effected. They were aware that a most important measure—the County Government Bill—was introduced at the commencement of the last session of Parliament, which afforded facilities for reconsidering some of the poor relief areas and some of the workhouse arrangements, so that spare workhouse accommodation might not be abolished altogether, but be so dealt with as to afford better classification of children, imbeciles, idiots, &c., for the benefit of the whole country. He hoped that idea, for the moment set aside, would fructify in another session, and that many years would not elapse before they saw a wider interest taken in poor-law management. It was an object which he had very much at heart that the poor-law system should be regarded from a wider point of view, and that the county interest should be allowed to have play within the unions, and even, he might say, larger districts composed of groups of counties. There could be little doubt that counties were now somewhat oppressed with the necessity of providing more accommodation for lunatics, but if some portion of the vacant workhouse space could be converted into asylums for those lunatics, requiring less expensive management and provision than was afforded by the county asylums, a great economy might be effected. It was not absolutely necessary that movements of this kind should depend upon Government or upon the action of Parliament. They had shown at Ipswich in a comparatively small way what might be done. When they found Boards of Guardians like the Ipswich guardians establishing a school greatly in excess of their necessities, and which obviously it would be to the advantage of others to take part in, they had the initiative so much to be desired. He need hardly enlarge in the presence of gentlemen so thoroughly

acquainted with the subject upon the vital importance of the classification of workhouse management—the separation of the able-bodied from the aged, the sexes from each other, and, what was perhaps of more importance than all, children from the adults, without which the workhouse discipline would be entirely gone and its deterrent influence reduced almost to nothing. He did not say that could be entirely effected in a workhouse. It might be completely effected in a separate school. Now upon this subject they had had in London a very considerable experience. For many years past the whole of the workhouse children in London, numbering several thousands, had been educated and maintained in schools outside the metropolis. The great advantage of this was that they received an excellent education, and were got entirely away from the evil associations of pauperising antecedents. The greater part of the children who went forth from these schools succeeded in life, and did extremely well. It was said by some, and with some degree of truth, that the education of proper children in establishments of this kind had a somewhat injurious effect in disinclining them to the real life in which they would have afterwards to take part—that they were brought up somewhat artificially in such establishments, the operations of which were conducted upon a particular scale which nothing resembled in after life. Many people were of opinion that by means of the boarding-out system or emigration these children could be more properly dealt with. The magnitude of the work, however, was too great. The boarding-out system was extremely good and applicable to a limited number of children, but seeing that the numbers exceeded 30,000 or 40,000, it was impossible to rely upon agencies of the sort indicated. The next best thing was the removal of the children from the workhouse to a separate or district school. He had mentioned the case of London, where the system was in full operation, but in the country they had been rather behindhand. He found the greatest disinclination on the part of unions to co-operate for school purposes, and as far as he remembered there were not above four or five instances of satisfactory co-operation in the kingdom—two of them being in his own part of the world. Seeing the difficulty of arranging these district schools by the voluntary agency of the guardians, he was the more impressed with the importance of the work just inaugurated. When an important union like that of Ipswich, having 100 children to be responsible for, built an excellent establishment, which provided accommodation for the children of other unions, it did an excellent work for the ratepayers of the district, and a still better work for the children, and it deserves well of the neighbouring unions. He was told that several of the unions in the locality had already signified their intention of availing themselves of the advantages of this school. He trusted other unions would follow the example. He came there not entirely to please his friends in Ipswich, but to testify his appreciation of the importance of the work to which they had set their hands, and his feeling that they deserved a public recognition from the centre of the poor-law system for the effort they had made. He was aware that for ten years there had been a great deal of correspondence between the Ipswich guardians and the Local Government Board upon workhouse management and arrangement, and it might be that during those years some friction might have occurred, and some difficulty might have arisen, and the central authority might have seemed to be over-exacting in their requirements; but, on the other hand, they had the satisfaction of knowing with what cheerful alacrity the guardians and the ratepayers of Ipswich had responded to the wishes expressed. He hoped too much had not been exacted. The building he had seen and the accommodation provided were certainly excellent, but not out of proportion to the importance of the object in view. They were a wealthy and thriving community, and desired to extirpate the plague-spot of pauperism so far as it was possible to do so by a moderate outlay, which he hoped had been spread over a number of years. He had great pleasure in congratulating them on the completion of their work. It was approached with some dislike and some reluctance no doubt by many of the guardians and ratepayers, but he felt confident that the result would prove the wisdom of the step. He asked them to drink "Success to the St. John's Boys' Home, and also to the Health of the Chairman." He had but one more word to say. The children in the schools would be taught some useful things.

FREE TRADE IN LAND.

No. IX.

Mr. Joseph Kay continues his series of letters in *The Manchester Examiner* as follows:—

I cannot too often or too strongly remind those of the public who are interested in the subject of these letters—and as they are now being regularly republished in various journals both in England and Ireland, I suppose there are many who are so interested—that the first argument brought forward against anyone who is in favour of "Free trade in land," and consequent subdivision the great estates, is almost invariably the exclamation, "Look at the state of France."

Even since you published No. VIII., a very able man, well known in the political world, called on us and entered into a discussion upon the land laws. He knew very little of the subject. He had not studied it at all. But his good strong sense had made him revolt against the system of English laws which divided the vast bulk of the land of Great Britain and Ireland among a few owners, while it deprived peasants, small farmers, most of the large farmers, and the tradesmen of the towns of any share, of anything but a very small share, in the most valuable and most coveted of all property.

Our friend inveighed bitterly against the state of things in one of the counties where he had been visiting, describing in vivid language the enormous possessions, households, wealth, and luxury of the great landowning aristocracy, some of whom were his own near kin, and describing no less powerfully the poverty and hopelessness of the peasantry and the utter impossibility of either the peasantry or the small farmers obtaining land. He said that he had not concealed from his relations the impression which this strange and sad contrast had made upon his mind upon his return to England after a long absence of many years in one of our great foreign dependencies, where he had been occupying an important official position. But the moment we began to discuss the remedy, then his mind seemed to be filled with a dread of the French system, and he began to inveigh against the impossibility of such a system working well, or producing anything but ruin.

Now, I have never been an advocate for the French system, which divides nearly all the land which a man possesses at his death among his children, and of this I shall have more to say hereafter.

But what I want to impress strongly on my readers is that it is simply ridiculous to declaim in this ignorant way against the French system. I will prove by abundance of evidence that even this extreme system is producing an ever-increasing prosperity even in France, where as yet the peasants and small farmers are almost wholly uneducated. But independently of all this, and putting this evidence aside, these cavillers are ignorant of the fact that some of the most richly cultivated countries in Europe, such as the prosperous agricultural cantons of Switzerland, the splendidly cultivated Rhine provinces of Prussia, other provinces of Germany, and the rich provinces of Holland and Belgium, have the same land laws as France, are subject to the same system of subdivision on an owner's death, are cultivated by small yeoman farmers and peasant proprietors, but that the vast difference, the great fact which makes their landowning classes so much more prosperous even than those of France, is that their farmers and peasants are well-educated, intelligent men, while the French small farmers and peasant proprietors are, owing to the selfishness and fear of former arbitrary rulers, sunk in a condition of ignorance which must be seen and studied to be believed.

As I have over and over again said, I am thoroughly opposed to the French system of land laws. It has always seemed to me that it errs as much in one direction as our laws do in the other. Our laws seek to prevent subdivision, whether it is expedient or not; the French system seeks to force subdivision, whether it is expedient or not.

But I believe that our system is infinitely more prejudicial to the yeoman and peasant classes than the French system, and that I will presently show. My belief is that the system of laws which is in force throughout the greater part of Germany and other parts of Europe is the right one. It allows

the owner to give, sell, or devise his land, or any part of it, to any one he pleases, but it does not allow him to tie it up by any instrument, so as to prevent its being sold after his death. The land is always saleable; it is always changing hands. Some estates subdivide, some increase in size; and the consequence is that, while there are a considerable number of large estates, there are vast numbers of yeomen, farmers, peasants, and market gardeners who own and cultivate their own land. If an owner cannot make his farming pay, or finds a more prosperous career open to him, or become bankrupt, or for any other reason wishes to enter into some other business, he sells to some one who has capital and enterprise and knowledge enough to make the land a profitable investment. The land is never tied up in the hands of men who have neither the capital nor the industry to cultivate it properly.

It is this system, and not the French or the English system, that I am in favour of. But, inasmuch as I am convinced that the French system of excessive subdivision is better for the yeoman farmers and the peasant than ours, and inasmuch as this system is constantly put forward as the bugbear and stumbling-block of those who would reform our land laws, I propose, first of all, and before describing what has been accomplished in Germany by free real trade in land, to explain—first, what the French system actually is; and, secondly, what this system has accomplished for the French yeoman farmers and peasants, even in spite of their extraordinary ignorance and want of education. First, then, what is this French system of land laws which is now in force in France, in the Rhine provinces, in the largest and richest of the Swiss cantons, in Holland, in Belgium, and in a great part of Italy.

The French law is this: The article 745 of the Code Napoleon provides for the equal division of property among all the children, without distinction of sex. In default of children, the succession reverts to brothers, sisters, and their children; and in default of these to other relations in the order pointed out by the code.

Provisions are made by article 756 for natural children, and by article 767 for the wife.

A landowner is not obliged to leave the *whole* of his estate to be divided thus equally, if he desires otherwise. The French law permits him, if he so wishes, to bequeath by his will, to whomsoever he may nominate, *one-fourth* of his land if he has *three* children, *one-third* if he has *two* children, and *one-half* if he has only *one* child. Or, in other words, to quote Mr. Cliffe Leslie's article in "Systems of Land Tenure in Various Countries," "The French law of succession limits the parental powers of testamentary disposition over property to a part equal to one child's share, and divides the remainder among the children equally."

Land cannot, under the French law, be tied up and made unsaleable after the owner's death. The next successors to it may sell to whomsoever they please.

No marriage settlements like those which our law allows, and which often keep an estate out of the market, and make it impossible to sell any portion of it, however expedient it may be to do so, are permitted by the French law; but the law protects the wife's marriage portion, whether such portion consists of land or money, as long as her husband lives, by stringent provisions, and after his death it becomes her own absolutely.

Secondly, let us shortly consider what effect this law has had upon the division of the land in France, and upon the size of the estates. In considering this question it must be remembered that before the great French Revolution of 1789 there were a great number of small yeoman and peasant proprietors in France over the whole face of the country.

Owing to the exactions of the nobles, and to the right which the nobles had to force the peasants to do various kinds of work upon the great estates, without any reward, and at times when their labour and carts and horses were wanted on their own land, and to the right which the law gave the nobles in many cases to force the peasants to contribute to their wealth and extravagance, the yeomen and

peasant proprietors of those days were in a condition, as Arthur Young has shown us, which was sufficient to make anyone despair of any real amelioration of their state without some great change of the whole structure of society.

The great Revolution came. The feudal system was destroyed. The oppressive rights of the nobles were swept away for ever, and the present system of land laws was established. What has been the effect?

The land in France is now chiefly occupied by small proprietors. According to the best and most recent calculations that have been made by M. de Lavergne in his "Economie Rurale de la France" (last edition), there are now 50,000 proprietors, each possessing an average of 300 hectares, 500,000 with an average of 30, and 5,000,000 with an average of three. A hectare of land is nearly equal to two acres and a half. Putting, therefore, the French measurements into nearly equivalent English values, it appears, according to M. de Lavergne, that 50,000 proprietors possess each an average of 750 acres; 500,000, 75 acres; 5,000,000, $7\frac{1}{2}$ acres.

Turning to the reports of her Majesty's representatives respecting the tenure of land in the several countries of Europe, published as lately as 1869, we find that Mr. West, reporting upon the tenure of land in France, says that landed property is thus divided: Properties averaging 600 acres, 50,000; properties averaging 60 acres, 2,500,000; properties averaging 6 acres, 5,000,000. M. de Lavergne is, however, the best and safest authority upon this subject. He is a Membre de l'Institut, and has devoted many years to the most careful examination of all questions connected with the rural economy of France, and the fourth edition of his celebrated work on this subject has only recently appeared.

But even his estimate is only an approximation to the truth. It seems very probable that among the number of the smaller proprietors many have been reckoned several times, owing to their having plots in different communes. And besides this, another fact must be borne in mind—viz., that a great portion of the land of France is devoted to the culture of the vine, for which very small properties and manual labour are peculiarly appropriate. In these districts the average size of the small properties is much less than in the agricultural districts.

But still another and much more important fact to be considered is that according to the testimony of all the best-informed writers upon this subject, and especially of Mr. Thornton in his "Plea for Peasant Proprietors"—an admirable essay on this subject, which received the special praise and approval of our great political economist, Mr. Mill, and which has now reached a second edition—that a considerable number of the small properties which are grouped under the grand total of 5,000,000 are small plots, many of them only small kitchen or market gardens, and many others only a field for a cow or a beast of burden. The owners of all these latter small portions of course do not earn their livelihood by the cultivation of these small plots only. They labour, as our peasants do, on the properties of the larger landowners for weekly wages, and Mr. Inglis, in his "Switzerland and the South of France," vol. ii. page 269, says "I am inclined to assert that, upon the whole, the French peasantry are the happiest of any country in Europe." And Mr. Thornton in his "Plea, &c.," quoting from Inglis says, "While passing through Languedoc, Inglis particularly remarked the 'very enviable situation' of the labouring class." The people appeared to be well off, and paupers were rare.

Now, deducting the proprietors who are twice reckoned the vast numbers of owners of small vineyards, and the undoubtedly great number of labourers who really earn their livelihood by working on the larger estates, and have only a garden or a field to eke out the comforts of their family, from the 5,000,000 small owners, the great probability is that the average size of the estates of the actual yeoman and peasant farmers of France is considerably above the alleged average of $7\frac{1}{2}$ acres. But even if it were not so, it seems strange to me to affirm that the owner of a farm no larger than $7\frac{1}{2}$ acres would not, by means of the industry, economy, and self-denial which are almost always characteristic of a small owner, be able to earn a comfortable maintenance for himself and family, and on far superior to any which our rural peasants are able to enjoy. Whatever theorists may say, these small owners do prosper, and are so contented with their lot, and that lot is so envied by those who do not possess land, that on

the death or removal of an owner his estate finds many bidders in the market and the price of land in France is found to rise and not to fall.

Thirdly, I will now try to show that, spite of the want of any efficient system of education in France, spite of the dense ignorance of the French peasantry, spite of the want of agricultural schools such as exist in Germany and Switzerland, the division of land in France caused by their system of land laws is promoting the contentment, happiness, and prosperity of the yeoman and peasant farming classes of France.

The first fact which strikes one in considering this part of our subject, and which seems to me to prove incontrovertibly the happy working of the French land laws even in France, and the perfect satisfaction of both larger and smaller owners with them, is this—that no matter what the system of government in France, whether limited monarchy, Imperial despotism, or republic, no Government has ventured to propose any change whatever of these laws, or to abolish or limit the system of compulsory subdivision. The just weight of of this remark will be understood if it is considered how rejoiced the Government of Louis Philippe or of Louis Napoleon would have been to have created a great territorial aristocracy, as a support for their systems of government, if it had been possible for them to have dared to propose such a scheme to the Chamber. And this is all the more striking when it is remembered by what a very small number of middle-class, well-to-do electors the Chamber of Representatives was elected during Louis Philippe's reign. But throughout his sham of constitutional government, through the struggles of the reactionary parties, the one system of laws in France which has remained unassailed and truly unassailable has been their system of land laws, so strongly are they now rooted in the cordial satisfaction, contentment, and wellbeing of the French rural classes.

But another equally remarkable fact, which shows, independently of statistics, how these laws are promoting the economy, prudence, thrifty habits, and wellbeing of the French rural classes, spite of their ignorance, is the wonderful way in which these classes have come forward and taken up a large part of the great loans of the Empire and of the immense sums raised by M. Thiers's Government to pay the frightful burdens of the war—burdens which all Europe thought would have crushed France for a long space of time. But the sums to meet these terrible demands were found to a very great extent by the small agricultural owners themselves, and the world was astounded by ascertaining that, although in 1823 Mr. McCulloch had prophesied that in "half a century it (France) would certainly be the greatest pauper warren in Europe, and, along with Ireland, have the honour of furnishing hewers of wood and drawers of water for all other countries in the world," in 1872, this same France, Mr. McCulloch's "pauper warren," was paying off with apparently the greatest ease one of the heaviest, if not the heaviest, fine that had ever been laid upon the shoulders of any nation in the world, and that the rural classes were to a very great extent, if not mainly, finding the funds by which this most extraordinary feat was accomplished; and what is equally, if not more, remarkable is that these same classes, who by this time were to have formed such a "pauper warren," are supporting with enthusiasm a Government which has been forced to raise the scale of taxation on many, if not most, of the articles of their daily life.

I hope to continue this subject of the French land laws in my next letter.

HISTORY REPEATING ITSELF. — History repeats itself, and America is having a recurrence of the disturbances at Nottingham in 1808, when the weavers initiated a crusade against labour-saving apparatuses, and demolished the beam-ender's frames. The army of tramps in the West are destroying the harvesting machines of the great farmers, and so terrorizing the population that many machines that have not been destroyed are kept securely locked up. The journeymen printers who refused to work on the Watson printing press, which superseded the old rotary elephants, have many of them died in want, and although the cabmen of London petitioned Parliament against the introduction of the umbrella, in the fifteenth century, and denounced it as the instrument of a foreign endeavour to destroy their business, gamp's still obtain.—*Britannic*.

ROYAL AGRICULTURAL SOCIETY'S TRIAL OF SHEAF-BINDERS.

Among the inscrutable designs of intelligent beings in the present world may be classed the plan of the Council or of the Stewards of the Royal Agricultural Society for conducting its momentous trial of the novelties of the time in the remote region of East Somerset. It could not have been to save the carriage of the machines from the Show; neither could it have been to economize expense in the railway journeying of judges, engineers, stewards, and other officials engaged in the business; nor could it have been for the convenience of the competitors and their staff, seeing that they hailed respectively from Liverpool, Manchester, Bedford, and London, with only one machine (and that unable to do any good in the competition) from so near a county as Gloucester. We travelled many miles through counties in which the harvesting of fine crops was in busy progress, to find the assembled sheaf-binders on a farm some two miles west of Clifton Suspension Bridge, in fields commanding lovely prospects of the Bristol Channel, with the chequered green hills of Monmouth in the distance, and the mountains of Wales looming with dim blue ridges and summits beyond. The views were fine, the air refreshing, the woods fragrant and cool; but the crops were almost as green as grass, and, in fact, a good deal of what ought to have been corn was grass. Sir Philip Miles' home farm at Abbot's Leigh is not a model of cleanliness in management; but as the place and the produce were kindly and patriotically offered to the Society for the purpose of proving the capabilities of the new machines, and not to have the farming shown up in the papers, no more need be said about it.

On arriving at the spot in the morning we found very light and short-strawed upstanding crops of oats, wheat, and barley, most of them very green, full of green stuff, and wet with the rains of Sunday. But there was one field of heavy oats, with a four or five-foot straw, very thick at bottom, laid in several directions, and ripe enough for harvesting according to the old dictum—"Cut them green, or else you'll lose the king and queen." It was obvious that no proper test was possible for settling the point whether the webs and belts and slats and prongs on the machines for clearing the platform and elevating the corn to the binding apparatus will or will not rub out an undue proportion of dead-ripe grain. Of the seven machines competing for the gold medal offered for "an efficient sheaf-binding machine, either attached to a reaper or otherwise," none were "otherwise," all being combined reapers and binders. We went down to Bristol without any predilection in favour of anybody's machine, and without bias for or against the wire or string methods of working; but from what we had seen in the showyard recently, and had read and heard, we had some expectation that the Wood machine was likely to enjoy an easy walk over the course. In this, probably, many people were similarly mistaken, not being aware of the essential improvements which have been lately introduced in the M'Cormick machine. Perhaps a thousand persons visited the field on Bank Holiday, and fewer on the Tuesday. The importance and interest attaching to the contest were manifested, however, by the character of the public thus drawn together, including the representatives of the agricultural and engineering press; and among implement makers and inventors, Mr. Walter A. Wood, Mr. M'Cormick, Mr. James Howard, Mr. J. E. Ransome, Mr. W. M. Cranston, Colonel Griffin, Mr. Burnell, Mr. Harrison, Mr. M'Gregor, Mr. Geo. Biddell, Mr. Fiske, Mr. Baker, Mr. Osborne, Mr. Saunders, Mr. Cuthbert,

and many more persons of note in the trade—and, in spite of the prevailing British nationality of the concourse, ringing cheers burst out when of the three American machines which were the favourites, M'Cormick's and Wood's machines finished their plots in style, and demonstrated in English crops before the Royal Agricultural Society's judges that sheaves can be bound with wire in a thoroughly workman-like manner, and as expeditiously as you please. In the heavy wet oats, the cutting certainly put the machines in difficulty more than did the binding.

M'Cormick's machine, entered by Waite, Burnell, Huggins and Co., took the lead from the first. It cuts a breadth of 5 feet, the cut corn falling upon a horizontal platform of endless web canvass, or as the Americans call it, "ducking," carrying ribs or slats of wood. This carries the corn towards the rear side, where it passes upward at an acute angle almost perpendicularly between two endless webs, to a height of nearly 5 feet thus rising over the main wheel, framing, and driving gear; and the stuff, delivered in a continuous stream, falls over upon a horizontal table; a binding arm placed about midway along the side of the table, advances towards the falling corn, strikes downward through it, separating a portion for a sheaf, and at the same time carrying down the upper ply of wire, so as to meet the ply of wire beneath, and thus encompass the sheaf. The arm then retreats, drawing the girdled sheaf toward the side, and in the course of this movement the wires are cut off and twisted together by a rapidly-rotating pinion below named the "whirl." The sheaf remains upon the table until the next sheaf pushes it off, with a deliberate quiet motion. Nothing can exceed the smoothness and unerring perfection of this arrangement for binding except that in very thick and grass-encumbered crops a few of the sheaves are "twinned"—that is, though properly tied, the straws entangle so that the sheaves stick together until pulled asunder by hand—which is not done on the machine, but on the ground before being picked up for shocking. The sheaves are dropped with the greatest regularity, lying in line longitudinally or in the direction of the machine's course, with the butt ends foremost; and they are some feet clear of the horse-track. The wire band is joined by a twist in two places on opposite sides of the sheaf, leaving the twisted ends sticking out for about a couple of inches. The special merit of the work was in its perfect collection of all the corn, scarcely an ear being dropped; thus absolutely the whole of the crop is bound in the sheaves, leaving nothing at all to be raked up, and perhaps not more than a handful per acre for gleaners. About 2½ lb. of No. 20 gauge annealed wire is used per acre at a cost of 1s. 3d. to 1s. 7d.; and the saving in corn from the clean collecting would seem far more than enough to pay for this, considering that the old bands are alleged to be saleable at about half-price. The labour of five or six men in manual tying is dispensed with, and that work done instead by one man driving (who devotes no attention to the binding, except occasionally to see that all is going on well, and having to stop to re-thread the needle in case of accidental breaking of the wire); while the little additional labour for the horses may perhaps necessitate changing the pair three times instead of twice in a long day's work. The cutting was not a point for consideration; for though a six-inch stubble was left on account of the profusion of big stones, the machine can cut as low as any ordinary reaping machine can do. In the greenish oats Mr. M'Cormick's machine cut and tied half an acre in 24

minutes without a single stoppage of any kind; and in the 4 feet strawed wheat it finished 1 acre and 26 perches in 50 minutes, including two stoppages, once snapping the wire. In light, very short, barley, and also in heavy laid oats, the work was equally good and satisfactory. In Walter A. Wood's machine the cut corn falls upon a web which carries it to the side, where it is elevated by belts with clips passing continuously up over an inclined board, a light frame of slats and wire-work lying upon the stream of corn, supporting it on the steep incline and preventing its being blown off. The corn falls over upon a concave table, and the binding arm, revolving upon a fixed centre, separates one portion at a time, passes round the wire, and cuts and twists it. A compressing form upon the binding arm tosses off the sheaf, passing a couple of springs which in their rebound catch the stream of untied corn and hold it from falling off with the sheaf. This, however, is one imperfection in the machine; the sheaf goes off with a jerking motion of the binding arm, and is thrown further than seems necessary, loose straws are let drop occasionally, and the wire slips out of the needle or is broken oftener than in the M'Cormick machine. The sheaves, with only one twist fastening instead of two on the band, are delivered so as to lie transversely to the path of the machine, with the ear end next the machine. In cutting the heavy crop of oats the driver dexterously used a hook fixed on the end of his whip-handle, for assisting to separate the stream of corn into sheaf bunches; and this incessant attention ought not to be required in an automatic binder. Manual attention, too, was sometimes required to clear the point of the binding arm. The half acre of light oats were well cut and bound in 33 minutes, with four breakages of wire. The plot, however, was very much shorter than M'Cormick's, and so had many more turnings. Wood's machine cut one acre twenty six perches, of wheat in 51 minutes, and had seven stoppages. In light barley it worked exceedingly well, but unluckily broke a small casting owing to the loss of a pin in the main wheel axle.

The binder of D. M. Osborne and Co. was unfortunate on the Monday in breaking a small chain wheel by which the gathering reel is driven; but on the Tuesday it cut and bound with wire very well indeed in the light barley, failing, however, in the long strawed oats. This was mainly because of the narrow end elevator; and we do not know by what untoward circumstance Osborne was prevented from sending his large machine, in which the dimensions of these parts allow six inches more room.

The dynamometer tests with the Royal Agricultural Society's skeleton horse proved that the draught of M'Cormick's machines in cutting wheat was 361 lb., of Woods' 362 lb., and of Osborne's 397 lb.—though about the latter we should suppose some mistake, judging by the apparent lightness of the machine for the horses. As M'Cormick's cut a 5 feet breadth, and Wood's 5½, the draught per inch width of cut was 6.02 lb. for M'Cormick's, and only 5.44 lb. for Wood. But no comparative test was applied to determine how much the binding apparatus adds to the power required over that needed for cutting and delivering by an ordinary reaper.

The wire-bands are firm enough; for the engineers tried snapping them by hooking a spring-balance to the band and standing upon the sheaf, and pulling upwards. The wire gave way with a pull of 80 up to 140 lb., standing most when the twist fastening was undermost, the wire being fractured near the hook. The jute yarn bands of the Johnston Harvester Company's machines stood as well; but at least fifty per cent. greater strain was found requisite to break the common straw bands tied by the labourers.

We noticed that all the machines tried bound sufficiently tight for all practical purposes.

Messrs. James and Frederick Howard having only just completed their new machine in time for the present harvest, had no opportunity of working it in various descriptions of crops before the date of the Bristol trials, and indeed it may be said to have been ordered out for trial in conformity with a rule of the Society rather than voluntarily entered for competition. Nevertheless the firm did not resort to any accidental breakages to hinder their being put to tests for which they were not prepared, and upon breaking one of the working parts on Monday a duplicate piece was telegraphed for, and arrived at the trial field on the Tuesday morning. As far as could be seen in the attempt made in the barley the binding appliances appear completely successful; the separation of the sheaf-bunch is cleverly and neatly effected, the wire is effectually prevented from slipping out of the jaw which holds it in readiness for the next sheaf, the movement of the binding arm is smooth, and the delivery of the tied sheaf is quiet, being put off by prongs arranged for the purpose. The chief cause of non-success in working was in the placing of the horizontal platform web rather too far back from the finger-bar, the consequence being that while long straw can be elevated very well the very short barley rested its butt ends upon the wood beam behind the knife bar, and was thus detained while the ear ends were moved by the web, and the cut stuff in this angular position would not run properly up the elevator. We have no doubt that all this will be rectified long before the harvest is over.

The Johnston Harvester Company's string-knotting binder made some fair work in the wheat, the jute yarn knots or double hitches being perfectly fast. Hethington's string binder could not be tried at all, owing to a breakage. King's machine, also a string binder, fastening by twisting the ends of the string and tucking them under, made an attempt in the wheat, but came to a premature stop. The invention, ingenious as it is, wants a good practical schooling in the field before the weak points can be tested and put right. But both of these string binders are at present too complicated and like clockwork for farmers' use, though it is certainly to be wished that string may be practicable in preference to wire.

The Judges awarded the Gold Medal to the M'Cormick machine, exhibited by Messrs. Waite, Burnell, Huggins, and Co., and highly commended the machine of Mr. Walter A. Wood. We believe that the universal verdict of the spectators who watched the trial was in accordance with the decision of the judges, Mr. John Coleman, Mr. J. W. Kimber, and Mr. H. Cantrell, and we no doubt concurred in by the Stewards Messrs. John Humsley, George Sanday and H. Frankish.

REAPING MACHINE TRIALS.—On August 14 a trial of self-delivery reapers and self-binders came off at Penrith. Rain having fallen all the previous night, and the crop being a heavy piece of oats, the qualities of the machines were put to a severe test. The binders of Mr. M'Cormick and Mr. Walter A. Wood were tested by the dynamometer, the draught being 3 cwt. 3 qrs. and 3 cwt. 1 qr. respectively. The prize was awarded to the machine of the heavier draught—Mr. M'Cormick's. In the class for self-delivery reapers eight machines competed. The "Simplex" of Messrs. Howard, Bedford, took a draught of 1 cwt. 3 qrs. only, and after a second trial with the well-known American machine of Walter A. Wood was awarded the first prize in its class. The three next to it in point of draught were W. Anson Wood, Pickley, Sims, and Co., and W. A. Wood, whose machines all took a draught of 2 cwt. 1 qr., the heaviest being Messrs. Brigham's "Excelsior," 3 cwt.

THE DISTRESS AMONG THE LABOURING CLASSES IN AMERICA.

The New York Correspondent of *The Daily News* writes:—

The severest blow that has yet fallen on the Communist agitators in this country is the permission to come before a Committee of Congress and state their grievances. Turn over a flat stone that has long lain undisturbed in your garden and a multitude of hideous beings will start into frantic activity. So, no sooner have aggrieved working men been invited to make public their wrongs and suggest their remedies than a hundred wild schemes are brought to light, and agitators who have heretofore been working in the dark are exposed to full view. People do not like the exhibition, and it will surely have an effect in discrediting a great many demagogues and visionaries who have been getting aid and countenance from those who ought to know better.

The Committee, of which Mr. Abram S. Hewitt is chairman, was appointed to inquire into the causes of distress among the labouring classes. It met last week in New York, and invited working men to come forward and state their case. The room was promptly filled, and it has been filled every day. But the genuine working man has hardly been seen. A queer lot of representatives have offered to speak for him—professed Socialists, reconstructors of the universe, rampant atheists, here and there an officer of a trades' union. Delegates from the Stonecutters' Union demanded that contractors in their trade should be compelled by law to have all the stone cut on the spot where the building was to be put up, and not at the quarry; and when it was asked if a man might not have work done where it could be done cheapest, they said—no; a contractor should not be allowed to bid unless he could afford to pay decent wages. But the trouble with their craft here, as they confessed, was that one-third of the hands are idle. They proposed to remedy that difficulty by driving the work by law out of the country into the town, and forbidding anybody to work more than eight hours a day. The stonecutters were followed by a jeweller named McGregor, who declared himself to be "a Socialist, not a Communist," and called for "no patchwork reform, but a comprehensive scheme." Mr. McGregor wished Congress to limit production, to reduce the hours of labour till every man had work, to seize all the machinery in the country and work it for the benefit of the people, and above all to collect "statistics"—which he was very much surprised to learn that the Government has been doing regularly ever since 1790. He said he did not believe in God, and there was no religious liberty in this country any way; and he added, in a whisper, "The working man is a smouldering volcano; I tell you there is danger." A delegate from the Socialistic Labour Reform party, who is a cigar-maker when he is not occupied as a statesman, demanded on behalf of the party that Government should take all industries whatever under its control, and conduct them on the co-operative plan. All private capital must be abolished, and no machinery must remain in private hands.

A. A. Carsey was a representative of the Greenback party in politics, and a "bricklayer and editor" in private life. He thought there could be no prosperity without an inflation of prices, and he wished Government to give every man a farm, and stock it for him, and to make work by opening a vast system of public improvements, and to print money enough to pay for them. He demanded also a slight extension of the protective system—to wit, he would absolutely prohibit the importation of any manufactured goods of which the raw material was produced here, as well as the exportation of any raw material which America could manufacture. Like other speakers, he threatened insurrection and blood unless Congress gave relief "immediately." A Mr. Osborne Ward, who followed Carsey, is a man of some education and literary ability. He proposed to establish a new religion called Communistic Christianity, and to have no other; he would tax all the churches; he would have none but "social money;" he would make all the world come into a sort of co-operative society modelled on the Shaker community. George W. Maddox, who is a leader in nearly all the labour agitations here, called for the issue of a thousand millions of paper money annually for public improvements, and had no doubt

that these issues would be worth par, or even 200 per cent., all over Europe. He demanded also that the power of making laws should be taken away from Congress and given to the people. "You," said he, addressing the Committee, "are my servants—are the people's servants. The great mistake we made was to set you up as our superiors." There was a lady of advanced ideas who "represented twenty millions of slaves," and thought the quickest cure for the distress of the labouring classes was female suffrage. There was a roaring red hot Irishman who "represented his own sovereign self," and proposed to solve everything by repealing the patent laws. There was a tailor who wanted to "abolish Congress, the Executive, and the Judiciary, and let the people take care of themselves." A strong feeling was manifested against "European Shylocks." There seemed to be a widespread notion that it was a great shame, a wrong to the working man, to allow foreigners to lend money to Americans. There was an earnest demand for the repeal of all laws intended to secure the repayment of loans, as well as for a general abolition of interest—interest of course being always referred to as "blood-money" or usury. Steamships, Chinese cheap labour, and railroads were also denounced as the causes of great suffering; and it was proposed that the steamships should be taxed "for the benefit of labour," and the railroads made free to all and supported by the Government. One orator wished Congress to lend every working man 5,000 dollars; and another thought the world would roll on all right if the United States Government would issue to every inhabitant just 58 dollars—neither more nor less.

It is noticeable that nearly all these agitators had a firm faith in unlimited paper money, and a great objection to the payment of any debts. One and all they looked upon capital as their natural enemy which must be taxed, crushed, appropriated, or otherwise assailed by the general Government. One and all they demanded a centralised Government—most of them said a strong centralised Government—and they entertained a hearty contempt for any sort of constitutional limitations. They freely admitted that there was an excessive supply of labour in nearly all trades, but not one asked that other avenues of employment should be found for this excess, or that additional markets should be opened for American products; they required instead that production should be artificially checked, or that Government should make work—for each man the kind he preferred to do. And nobody was willing to work hard. For the first two or three days the cry was for eight hours' work, but latterly they reduced it to six.

The real working men, as I have said, were not heard at these sittings. Mr. Hewitt called for them, but they did not come. They have nothing to say to Congress; they have no crzy theories to propound, no special demands to make; they do not know what they want; but they are poor, and disheartened with the long years of waiting, and they are ready to believe what these wild agitators tell them, that the cause of their misery is legislation shaped for the protection of the rich and against the interests of the poor. They leave others to guess at the cause of hard times, and to invent the remedies; and I cannot but think it fortunate that just now when demagogues, like California Kearney and political schemers like General Butler are rushing to each other's arms, this remarkable exhibition should be made of the leaders whom the working classes have been half inclined to follow. Their projects seem a great deal more ridiculous when they are hung up in public for observation and comparison than probably they do in the seclusion of their society meetings.

RULE, BRITANNIA!—Here is the latest sample of our naval supremacy: "A YACHT RUN DOWN.—The *Lively*, one of Her Majesty's despatch-boats, had landed a party at East Cowes yesterday afternoon, and as she was 'slewing' round to go away she carried away the cutwater and other parts of the Royal yacht *Alberta*. The *Lively* proceeded on her course, and had not gone far when she came into collision with a yacht that was 'for hire or sale,' and immediately sank her, a portion of her mast only remaining above water. This occurred in broad daylight. Fortunately no person was on board at the time. The *Lively* then ran aground." After dealing such lively destruction suicide seems quite the correct thing. But should not such despatch-boats be called "Happy Despatch" boats?—*Punch*.

WHAT I SAW OF CANADA IN 1873

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Although five years in these days of change is a long time to refer back to, still the following brief description of what I saw in Canada in 1873 may not be quite uninteresting to those who have thoughts of going to that country. For some years I had had, like many others at that time, a great longing to go to Canada, a desire from time to time fed by glowing letters in *The Field*, in which 10-bore doubles and ducks seemed to me to be by far the most important item. My father, who farmed near a tidal harbour, was an easy-going man, and he let me spend most of my time in wild-fowl shooting and fishing; hence my tastes. However, I am not saying much of Canada. In the spring of '73 I made up my mind to have a good look at the country, and judge for myself, before I finally determined to settle; so on the 30th of April I left the Victoria Docks, and, after a very stormy passage of twenty days, arrived at Quebec. I started the same afternoon in the steamer "Quebec" to the city of Montreal, spending one day there, but not going far into the country, Ontario being my destination. I left the next morning in the steamer "Passport," passing through the "Thousand Islands," and arrived safely at Toronto.

The passage from Quebec was truly splendid, and almost seemed worth making the journey for. I went from Toronto to London by train, the track being mostly through old cleared land, on which, however, many stumps were to be seen. I stayed at London three weeks, and travelled many miles round that place, carrying a note-book with me, and jotting down here and there what I thought of interest. I found that the land round London was very good, a rich light loam growing good crops, the value of agricultural land being about £20 per acre, or more, near the town. Day labourers were earning a dollar a day, with board, working from 7 a.m. till 6 p.m. Many of the men lodged themselves. The working classes round London then seemed prosperous, having meat three times a day. I am not referring to men with large families.

Having looked well round London, and parts of the shores of Lake Eric, I started for Orillia, a small town about ninety miles north of Toronto. Travelling in Canada is very pleasant. Large roomy cars, with plenty of light and iced water from filters gratis when you felt thirsty (note that, London, Brighton, and South Coast Railway Company). Travelling costs 1½d. per mile first class (not Pullman's cars). The country around Orillia is very beautiful. There are lovely lakes, with trees to the water's edge. But the soil was poor and rocky, many rocks being left in the fields as large as a waggon-wheel. I found out all about the much-talked-of free grants of 160 acres, as I was not then very far from them. I did not hear any one say any good of them. On looking at my note-book I see entered, "Oh! no Canadians think of going up there; they know better. Only Norwegians and Swedes stop there; and if Englishmen do go up they are soon back again. The black flies and mosquitoes are something horrible, and the roads ditto." Most of the working-classes had nice little frame-houses and gardens of their own, and seemed contented, working many of them at saw-mills. After spending a week here I left for Queenville, a village near the town of Newmarket. Here I stayed ten weeks at a hotel kept by an Englishman. I was boarded and lodged for three dollars per week (12s. 6d.), with a glass of beer for dinner, and meat *ad lib.* three times a day. I made friends with a lot of people; but I must not enter into shooting excursions and picnics. I went to a Bee one afternoon, when sixty of us put up a barn and shed by six o'clock.

Reapers and mowers were extensively used, and many is the sheaf I have tied, though I did not hire out. I was once offered three dollars a day for binding, which was a good offer. The working classes here, too, were prosperous, one dollar being the ordinary farm-man's pay, with board. Land was good here, and worth from £8 to about £15 per acre. I saw, near Queenville, some splendid land, once bought for one dollar an acre, growing splendid wheat and oats. As they cleared it, it drained itself, as there was a good fall to the Lake. Some of the grass was ten feet high.

I must now draw this to a close, as I am afraid I have written too long. I had found out all that I wanted to know, viz., that where I should have liked to have settled the land was too dear for me, and I felt myself too dear for the cheap-land sections and the free grants; also that the charm of swinging the axe on your own land in the far West wonderfully alters when you find it is very hard work.

Before coming home, which I did in September, I visited most of the principal towns and Niagara Falls. I only saw one beggar in all my travels, and he was a cripple.

I am, Sir, &c.,

A. E. W.

THE WHEAT CROP, 1878.

Mr. James Caird writes to *The Times*, under date Aug. 20: The agricultural returns for Great Britain issued this evening show a small increase over last year in wheat and barley, and a decrease in oats. The extent under wheat has increased by 50,000 acres. Estimating Ireland at a little over last year, the total area of wheat in the United Kingdom will be nearly 3,400,000 acres.

From the general appearance of the crop on the ground, and trials by thrashing already made in various parts of the country, there can be no doubt that the wheat crop now being harvested is a full average, and the best we have had for some years. The increased average and the additional produce will afford us 11,500,000 qrs. for consumption. We shall require 13,000,000 qrs. more, for which we must look to our foreign commerce and to our Indian and Colonial supplies.

During the past harvest year, now drawing to a close, we shall have imported upwards of 15,000,000 qrs. of wheat and flour. This is the largest import we have ever received; it has kept the price reasonably moderate, and the surplus has come mainly from the United States. The latest advices from that quarter show that, while the great crop of 1877 is not yet exhausted, the prospect of the present crop is much less satisfactory. In France the wheat crop is believed to be below an average, so that we are likely to meet our nearest neighbours in the market as buyers rather than sellers. There is thus much probability of the present price being maintained, and, perhaps, slightly increased, but there will be no scarcity.

Up to this date there is less disease in the potato crop than there has been for several years at the same time. The extent of this important food crop is much the same as last year.

Young cattle and lambs have both increased, the first by 40,500 and the last by 263,000. There is thus already a satisfactory beginning made in the desirable object of extending our home breeds of live stock, and the abundant supply of provender, hay, and green crops this season all favour that object which recent legislation is intended to promote.

BOSSIN CABBAGE LETTUCE.—*The Gardener's Chronicle* says this variety was found to stand best among the large number of varieties tried at Chiswick this season, and it was singular to note that while heads of all other varieties had bolted off to seed the Bossin was as unbroken as when it was hearting in. It is not a tiding-looking lettuce, as when it was large and coarse looking, with brownish tinted and fringed leaves. Of its standing qualities there can be no doubt, and after all it is the inside of a lettuce that salad eaters are most concerned about.

THE HABITS OF ANTS.

At a meeting of the British Association Sir John Lubbock read a paper on "The Habits of Ants." He stated that he had been for some years watching the habits of ants, and had kept under observation about thirty species. Though living in captivity they were in good health, and he had in one nest a queen which had lived with him since 1874. He could confirm the statements which had been made with respect to the architectural skill of ants, their attention to their young, their remarkable organisation, their possession of domestic animals, and even the institution of slavery. He had also watched several other insects which lived in association with them, of which M. André calculated that there were 583 species. In some cases the association was accidental, in others it was because the nests afforded shelter to other insects, and there were also some uncomfortable companions which attached themselves to ants and could not be got rid of. The common house ant was to be found sometimes in association with other ants, but the cases were exceptional, and he had never seen any instance. A nearly allied species, however, the sanguinea, was sometimes found in association with others, generally the usca. In such cases the nest belonged to the sanguinea. The queen and the young were of that species, and the fuscas were slaves, though free to come and go, as there was no fugitive slave law, and they seemed to be quite reconciled to their position. They assisted in the household duties, and in foraging for provisions. They kept the aphides in corn, and derived a considerable share of their sustenance from them. In the winter, when they were of no use, they were still tended with great care, until the spring, when they became again useful, an instance of prudence and forethought unexampled in the animal kingdom. There was one species which took no part whatever in the duties of the household, and would even starve in the midst of plenty if the food were not put into their mouths. He had confirmed Huber's remarkable experiments on this point, and had kept some alive and in health for months by allowing them a slave for an hour a day to feed and clean them. To test their intelligence he suspended some honey about half an inch over the nest, which could only be reached by a paper bridge ten feet long. He then made a small heap of earth by which they could reach it. They soon swarmed over the earth and began to eat, but when he removed some of the earth it never occurred to them to heap it up again, though they tried to stretch up to the honey, and they went round by the bridge. He made a similar experiment by placing honey which could only be reached by crossing a chasm over which he had laid as a bridge a bit of straw. He slightly moved the bridge, and they tried in vain to stretch over, but never thought of putting the straw back, which they could easily have done. Every one knew that if an ant or bee found a store of honey others would soon collect about it; but very little intelligence was implied if the ants and bees only accompanied their friends. The case was different if they could describe the locality and send their friends to it. They did not, however, appear to be able to communicate as much as that to their friends. If a fuscas nest were disturbed and one of them found a place of concealment, she was anxious that her friends should come to it. She went up to one of them and took it by the mandible. The second ant rolled herself up into a ball, and was carried over her shoulder to the place. The second ant then went to a third, and the process was repeated. He put an ant which had been without food for some days to honey, and saw that after feeding she was on her way to the nest when she met some friends, whom she fed, and then returned alone to the honey. On her way back again she met some other friends, whom she fed, and then five of them went back with her to the honey. In due course they, no doubt, brought others. He believed they were able to distinguish between a large and a small quantity. To test this, he put some of the *Lasius Niger* species into a small store, and others into a large one, and having watched for 50 hours found that the ants with the small quantity brought 82 friends to share it, and the ants with the large store brought 257. To try whether they could send their friends to a store, he put an ant (*Niger*) to some honey, which he placed near her nest. She fed, returned to the nest, and came out with ten friends. He took her up, however, and put her into the honey, and her friends then wandered about, and then returned to the nest. It was hard

to say whether there were differences of character in ants of the same species, as they behaved differently under different conditions; but there were great differences of character and habits between those of different species, putting aside the slave-making species, which he thought would find it impossible to compete with the self-dependent and freer species. These communities even showed curious analogies to the earlier stages of human progress. There were the hunting, the pastoral, and even the agricultural ants. The first lived chiefly by the chase, and hunted alone. Their battles were single combats like those described by the ancient poets. The second were a higher type of social life. They demonstrated certain species of aphides like flocks and herds. They were immense and acted in concert. He thought they would probably exterminate the first type, just as the white man exterminated the savages. Of the agricultural class—the harvest ants—he would not speak, as there were none in this country. When he first began to keep ants he isolated the nests by water, but it was necessary to change that often, and observing that the hairs on the stems of flowers prevented the ants from climbing them, he had since used ferns. One of the most surprising points connected with ants was that while there was one nest they never appeared to quarrel, all others, even of the same species, being treated as strangers and enemies. There was no mistaking the treatment. If an ant (*fusca*) wanted to carry away a friend to a place of security she took her by the mandible and her friend rolled herself into a ball, but an enemy is seized by the leg or an antenna. He confirmed the experiments of Huber as to their being able to recognise their friends, even after a long absence, or rather their acquaintances, for although he saw that they attacked and killed their enemies he could not find any trace of warm affection for their friends. He tested this by taking some out of a nest and suspending them in a bottle covered with muslin. Those in the nest took no notice of them, but when strangers were put in they were indignant and never stopped until they cut through the muslin and attacked them. He marked some ants in a nest with paint and found that their friends removed it, but a stranger going into the nest was restless and got out as quickly as possible. It would be interesting to know how they recognised their friends. It might be by smell or some sign or by actual recognition. In order to try whether they could recognise them when insensible he first used chloroform, but that practically killed them, and he then made them intoxicated. He did so by putting them into whisky, not whisky into them, for they were too sensible to take it even on week days. He tried an experiment with 25 friends and 30 strangers. The sober ants coming out of the nests and finding the intoxicated ants lying helpless on their backs in ludicrous attitudes, proceeded to take them up and carry them off. Of the 25 they brought 20 into the nest, where, probably, they soon slept off the effects. The other five they dropped into the moat of water which then surrounded the nest. Why they did so he could not tell. Perhaps they fell into the hands of stern totalitars. As to the 30 strangers, 25 were thrown into the moat and the other two were taken no notice of. He took some pupae out of a nest, and on putting them back after some months, found that they were received as friends, while some which were put into a different nest were attacked. It was generally stated that all the eggs in a nest of ants or bees were laid by queens. That was not strictly so, for some were laid by workers, though the cases were exceptional. He had some nests in which there were no queens, and yet there were eggs in them, but the eggs laid by workers always produced males. He had made some experiments to test the senses of ants. He found that they were capable of distinguishing between different colours, and avoided violet. Their sense of smell was also delicate, but he had seen no proof that they were capable of hearing, and he had proved by an experiment, which he described, that they were not capable of communicating with each other by sound. There were 30 species of ants in these countries, and 700 in other countries, and there were many interesting problems to be solved in relation to them.

Sir WALTER ELLIOTT asked how ants communicated with each other, and mentioned that on one occasion in India when making a preparation of a spider an ant approached and attempted to carry off the specimen. He drove it away, and then five others came, and having occasion to leave the room he found on his return that the specimen was gone.

LARGE *versus* SMALL FARMS.

"A *General* Lincolnshire Labourer" writes as follows to *The Lincoln Gazette* :—

This is a question of great importance, and much may be said on both sides of it. Much, indeed, has been said, and will be said again, and yet there is not much likelihood that a position on which all can agree will be reached. All the arguments in the world will not carry conviction to all minds that large farms are better for the community than small holdings, and *vice versa*. "What then," it may be asked, "is the use of discussing the matter?" The reply is simple, namely, that in all probability the greatest advantages result when both large and small farms are represented in a district or country. It appears from a question submitted to Mr. Seely, at Lincoln last week, that Mr. Sheppard believes that small farms conduce more to the welfare of a nation than large ones. The question, as reported in your columns, was "whether Belgium is not a country of small farms, and if so, whether it did not produce more than England, which was said to be one of large farms?" Mr. Seely was unable to answer the question; still, it is one that should not be left unnoticed, especially as erroneous opinions appear to prevail as to the condition of the small land holders in the small but populous and thrifty nation referred to. Having more than once visited Belgium and traversed several districts both by "road and rail," I am driven to the conclusion that in no part where small holdings prevail does the land produce anything like so much food as does land in Lincolnshire, where large farms predominate; and I am still more strongly of opinion that the small farmers of Belgium do not as a class enjoy equal comforts with the thrifty farm labourers of our own county. Let any impartial observer travel, for instance, by road, from Brussels to Waterloo, a distance of some twelve miles. On the right (the left is woodland) may be seen a fair example of Belgian agriculture. It cannot be said the fences are in bad order, because there are none, and, consequently, scarcely any live stock is to be seen on the "farms." If the visit occurs during the summer, say in June, July, or August, no Englishman can fail being struck with the poverty-stricken appearance of the country, and not less so with the drudgery to which the female portion of the population is submitted. Half-clad women appear to do most of the work. They fill manure carts—if the ramshackle vehicles are worthy of the name—they plough with the poorest of nags and the rudest of implements, they harvest the corn, what bit there is, and secure the potato crops, and all the while have a careworn, hungry appearance, very different from the active, healthy, sprightly look of the wives of steady Lincolnshire labourers. The land, in fact, is not half farmed, and certainly does not, and cannot, under the present system of management, yield anything like the produce that is obtained from the land, say, between Lincoln and Stamford. Let any one travel along the two roads alluded to—I mean the road between Brussels and Waterloo—and along the road between the two Lincolnshire towns named, and he will never again quote Belgium as a land of Goshen, nor the small holdings system as a pattern for Lincolnshire landlords to adopt. It has been said that the appearance of the children of a village or district constitutes a tolerably good index of the condition of the locality. If the children are plump and rosy, well clad, and, especially, well shod, we may take it for granted that their parents are tolerably "well off," but if, on the contrary, the "poor bairns" are dirty, ragged, wan, and shoeless, we may conclude that their homes are in a state to evoke pity rather than envy. Now, judging Belgium by this test, let the visitor on the way from the beautiful city named to the historic field of which every Briton is proud, examine as he passes through it the only village in his route, and he will find what I am glad to say he cannot find equalled in any Lincolnshire village—an apparent infantile destitution. The fact is, the women in this district of Belgium appear to work, and the children to beg. "But where are the men?" does some one ask? I give the same reply that was given to me—given not once, but ten times over, by as many different people, who may be described as educated and well-to-do Belgians—namely, "They have gone to the towns, to act as commissioners, guides to strangers, to pick up a few francs, otherwise they would not be able to live at all." I have only to add that I am neither an English

landlord nor a large tenant farmer. I can, I think, examine fairly and disinterestedly, and I earnestly long to see the peasantry of England prosperous and contented, for the best of all reasons, that I was once one of them. I have walked out and home eight miles a day for twelve shillings a week, and even then I believe my lot was not harder, if as hard, than many of the "small holders" in the oft-cited but, I think, not yet well understood Belgian paradise of which Mr. Sheppard appears to think so highly.

FARMERS AND SOCIALISTS IN AMERICA.—Until recently it has been the general belief that the great number of farm-owners in this country would form an effectual barrier against any assault upon rights of property. But it has come to pass that many farmers have adopted ideas essentially communistic in two respects. A very large number of them desire repudiation of local or national indebtedness. A large number, also, want inflation of the currency, in order to secure higher nominal prices for land or produce. The fact that enormous sales of breadstuffs abroad are effected only because the prices here are low, and that the farmers themselves would be the chief sufferers if inflation should so raise prices as to check exports, does not have weight with them. Neither do they rightly estimate the enormous losses of a community which result from repudiation of its debts. These farmers think only of immediate gains—lighter taxes and higher prices—and they find themselves in unnatural alliance with socialists who are as hostile to ownership of land as to ownership of bonds, and whose real purpose is to destroy the savings of all who have accumulated property, and to place on a level in rewards the shiftless spendthrift and the most thrifty and enterprising accumulator of wealth.—*New York Tribune*.

OUR CONSUMPTION OF FOREIGN FOOD.—Official returns show in detail the increase in the last ten years in our consumption of various imported articles of food. The consumption of foreign and colonial wheat and wheat flour (the imports, less the exports) increased from 140lb. per head of population of the United Kingdom in 1867 to 203lb. per head in 1877. This last quantity is unusually large, but it is to be noted that it is now seven years since it was (in 1871) below 160lb. per head. The consumption of raw sugar has risen from 10lb. per head in 1867 to 54lb. in 1877, and of refined sugar from 3lb. to 11lb.; of tea, from 3'68lb. to 4'52lb.; of eggs, from 13 to 22 in number; of potatoes, from 5lb. in 1867 to nearly 27lb. in 1877; and though this was exceptionally large the quantity has never fallen below 13lb. per head since 1871. The import of rice has risen from 6lb. per head in 1867 to 13lb. in 1877; of bacon and ham, from 2lb. to 8lb.; of butter, from 4lb. to 5lb.; of cheese, from 3lb. to 5lb.; of tobacco, from 1'35lb. to 1'49lb.; of wine, from 0'45 gallons to 0'53 gallons. The consumption of British malt rose from 1'67 bushel in 1867 to 1'92 bushel in 1877; of imported spirits, from 0'28 gallons to 0'52 gallons, and of British spirits from 0'71 gallons to 0'91 gallons, showing an increase in the consumption of spirits from 0'99 gallons per head in 1867 to 1'23 gallons in 1877, this last quantity being less than in either of the three next preceding years. Coffee shows a decline from 1'04lb. per head in 1867 to 0'96lb. in 1877.—*Times*.

TACKLING A SPIRIT.—The latest story of the American Socialists is as follows:—A sceptical fellow obtained admission to a seance the other day, whereas Daniel Webster habitually materialised, walking from a cabinet across the room and looking as he had looked in life, but making no sound of footsteps. This base-minded man tossed a number of tacks on the floor; and as they had very large heads they, of course, fell point upwards. The consequence was that when Dan came out of the cabinet and began to walk across the room he suddenly paused, and, lifting one foot, applied his hand to the sole thereof. Upon taking another step he suddenly drew up again, and, in a low voice, ejaculated, "Ugh!" Shortly after this he lost his balance and sat down on the floor, immediately became very profane, wriggled painfully on his seat, jumped up with an exclamation not to be found in his own dictionary, and retreated into the cabinet greatly disgusted with the matter. Not so the sceptic, who quietly remarked that it was a proof of the truthfulness of the line that "Fools rush in where angels fear to tread."

THE HABITS, FOOD, AND USES OF THE EARTH-WORM.

(From *Hardriek's Science-Gossip*.)

If there is a creature of tolerably large size which one would be disposed at first sight to place lower than most others in the scale of creation it is the common lob-worm. To an unobserving eye a very simple organism without any particular head or tail, and possessing only a slightly rough and bristly body of tubular form, composed of contractile rings—from which the class it belongs to is called *annelidae*—it is regarded by most people as a rather ugly, but harmless, wriggling thing, slimy and disagreeable to touch, unsightly to look at, and about as destitute of interest as anything that lives and moves and has an independent existence. But all this is founded on a false estimate and the false estimate is, as usual, founded on ignorance. The lob-worm may almost be called a clever and intelligent creature; very shy indeed of letting its mode of action be seen, but showing by certain results, which readily come under our observation, that it has instinct which fall very little short of reasoning and design. And yet this creature has “no eyes, nor any other organs of special sense that are known.”*

There are difficulties in ascertaining the habits of the lob-worm, first, from its timidity and watchfulness, next, from its rarely appearing on the surface except at night, thirdly, from its operations being conducted almost entirely under ground. It is immediately conscious of the tread of an approaching foot, or of the least tremor of the earth, such as is caused by digging or any garden-work. In these cases it acts in two apparently opposite ways. If a stick or a spade be thrust deep into rich garden-soil, in which large lob-worms generally abound, and move to and fro, several of them will crawl out of their holes, even at the distance of a yard, and wriggle about on the surface. In this way the extraordinary elasticity of the creature may be seen. It can stretch itself out to more than twice its natural length, and its power of locomotion consists in its turnings and twistings, its grasp of the earth by its short stiff bristles, and by forming its head into a kind of hook or anchor, and then dragging its body towards it. But if, walking gently, and towards evening, you chance to see a worm partly out of its hole, it will immediately retire into it. Blackbirds and thrushes may be watched, pulling long writhing worms out of a grass-plot, and devouring them; but if you walk across the same grass you will not find a single one. The reason is that the light hop of the bird does not warn the worm of its approach; the bird sees just the head protruding, and by a dexterous clip and jerk he extracts the delicate morsel, and bolts it whole—alive and kicking.

The lob-worm has a singular habit of filling up the entrance of its hole with fallen leaves, bits of stick or straw feathers, or any small and light objects—it is rather fond of bits of string—that it finds near. If it cannot get these, it piles up a little hillock of pebbles or small bits of lime, cinder, &c. Why it does this it is not easy to make out. Possibly it is to allow the passage of air into the hole, and yet to prevent the intrusion of insects, such as beetles, or ants, which would give it as much trouble and annoyance as a ferret gives to a rabbit in its burrow. For if it were solely for purposes of food, which fallen leaves or seeds of trees might be, and apparently are, the worm would not draw in such indigestible delicacies as string or feathers. Perhaps they pull in anything that they find soft and yielding, and make trial of its edible qualities at their leisure. Whatever be the reason, the holes are carefully stopped up in the way I have described. This seems, indeed, rather stupid; because a knowing bird may regard the tufts upon worm-holes as so many points of attack; but this is the habit of the creature, and as I once, and once only, caught a lob-worm actually at work, I shall describe what I saw, which I thought extremely curious.

My attention was directed to the fact that if the small heaps of pebbles were cleared away from a worm-hole they

* Huxley.

† In Mr. Taylor's “Half-hours in the Green Lane,” a slug (*Testacella halictoides*) is described as “the terror of the common earth-worm” (p. 211).

were sure to be replaced next morning. Suspecting they worked only at night, I went late one summer evening, after a shower of rain, to a bed in the garden which was very full of earth-worm. Walking up to it on tip-toe, and with extreme care (for I was well aware that if it felt the footstep two or three yards off it would retire into the hole), I was lucky enough to see one very big worm with its body half out of the hole. I then stood for some time perfectly still, and watched it as it reached out its elastic head to a small pebble, and by a clever jerk, or possibly, by its slimy moisture adhering to it, it drew the pebble to its hole and left it close to the edge. Thus it took another and another, and now I was able to explain what I had often noticed that every pebble within a circle of about six inches was moved away and piled up over the hole. The worm took the circle, elongating its body, and moving east or west and to every point of the compass, so to say, till not a pebble was left within its reach. This I saw, and the reader may believe that it is a strictly accurate account, though it may seem to credit the creature with more intelligence than it has any right to possess.

I believe the same may be seen by anyone who will take a lantern into the garden late on a summer's night, for they can hardly be conscious of light; even of this, indeed, I have sometimes entertained a doubt, though I cannot explain it in an eyeless creature. Certain it is on gently uncovering a pot of earth containing a lob-worm, and bringing a candle to examine it, when it happens to be above ground, the creature will almost always immediately disappear.

But the feat which I saw performed is nothing to what I am going to describe. I found on a gravel path in my garden and on the grass-plot adjoining a number of worm-holes, all stopped up with the long narrow leaves of the weeping willow, which had fallen in the late autumn, and had been placed erect in small bunches. On examining separately a number of these leaves (of which each hole contained on the average about twenty though many of them had more), I found, to my surprise, that every leaf had the stalk-end uppermost, and the other end rolled together into a kind of plug so as to fill up the hole. Very rarely indeed, perhaps in one or two out of a hundred leaves, the creature had made a mistake, and put the stalk-end downwards. But in these few leaves the end was quite entire, whereas the leafplugs in general seemed to have been nibbled or partly eaten at the ends within the holes. Evidently the stalk-ends were too rough, and the worm had the extraordinary intelligence, blind as of course it is, to find out by the touch the right and the wrong end, and to make use of each leaf accordingly.

The mouth-end (so to call it) of a lob-worm has many analogies to an elephant's trunk. It can curl it and twist it, make it blunt or sharp, curved or hooked, as it pleases; and it is evident that an acute sense of feeling resides in it. Therefore, recklessly to chop worms in half with a spade, on the plea that they do not feel, or to impale them on fish-hooks, is cruel, even though we take old Walton's advice and perform the operation “tenderly.”

Worms feed by a kind of suction, as well as by digesting fibre; they pass earth through their long tubular stomachs, and eject it on the surface in those little hillocks which we call worm-casts, and so much disfigure our closely-mown lawns, till we flatten them down with the garden roller. But these worm-casts perform more than one very important function.—*Prof. Paley, M.A.*

STATISTICS OF HORSES.—According to *The Journal des Débats*, the number of horses in the principal countries of Europe is as follows:—Russia, 21,570,000; Germany, 3,352,000; Great Britain, 2,355,000; Hungary, 2,179,000; Austria, 1,367,000; and Turkey, 1,000,000. According to the same authority there are 9,504,000 horses in the United States; 4,000,000 in the Argentine Republic; 2,624,000 in Canada; and 1,600,000 in Uruguay.

A GENTLE “LILY!”—A young girl named Lily Nicholson was brought before Colonel Haworth Booth, at Malton, recently, charged with setting a straw stack on fire at Mr. Kirk's farm, Setterington. The whole stack, nearly 20 tons, was consumed, and other stacks and farm buildings were in great danger, but the Malton fire brigade prevented the fire spreading. The prisoner said she did it because her mistress, who is Mr. Kirk's hind's wife, fogged her. She first tried to fire a hay stack, but failed.

TENANCY *versus* PROPRIETORSHIP.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—As you kindly gave the letters on "Irish Waste Land Reclamation" and on "Irish Landlords and Tenants," would you permit me to say a few words as to a Small Proprietor, not confining myself to "peasant proprietors," but to those of 20, 40, 50, 100, and 200 acres, who, as "yeomen" and "statesmen," have almost disappeared in England, and who in Ireland have been swallowed up by the great estates?

There is one manor in Fermanagh—Newportan—containing several thousand acres. A century ago the Right Hon. Thos. Connolly, Speaker in the Irish House of Commons, gave to over 700 tenants of 25 to 50 acres leases renewable for ever at 2s. 6d. per acre, Irish. At present there are not 50 on the manor, being all bought up by the neighbouring landlords. Now this, with similar instances all over Ireland, and the decrease of the Cumberland "statesmen" and English "yeomen" are stubborn facts.

What can be the cause of this but that land being a luxury and giving status to its owners in the United Kingdom makes the price too high, and that a tenant would be better off paying a fair rent for his land, which will return 10 per cent. on the capital expended, than in buying it, which takes away all his capital, and for which the returns in England and Scotland would be only 2½ to 3, and in Ireland 4½ to 5 per cent?

If we can establish a small proprietary in Ireland it will be only on the improvable waste lands which can be reclaimed by State loans through the Board of Works, repayable principal and interest in 22 years at 6½ per cent., or in 35 years at 5 per cent.

The Grampians, 700 to 900 feet high, in Aberdeen, with a bad climate on lands reclaimed from bog, heather, and swamps, produce such crops of oats, turaiips, mangels, potatoes, hay, and grass, that the prize cattle of the world are reared and fattened there, and that *one-seventh* of the cattle at the Christmas Show in London comes from that country—a lesson to Irish landowners and graziers to reclaim their waste lands. The curse of Ireland is 10 millions of acres being in grass, giving no employment: while 9 millions ought to be cultivated.

In the United States, where the landowner even of 17,000 and 35,000 acres, is at the bottom of the social scale, land giving no status, but where the great hotel keeper, banker, and the store keeper are at the top of the wheel it is different. I have met owners of 35,000 acres down to 10,000 acres in Illinois, who, being invited by me to dinner begged that none of the merchants, &c., would be asked to meet them. The produce of the holder of 35,000 acres during the Crimean war brought, in beef and pork, 72,000 dollars, or £14,000 sterling, and yet this great landlord wore boots never cleaned, and attended to and drove his own cattle. At this time (1854 or 1855) a Springfield paper had an advertisement from the farmers (landowners) not to stop at the American Hotel. The hotel-keeper put in a counter one, that these farmers turned into bed with their boots on, and that the cost of washing the blankets and sheets exceeded their bill at the hotel.

A farmer holding land at fair rents in the United Kingdom has more comfort than the proprietor of 10,000, 20,000, or 35,000 acres, and can live better.

Yours, &c.,

W. K.

FOREIGN CATTLE.—The Markets Committee of the Corporation of London recently presented a report to the Court of Common Council asking for authority to expend a large sum of money in the execution of works required at the

Foreign Cattle Market, Deptford. A careful inspection of the market showed that further works were now absolutely necessary, their estimated cost being somewhat under £7,000. The works consisted of drainage, road repairs, and making new roads. In a previous report the committee had urged the desirability of avoiding, if possible, any increase of the loan account, which then stood at £255,000, carrying with it a yearly interest of £10,775, and, at their suggestion, the £3,000 then expended in works was charged upon current account; indeed, it seemed to them that the business done should be the justification for the outlay. In this spirit they had been guided to their then conclusions, and as a considerable increase was shown in the trade and receipts for the past year, and nothing at the present time indicated a falling off they felt, first, that the works mentioned had become an absolute necessity; and, secondly, that the proposed outlay—viz., £7,000—might with propriety be charged, as on a previous occasion, upon the ordinary receipts of the market. The committee therefore recommended that they be authorised to expend the sum of £7,000 in the execution of the works required, and to draw for the same on the current account of the market. The Common Council approved the arrangement. The number of animals in the market on Monday was as follows:—Beasts, 1,306; calves, 248; sheep, 8,871; pigs, 496.—*Times*.

THE NEW LAW OF WEIGHTS AND MEASURES.

—On Friday the important Act to consolidate the law relating to weights and measures was issued. On the Act coming into force on the 1st January there is to be a uniformity of weights and measures in the United Kingdom. The statute extends to 86 sections and several schedules, and repeals a number of Acts and portions of other statutes. The Act is divided into five parts, and the latter two relate to Scotland and Ireland. The imperial standards of weights and measures deposited in the Standards Department of the Board of Trade are to continue to be the standards, and all articles, with special exceptions, to be sold according to the same; offenders as to unjust weights and measures to be liable to a penalty not exceeding £5 for a first offence and £10 for a second offence. "Every weight, except where the small size of the weight renders it impracticable, shall have the denomination of such weight stamped on the top or side thereof in legible figures and letters." The Board of Trade are to have all powers and perform all duties as to weights and measures, the "local authorities" in every county and borough to provide local standards, and each "local authority" to appoint inspectors of weights and measures, and all expenses to be paid out of the local rates. Orders in Council may be made to carry out the Act. In a table the metric equivalents of imperial weights and measures are given. Penalties are set forth for infringements of the provisions, and the Act, with the schedules, will require consideration before the time of its operation. As it is a consolidation of the law the other Acts specified will be repealed.

—LAND TRANSFER IN BABYLON.—Mr. W. St. C. Boscawen has discovered among the contract tablets in the British Museum two documents of great interest to geographers. Attached to two terra-cotta tablets containing deeds of sale of estates near Babylon, Mr. Boscawen found two neatly-drawn plans of the estates in question, the first of these relating to the sales of some land which took place towards the latter end of the reign of Nebuchadnezzar. It represents an estate of about eight-and-a-half acres in area, and bounded on the northern side by the canal of the goddess Banituo. The names of the owners of all the adjacent lands are given, and the greatest care is taken in giving the dimensions of these plots of land. The whole is divided into three pairs of parallelograms and check dimensions are taken to test the accuracy of the work. A semi-circular portion on the east side is most carefully measured, both radius and circumference being given. The second plan is unfortunately in a mutilated condition, but the remaining portions show the same care and neatness as is found in the perfect one. The deed of sale in his second document is written on the reverse of the tablet and is dated in the reign of Darius Hystaspes. The value of these documents as bases by which to fix both the lunar and area measures in use in Babylonia is very great. Both these documents form portions of the now well-known series of the hijbi tablets. Mr. Boscawen hopes shortly to publish these documents, accompanied by facsimiles of the plans and translations of the deeds relating to them.—*Athenaeum*.

FIXITY OF TENURE.

At the last quarterly meeting of the Carmarthenshire Farmers's Club Capt. T. Parry Horsman, of Pibwrwen, read a paper on the above subject

He said:—When I last had the pleasure of introducing a subject for discussion before you, that which I selected was the planting of trees in exposed situations, to afford shelter to stock and crop. The suggestions which I then made, that the tenant should in certain cases plant and that at the expiration of a certain time he should receive a moiety of the value of the timber, could never be carried out, unless the tenant had a lease. This has naturally suggested to my mind the fact that not only in the case alluded to, but in other cases, many improvements upon a farm which are quite necessary for its perfect development cannot be carried out by the tenant unless he has a certainty of reaping the benefit of his improvements. Some gentlemen present may think that all permanent improvements should be carried out by the landlord, but whether these gentlemen are right or wrong, the fact remains that the majority of landlords do not make these improvements upon such a scale as the necessity of the case requires. Very many landlords have the will but not the means to carry out on a large scale such improvements. I am quite aware that owners for life of settled and entailed estates can obtain money for the purpose of draining, and such like permanent improvements from her Majesty's "Enclosure Commissioners," but the fund is a limited one, and the companies formed to carry out the principles of the Act have also been formed for the purpose of self-employment. Therefore, I think, any landlord who carries out his improvements by means of borrowing money from one of these companies will find that the expenses and costs of procuring the loan will be a heavy addition to the general expenses incurred. Notwithstanding, I believe these companies have been of service to the country, as permanent improvements upon landed estates pay a higher percentage than can be acquired with the same amount of money in any other way (that is of course, if they are judiciously undertaken and judiciously carried out). Some gentlemen here may think that the Agricultural Holdings Act of 1875, which came into operation on the 14th of February, 1876, will meet all the requirements of the case; but as the majority of landlords contract themselves out of the jurisdiction of the Act, in all such cases the Act is merely a dead letter. It is true that there are persons of opinion that it is dangerous to interfere with the free liberty of contract, and that such an interference is in opposition to the love of liberty which is supposed to animate the breast of every Briton; that it would be extremely unfair and in opposition to this sense of liberty experienced by the British subject, that in exercising the right of forming a contract to let lands he should feel the influence of a government measure which would compel him to do justice to those who took the lands. Many landlords have a very natural fear that tenants upon leaving their holdings will exaggerate the amount of their expenditure; that permanent improvements may be injudiciously planned and carried out, that land of a peaty or mossy description may be drained, the nature of such land (in consequence of the pipes being soon filled up) requiring retraining in the course of a few years, and the expenditure under the head of 3rd class improvements may more particularly be liable to exaggeration. All this may of course lead to expensive litigation, and there are elements contained in this enumeration which may be fairly presumed to be the possible causes of an injustice to the landlord. This you may put down fairly as an injustice which may possibly occur: whereas if the tenant had laid out money judiciously under either of the headings of 1st, 2nd or 3rd class improvements, and upon leaving his farm has no compensation, that may be considered an absolute injustice. The old proverb, "Of two evils choose the less," may be of use to us here. I think that it would be wiser to prefer the evil, which is only possible, to that which is certain. There is, however, a way out of this difficulty, and that is, if landlords and tenants would accept as a wise doctrine one that would benefit both parties, the adoption of the system of granting leases for 21 years. If this system became general

it would do away with any reasonable hardship which the tenant farmer may now complain of. As soon as he has a lease he has naturally a greater interest in his farm, and the improvements which he makes during the earlier period of his lease, he will have the opportunity of reaping with certainty. Clauses regulating the rotation of crops and the mode of husbandry to be followed would, of course, be introduced into the lease which would prevent the tenant destroying the improvements during the last years of his tenancy, which he had made during the earlier. As an illustration of my arguments, I may mention the case of a Welsh estate of some 4,500 acres, which formed part of a still larger one, and was managed in the usual way, neither better nor worse. The proprietor sold this 4,500 acres, and in many cases the tenants purchased their farms. Well! what is the consequence? Why, gentlemen, you have only to visit that district, and those who might do so and who had been previously acquainted with the estate would hardly think it possible that such a change could take place in about four years. The face of the country in which the estate lies is perfectly changed. Instead of bad farming and general untidiness, you may now see new or improved houses and buildings and the very tenants who many persons would have argued were unable to carry out any extensive system of improvements upon their farms have shown the energy and disposition, as well as the capability, of improving them. It is true you will say that these farms were purchased, and that I am arguing from cases which are not parallel, but to my knowledge many of the tenants who purchased their farms did so with borrowed money, and although they are nominal owners of the soil, still they pay a heavier rent than ever, by way of interest on mortgages. Some of the farms were purchased by others than tenants; one to my knowledge was so purchased and let on lease for 21 years. I find that the tenant has adopted a system of farming quite equal to his neighbour who had purchased his farm, although his new landlord has raised his rent. But the security of a lease gave him confidence, and with a judicious outlay of his capital his farm is cheaper to him than it was to his predecessor. Last year I visited Canada and the State of New York. I found that in Canada, particularly in the province of Ontario, there was a peculiar system of letting land; the tenant, instead of paying a fixed rent in coin, paid to the owner of the land half the annual produce. This is almost the only system known in that province of letting land, and I was told upon the authority of the late Minister of Agriculture that such farms were generally neglected, inasmuch as the tenant had no certainty of remaining upon the land; therefore his only object was to get as much out of it as he could, and then, to use an American expression, "to pull up stakes." You may depend upon it that human nature is very much the same in Wales as it is found to be in the French and English provinces of the Dominion of Canada. The ancient system exemplified in the Seigneries of the Province of Quebec having been found to have impeded the progress of the colony, they were in a great measure abolished, the Canadian Government paying indemnification to the Seigneurs. And now, why did this system impede the progress of the colony?—simply because of the want of fixity of tenure. After the abolition the land fell into hands that had the power and the will to improve them; and now you may travel through hundreds of miles of cultivated lands—lands that now yield maize, wheat, barley, hops and potatoes, which was formerly little better than a waste. Gentlemen, you must not suppose that I would wish this country to adopt such a measure as the Irish Land Act, or that I desire that the tenants should participate in the ownership of the soil. All I wish for is that the tenant should be placed in such a position that he could safely improve the land to his own advantage; and to the advantage of the landlord, as well as to the advantage of the country at large. As to the Irish Land Act, I sincerely believe that there never was a more injudicious measure, inasmuch as a tenant being removed, or leaving his farm, would obtain compensation without expenditure of money or labour. It, in fact, acknowledges the right of the tenant to participate in the ownership of the soil. Perhaps the only apology for such an

Act is the fact that the land in Ireland was originally vested in tribes, and the Irish people, notwithstanding the space of time which has elapsed since the period of tribal possession, still cling to the idea that the land is the property of the occupiers. Now, we have in England and Wales no such historical claim to land, and this is, I think, most fortunate for us, as nothing can be more injurious to the tenant farmer in Wales than that a system should be introduced by which supposing he entered a farm a large portion of his capital would be expended in paying the outgoing tenant—not for improvements to the land, but as a compensation for an imaginary claim. For my own part, I think it would be far better that landlords should grant and tenants take their farms for terms of years than to trust to the provisions of the Agricultural Holdings Act for England, inasmuch as the country generally would be well farmed and the capital of incoming tenants would not be curtailed; at the same time the outgoing tenant having had a lease had also opportunity of recouping himself, and if his improvements were successful, supposing from ill health, or from any other cause, he was obliged to give up his occupation as a farmer, he would with the consent of the landlord be in a position to sub-let the farm at a greater rental. Thus the capital of the incoming tenant would not be lessened, and yet the outgoing tenant would receive compensation. It is not my intention to dwell longer upon this most interesting subject—a subject that must be of the greatest possible interest to us all, from whatever point of view we look upon it. I am anxious, as no doubt all present are, to hear the opinions of the members of the Carmarthen-shire Farmers' Club, many of whom have had more experience than I have had. There is one anecdote, however, which I wish to relate as an illustration of my idea as to the advantage of having a lease. A friend of mine, a tenant farmer, in course of conversation with me upon this subject, told me that he did not require a lease, inasmuch as he had so good a landlord that his word was as good as any lease. I quite agreed with him so far as the excellent character of his landlord went, but suggested the fact that circumstances might arise which might prevent his landlord's carrying out his just and amiable ideas. A short time ago, say four years since the conversation in question took place, my friend received notice that the farm was to be sold, and he was obliged to find another farm. He told me that he still had no ill-feeling towards his late landlord, as the sale was a necessity that his opinion of him had not altered, but that he had changed his views as to the desirability or otherwise of fixity of tenure. Gentlemen, I will not say one word more than to thank you for the kind attention you have given me.

A long and interesting discussion ensued, in the course of which a general opinion in favour of long leases was expressed, the Agricultural Holdings Act being as generally condemned as useless. Fixed conditions as to courses of cropping, as recommended by Capt. Horsman, were objected to by some of the speakers, who thought that such stipulations need only to the last three years of the lease. Two of those who joined in the discussion declared that they had such trust in their landlords that they did not wish for leases, a remark which in one case provoked the inquiry, "Will he (the landlord) live for ever?" Others objected to 21 years as too long a term, and stated their preference for shorter leases with compensation for permanent improvements.

CELERY FOR MILCH COWS.—A writer in the Australian paper states that in many districts the leaves of celery are highly esteemed as food for milch cows, and are often preferred to red clover. The cows are said to eat them most greedily, and to yield on this food a far sweeter and richer milk than on any other. Sometimes the leaves are cut up small, scalded with hot water, and given as a mash mixed with bran, and sometimes they are fed whole in their natural state along with the other ordinary food.

ANECDOTE OF THE PRESENT POPE.—When he was Nuncio at Brussels he was invited to a dinner-party whereat a certain free-thinking Marquis undertook to gibe and annoy him. Finally, at dessert, offering, with much ostentation, to the young prelate a snuff-box with upon the lid a Venus very, very low in the neck, Bishop Pecci examined it critically, saying, "Remarkably handsome woman, indeed," and handed it back with the remark, "Your wife, of course."

REVIEW OF THE CATTLE TRADE DURING THE PAST MONTH.

The cattle trade has shown no special feature during the month. Supplies have been about the average, both in point of number and condition. The show of English stock was tolerably good. The Midland and Home Counties are sending forward fair supplies of full average quality, but from Scotland and Ireland scarcely anything has been received. On the foreign side a large supply has been shown. Liberal imports have come from America, and besides there have been fair receipts from Denmark and Spain, in addition to Swedish. The American stock is not making so much now as at this time last year, but the general value of meat does not appear to have been affected by these fresh receipts. At Deptford there has been a fairly numerous supply of Toning and Dutch stock. As regards trade quietness mostly prevailed, and at times there was depression, but the final prices showed steadiness. The best English breeds made 5s. 10d. to 6s., and the American 5s. 4d. to 5s. 6d. per 8lb.

The Sheep market, although generally quiet, has not been devoid of firmness. Supplies were tolerably good. There was a fair amount of steadiness in quotations, and the best Downs and Half-breeds made 6s. 8d. to 6s. 10d. per 8 lbs. at the last. A few American Sheep were offered.

The Lamb season may now be considered closed, and the price during the month has varied from 7s. to 8s. per 8lb.

Calves and Pigs were quiet but steady.

The imports of cattle during the month thus compare with the last two years:—

	1876.	1877.	1878.
Beasts	13,951	11,308	8,481
Sheep and Lambs	62,572	77,331	62,207
Calves	2,178	4,142	2,798
Pigs	1,212	3,980	5,654

From our own grazing districts the receipts were as under:

	1876.	1877.	1878.
Lincolnshire, Leicestershire, and Northamptonshire	10,950	9,650	9,410
Other parts of England	2,245	2,100	1,800
Scotland	24	150	10
Ireland	—	90	120

The total supplies of stock exhibited and sold were:—

	1876.	1877.	1878.
Beasts	28,410	17,290	19,740
Sheep and Lambs	144,310	79,720	76,810
Calves	4,320	1,030	1,760
Pigs	111	120	140

COMPARISON OF PRICES.

	July, 1875.		August, 1876.	
	s. d.	s. d.	s. d.	s. d.
Beef	4 0 to 6 8	.....	4 6 to 6 2	.....
Mutton	4 6 to 7 0	.....	4 6 to 7 2	.....
Lamb	6 0 to 7 6	.....	7 0 to 8 6	.....
Veal	4 6 to 5 8	.....	4 4 to 6 0	.....
Pork	4 6 to 5 4	.....	4 6 to 6 0	.....

	August, 1877.		August, 1878.	
	s. d.	s. d.	s. d.	s. d.
Beef	4 6 to 6 2	.....	4 6 to 6 0	.....
Mutton	5 6 to 7 2	.....	5 6 to 6 10	.....
Lamb	7 0 to 8 0	.....	7 0 to 8 0	.....
Veal	5 0 to 6 2	.....	5 6 to 6 6	.....
Pork	3 8 to 5 2	.....	4 0 to 4 10	.....

A MAN OF BUSINESS.—A correspondent of *The Natal Mercury* writes from Mount Frere:—"I have had some conversation with Makaula, chief of the Bacas, a fat, jolly-looking man, on the subject of the Griqua contests. Among the statements he made to me was this:—"Blyth told me to go and look for Smith Pommer, find him, and bring Smith Pommer to him. I went I looked for Smith Pommer, I found him and killed him and brought him to Kokstad, and I put him down at Blyth's feet, and said 'There's Smith Pommer.'"

Miscellaneous.

GEORGE ELIOT.—There being no photograph of the author of "Adam Bede," I may be excused, perhaps, giving a pen-and-ink sketch of her, and written by a lady who had the pleasure of meeting the distinguished novelist a short time since:—"George Eliot is a woman who must have passed her fiftieth year. Her hair is dark brown, and has none of those silver threads one might expect where the burden of half a century of years is added to incessant labour, and experiences full of desolation. She is not at all handsome: her face is long and very pale, with a small, sensitive mouth; eyes dreamy, introspective, and sad always. Her hair is worn low over her intellectual forehead, and her slender figure has no robust energy about her. George Eliot's is the energy of mind, not of physical power. She is one of the greatest living conversationalists. She is one of the most accomplished amateur pianists in England, and a first-rate linguist, and seems to know as much about the healing art, history, and philosophy. What the witty Mrs. French said of Madame Staël—that she is consolingly ugly—applies to George Eliot; but her plain features are made beautiful by her expression. She composes slowly and methodically, not more than sixty lines a day; and report says that when she has completed a book her nervous exhaustion is such that her husband takes her abroad at once to recruit her failing health. While writing she must be scrupulously arranged as to surroundings and person. She is not only a wonderful authoress but a clever housewife too; and her home-life is perfect in all its details."—*Illustrated Sporting and Dramatic News.*

THE MODERN FARMER.

The pipe of the quail in the stubble field;
The scent of the new mown hay;
And all day long the shout and the song
Of the reapers so far away.

The restless racket amid the grain,
The noise of the reaping machine;
And ever again the howl of pain
Comes o'er the meadow green.

Oh! sweet is the field where the meadow lark flits,
And sings, as it soars and dives;
Where the granger sits, and yells as he gets
His fingers among the knives.

No longer we hear on the hillside sere,
The scythe-stone's clinkety clink;
But the reaping machine cuts his leg off, I ween,
Before ever the man can think.

With foreboding and tears his good wife hears
The man of the house say good by;
To return, in sooth, with a horse-rick tooth
Sticking four inches out of his eye.

When the thrashers come in with halloo and din,
How burdened with sorrow the hour,
When they pause to scan what is left of the man
Chewed up in an eight-horse power.

Oh! lithe and listen! From over the hills,
What voice for the doctor begs?
'Tis the stoker who fell, and awful to tell
The steam harrow ran over his legs.

Thus all day long, with mirth and song,
They laugh at the dread alarms;
Though the waving field shall its harvest yield
Of fingers and legs and arms.

Then pity the sorrows of a poor old granger
Whose mangled limbs have borne him to fence
Who braved, with reckless courage, untold danger
And run his farm with modern implements.

—*Burlington Hawkeye.*

AN ANGLING RIP VAN WINKLE.—A good story of Jefferson the actor comes from America. It appears that

while he was playing "Rip Van Winkle" at Chicago last spring he went to the theatre very much exhausted by a long day's fishing on the lake. When the curtain rose on the third act it disclosed the white-haired "Rip" still immersed in his twenty years' nap. Five, ten, twenty minutes passed, and still he did not awaken. The audience began to grow impatient and the prompter uneasy. The great actor doubtless knew what he was about, but this was carrying the "realistic" sort of thing entirely too far. The fact was that all the time Jefferson was really sleeping the sleep of the just, or rather of the fisherman who has sat eight hours in the sun without getting a single bite. Finally the gallery got to be uproarious, and one of the "gods" wanted to know if there was "going to be nineteen years more of this snooze business." Here Jefferson began to snore. This decided the prompter, who opened a small trap beneath the stage and began to prod "Rip" from behind. The much travelled comedian began to fumble in his pocket for an imaginary ticket, and muttered, drowsily: "Going clear through, doctor." The audience were transfixed with amazement at this entirely new reading, when suddenly Jefferson sat up with a loud shriek. The exasperated prompter had "jobbed" him with a pin. The play went on then—with a rush.

AN UNTRAVELLED WOMAN.—Richardson's villa, of which a view is given in his "Correspondence," is described by Faulkner as being situated near the Hummersmith turnpike. The precise locality of the house, however, seems to have been unknown to some at least of the inhabitants at the commencement of this century, for Sir Richard Phillips used to relate with glee the following anecdote respecting his inquiries in the neighbourhood:—"A widow kept a public house near the corner of North End Lane, about two miles from Hyde Park Corner, where she had lived about fifty years; and I wanted to determine the house in which Samuel Richardson, the novelist, had resided in North End Lane. She remembered his person, and described him as a 'round, short gentleman, who most days passed her door,' and said she used to serve his family with beer. 'He used to live and carry on his business,' said I, 'in Salisbury Square.' 'As to that,' she said, 'I know nothing, for I never was in London.' 'Never in London?' said I, 'and in health, with the free use of your limbs!' 'No,' replied the woman; 'I had no business there and had enough to do at home.' 'Well, then,' I observed, 'you know your own neighbourhood the better—which was the house of Mr. Richardson in the next lane?' 'I don't know,' she replied; 'I am, as I told you, no traveller. I never was up the lane—I only know that he did live somewhere up the lane.' 'Well,' said I, 'but living in Fulham, you go to church?' 'No,' said she, 'I never have time; on a Sunday our house is always full—I never was at Fulham but once, and that was when I was married, and many people say that was once too often, though my husband was as good a man as ever broke bread—God rest his soul!'—*Sic transit gloria.—Old and New London.*

VERY MUCH A WIDOW.—A Richmond curate was eloquently pleading the cause of the widow the other Sunday. He drew a touching picture of the sorrows and trials and anxieties which are the lot of women thus bereaved. "Picture her, then, my brethren," he continued, "picture her day after day keeping up this weary struggle, possibly with no husband to help and assist her!" Can this be the same curate who, when preaching on the Prodigal Son, spoke of the high honour done him in slaying the fatted calf for his repast? "No ordinary calf, my brethren, but one which had been the pet of the family for years!"—*Ibid.*

A FELLOW FEELING MAKES US WONDROUS KIND.—A drunken man succeeded in entering a tramway car in Glasgow, causing considerable annoyance to the other passengers. At length it was proposed to eject him, when a kind-hearted clergyman, who was also a passenger, interposed in his favour, and soothed the roused inebriate into good behaviour. Before leaving, however, he scowled upon the other occupants of the car, and muttered some words of contempt, but shook hands warmly with the Doctor, and said, "Good day, my friend; I see you ken what it is to be drunk."

A NEW ESTIMATE OF THE "BUSY BEE."—There is no insect more thoroughly objectionable than the bee. It is even more disgustingly active than the ant. At the first dawn

of day the bee sets off to hunt for honey, and continues at that sticky occupation until night. So far as is known, the bee receives no salary whatever, but works either to pamper the pride of a fat and useless queen, or because it is a prey to a miserly passion for heaping up honey. In the former case the bee deserves the contempt of all free men, and in the latter it displays a loathsome mental and moral degradation. In either case the bee's willingness to do unnecessary work is an insult to intelligent human beings. Scientific persons are fond of telling us of the bee's tremendous geometrical knowledge, and parade in proof thereof the fact that it builds hexagonal cells, thereby packing the greatest number of cells with the smallest possible amount of wax within a given space. They fail, however, to notice that there is no law requiring bees to build their preposterously little cells. If these were really intelligent insects, and knew the comparative value of wax and honey, they would build cells holding a pound of honey each, and thus enable a human being to eat honey without at the same time filling up the interior of his person with wax. This simple plan has never yet occurred to the bees. They go on building their antiquated and clumsy cells without once undertaking to improve upon them. They may be intelligent, but they do not prove it by adhering to a pattern of cell invented by their antediluvian ancestors. To hold up these miserly and wantonly busy insects to the admiration of mankind is a positive outrage. Dr. Watts, who openly forbade all interference with dog-fights was in the constant habit when he met a bee of politely inquiring "How doth the little busy bee!" thus treating the insect with a courtesy which would not be out of place if extended to a bishop. The pernicious influence of Watts in this matter has been widespread and enduring. It is time that a protest should be made against the bee, and that mankind should henceforth be taught the plain and obvious truth that an insect which spends its whole existence in working and stinging is even more unworthy of emulation than is the mosquito of the book agent.—*Sporting Times*.

HE WASN'T THERE.—It was by no means well known that General Butler ("Beast Butler," the Southerners used to call him) is one of the best *raconteurs* in America. He suffered severely during the civil war from misrepresentation and calumny; but he has some good points about him besides that doubtful virtue of an iron will. He tells this thrilling incident of the war time as having happened to him while in occupation of a certain Southern town:—"News was brought to me one day that one of our men had been murdered by a black man. 'Then,' said I, 'let the murderer be seized and judged.' But I was told that this would be no easy matter, that he had taken refuge in the 'Black' quarter of the city, and that the men of his race had sworn to protect him, and they were thousands strong. It would have cost two regiments to have taken them. 'Then,' said I, 'bring me my horse.' I rode down into the black quarter on my charger and in full uniform, but with not even an orderly in attendance. The people crowded round, more curious than alarmed, and I thus addressed them:—"One of my soldiers—a good soldier—has been foully murdered by a man of colour. I am told you are harbouring him amongst you. You must give him up." They answered not a word. 'I will ride up here to-morrow,' I continued, 'at noon, alone, as I am to-day. The man must be brought to me at this spot. If not, I burn every roof above your heads, and these gutters shall run with blood—black blood. You know me; my name is Butler,' and I rode back. The next morning, in spite of many supplications and entreaties on the part of my people who felt certain I should be killed, I mounted my horse. I, was my duty to the State to save blood if I could; and, if not, to die for it. I rode again into the black quarter, which was now silent as the grave; every street was empty. No sign of life was to be seen. I reached the spot which I had appointed for the surrender of the criminal, and—can you credit it?—That nigger was not there!"—*London Town Talk*.

COMPARISONS OF TEMPERATURE.—A house with a wife is often warm enough; a house with a wife and her mother is rather warmer than any spot on the globe; a house with two mothers-in-law is so excessively hot that it can be likened to no place on earth, but one must go lower for a simile.

BETTER THAN THE SEASHORE.—For the past two weeks a Woodward avenue druggist has put up a prescription of some kind or other about four times a day for a certain small boy, besides filling orders for a large variety of patent medicines and porous plasters. The sales were all cash, but the druggist's curiosity was at length aroused, and he said to the lad: "Got sickness in the family?" "Kinder," was the reply. "Your father?" "Yes—all but me. Ma is using the plasters for a lame side and taking the tonic for a rash which broke out on her elbows. Pa takes the troches for tickling in the throat, and uses the arnica on his shin. Louisa uses that catarrh snuff and the cough medicine. Bill wants the brandy for sprained ankle, and the squills are for the baby. That's all but grandma, and this prescription is to relieve the pain in her chest and make her sleep harder." "Rather unfortunate family," remarked the druggist. "Well, kinder; but pa says it's cheaper than going to the seashore, and so we plaster up and swallow down and feel purty happy after all."—*Detroit Free Press*.

SONG OF THE LABOURER.

Brown and burly, honest and free,

Resting, he sits by the fire;

While at his side, and bairns at his knee,

What can he more desire?

And he sings them a song, not grand nor long,

But that song in their hearts shall stay,

And cheer them on, when he is gone,

To labour, and trust, and pray.

"Low and mighty; master and man;

Labour and do your bes!

Think you can do it, and do it you can,

God will take care of the rest!"

Late and early, early and late,

His heart in his honest hand;

This first thought as he gaugs his gait—

God and his master's land!

And in after days in life's great throng,

When his children are scattered wide,

Each, at his work, recalls the song

He sang that eventide:

"Low and mighty; master and man;

Labour and do your bes!

Think you can do it, and do it you can,

God will take care of the rest!"

F. E. WEATHERLY, in *The Quiver*.

A CORDUROY ROAD.—Accompanying an illustration of a log road made through a New Zealand forest, there is in the *N. Z. Illustrated Press* the following description of a Corduroy road, formed of the trunks of Tree Ferns:—"The corduroy roads are usually carried through wild and wooded districts, where the materials for their construction are at hand. These are the straight stems or trunks of trees, which are split, when necessary, so as to reduce them to the dimensions required; and so prepared and cut into the necessary lengths, they are laid closely side by side across the road. No stems or trunks of trees employed are so advantageous for the purpose as those of the tree ferns; for not only are they generally of nearly correspondent and suitable diameters, but the rough and fibrous surface of the stems affords a more secure footing for foot travellers and for horses than does the more smooth and slippery bark of many other forest trees. The positions of these roads, carried tortuously through uncultured and diversified scenery, render them rich in prospects of romantic and picturesque beauty. Our illustration is taken from one of these primitive roads midway in the forest through which it passes."

"RISKS."

Shrewd Clerk (with an eye to his percentage): Take an Accident Insurance Ticket, Sir?

Passenger (nervously): Wha' for?

Clerk: Well, Sir, nothing has gone wrong 'twixt this and London for the last fourteen months; and, by the flaverages, the next smash on the hup line is overdue exactly six weeks and three days!

—*Punch*.

[*Old Gent. forks out with alacrity.*]

BARGAINS, CLEARANCE, AND AUCTIONS.—There is one phase of extravagance which disguises itself under the name of economy—the purchase of an article because it is “so cheap.” Those “clearance sales” which tempt the passer-by to look into the ticketed shop window provoke some of the dearest purchases that can be made. They suggest more wants than they supply. It may sound economical to have bought something which the purchaser desired, at half price. Had the whole price been asked he would probably have refrained from buying, and thus kept his money in his pocket. No doubt the real economical housewife who puts off the purchase of, say, some necessary garments till she comes across a genuine cheap sale profits by her delay. But very many buy from sheer inability to let “a good bargain” alone. Such a bargain is good when the article is imperatively needed, but in any other case it only represents so much money lost. It is far cheaper to do without a thing we don't really require than to get it at half or a quarter of its value. Auctions are sometimes curiously provocative of expenditure. I remember one in the country, at which a large, old-fashioned, lumbering chariot was put up for sale. Nobody wanted the thing, it was really useless. “Five pounds,” said a very small farmer, as the auctioneer looked round for a bid and caught his eye. I shall not soon forget his dismay when the great yellow vehicle was knocked down to him. The “cheap” rubbish people will sometimes gleefully bring home from an auction is apt to give rise to much vexation when the goods are coolly inspected. I recollect once buying a couple of pictures at a sale. I didn't want them; they were poor things, but they seemed so ridiculously cheap that in an idle moment I nodded to the seller to find myself the owner of two “views,” which have haunted me ever since. I didn't like to burn them; they seemed so worthless that I could not give them away, and now they shed an air of meanness in some bedroom in the house. I would recommend every one who would practice domestic economy to beware of superfluous “bargains.”—*Leisure Hour.*

OLD LOVES.

Louise, have you forgotten yet
The corner of the flowery land,
The ancient garden where we met,
My hand that trembled in your hand?
Our lips torned words scarce sweet enough,
As low beneath the willow trees
We sat;—Have you forgotten, love;
Do you remember love, Louise?

Marie, have you forgotten yet
The loving barter that we made;
The rings we changed, the sun that set,
The words fulfilled with sun and shade;
The fountains that were musical
By many an ancient trysting-tree—
Marie, have you forgotten all?
Do you remember, love Marie?

Christine, do you remember yet
Your room with scents and roses gay?
My garret—near the sky 'twas set—
The April hours, the nights of May?
The clear calm nights, the stars above,
That whispered they were fairest seen
Through no cloud-veil? Remember, love!
Do you remember, love Christine?

Louise is dead, and, well-a-day!
Marie a sadder path has ta'en;
And pale Christine has passed away
In southern suns to bloom again.
Alas! For one and all of us—
Marie, Louise, Christine forget;
Our bower of love is ruinous,
And I alone remember yet.

—HENRY MERGER. *Translated by Mr. Lang in "Ballads and Lyrics of Old France."*

WHERE THERE'S A WILL THERE'S A WAY.—A douce member of a Kirk-Session had a spark in his throat, which he industriously tried to quench with frequent whisky toddy. But “somebody told the Session the hail affair.” He was admonished, and promised faithfully to give up the habit. He kept his promise, but in a few weeks became very poorly, and

doctor was called in. After hearing particulars the doctor said: “Davie, this will never do; ye manna gang back to the toddy.” “I daurna do that, doctor, for the Session would turn me out.” “Never mind the Session; the doctor's orders are about the Session's, and naeboddy need ken.” “Aye, but you've forgotten my housekeeper Mirran; her tongue's hung in the middle, and the neebors would ken a' the next day.” “I'll tell thee what ta dae. Just pretend to shave in the afternoon, and make your toddy wi' the shaving water.” “How's yer maister, Mirran? I heard he was poorly,” said a neighbour. “Aye he was very poorly for some weeks, but he's quite hale and hearty again. But I think there's something wrang wi' his head. He used to shave only every second morning; but he's shavin' now five or sax times every afternoon.”—*Ayr Advertiser.*

A WEDDING.

He stands before the altar-rails
To plight his troth to her—a child,
Who had not heard the o'er-true tales
Of his rash youth and manhood wild.
And overhead are smiling skies,
As though to augur all is well;
And village swains,
Sing merry strains,
And gaily rings the village bell.

She little knows, that lily-bride,
What those glad joy-bells said to one
Who sitting by her lone fireside,
Nursed tearfully her little son.
Yet overhead are smiling skies,
As though to augur all is well;
To drown the sighs
That may arise,
Sing, village swains! Ring, village bell!

VIOLET FANE in *The World.*

“A QUARTER OF AN HOUR BEFORE TIME.”—I have been well said that industry is of little avail unless it be seconded by punctuality—a habit which may be acquired with but slight perseverance by every one. Perhaps these combined qualities were never so well exemplified in the career of a public man as in that of the Duke of Wellington. It is said that when on one occasion he was making an appointment to meet a famous engineer early on the morning of the following day, the latter remarked, “I will take care to be punctual at five.” To this Wellington replied, with a quiet smile, “Say a quarter to five. I owe all I have achieved to being ready a quarter of an hour before it seemed necessary to be so; and I learned that lesson when I was a boy.”—*Little Folks Magazine.*

VENUS AND ADONIS.

“Men who suffer their wives' photographs to be exhibited for sale in the shop-windows run the risk of being thought to get some profit by so doing, for they otherwise would hardly sanction such publicity.”

Where are you going to, my pretty maid?
I'm going to be photographed, Sir, she said.
May I go with you, my pretty maid?
Yes, if you like it, she calmly said.
What is your fortune, my pretty maid?
My face is my fortune, Sir, she said.
How do you live on't, my pretty maid?
By selling my photos, she promptly said.
Then may I marry you, my pretty maid?
If you've a title, perhaps—she said.

—Punch.

A BRIGHT STORY.—The ex-President of the Board of Trade was dining with a well-known citizen of Cottonopolis, and the conversation turned on the growth and development of America. “I should like,” said the host, who is an enthusiastic admirer of the great Republic, “to come back fifty years after my death to see what a fine country America had become.” “You have not said where you are going, but I believe you would be glad of any excuse to come back,” said Mr. Bright.

REVIEW OF THE CORN TRADE,

FROM *THE MARK LANE EXPRESS* FOR THE WEEK ENDING AUGUST 26.

The sky has been overcast and the weather dull and depressing during the past week, as the wind has remained persistently in a cold quarter, and more or less rain has fallen every day. Much delay has been experienced in the course of harvest operations, and in some localities the wheat in stook has commenced to sprout, but it may be remarked that complaints on this score have been less numerous than might have been the case if a higher temperature had prevailed. In the earlier districts of the home-counties the land has been pretty well cleared of cereals, but here and there some fields are still standing, while in the North a large proportion of barley is still uncut, and farmers are beginning to manifest some impatience with the weather, which has changed so adversely to their interests. Whatever opinion may be held with regard to barley, there cannot now be much doubt that the wheat crop is a better one than the very deficient crops of recent years, and has a somewhat increased acreage was planted, 11,500,000 qrs. is the approximate quantity at which the season's yield is estimated by Mr. James Caird, the well-known agricultural statician. It will be observed that these figures are practically identical with our own estimate which appeared in the issue of July 8th. In the South of England the barley crop appears to a great extent a failure, and in the Midland counties, where more favourable hopes were expressed with regard to this cereal, prospects have changed decidedly for the worse, colour, quality, and condition having suffered equal deterioration. Scotch agricultural advices, however, are on the whole favourable both as regards wheat and barley, but rain has already fallen in sufficient quantity to be beneficial, and as the weather continues broken and showery some anxiety is felt, and reaping has been much interrupted North of the Tweed. The root crops continue to thrive, turnips especially promising a heavy crop, and no further complaints have been made of disease in potatoes, but in some of the best growing districts the tubers are less plentiful than usual. Besides causing interruption to field labour, the recent heavy rain has almost put a stop to thrashing, and farmers have marketed very little wheat, either new or old, at Mark Lane. The provincial markets have been also sparingly supplied, and although the trade has been quiet, prices have been well maintained, owing to the wet weather. Quotations have been exceedingly irregular for new wheat, and here and there exceptionally high prices have been paid for the choicest samples of white. The imports of foreign into London have been fair, the arrivals up to Friday being 43,660 qrs., and a rather weaker tendency was observable in the trade during the earlier part of the week. The market is at present in a very sensitive state, and should wet weather prevail during the remainder of harvest it is mor-

than likely that a substantial enhancement of values will take place, especially now that the French crop is found to be seriously deficient, and the marvellous yield of spring wheat in America more than doubtful. That France will be a competitor for the purchase of foreign wheat during the coming cereal year is pretty certain, as her own harvest is admitted to be much below her requirements, and this fact no doubt tends largely to invest the trade with increased confidence; while in the immediate future, unless a speedy change takes place in the weather, we may expect to see an improved demand for foreign white wheat, as with so moist an atmosphere the offerings of home grown are scarcely likely to be in suitable condition for milling purposes. The heavy rain which fell during market on Friday strengthened the views of holders of American wheat, and although the trade was scarcely so active as might have been expected sales were effected at an advance of 1s. per qr. on Monday's currencies. There was also an improved demand for foreign white wheat, such as New Zealand and Australian, at 48s. to 49s. per qr. ex-ship. The sales of English wheat noted last week were 26,279 qrs. at 45s. 2d., against 19,183 qrs. at 63s. 10d. in the previous year. The London averages for the week ending Aug. 24th were 50s. 1d. on 860 qrs. The imports into the Kingdom for the week ending Aug. 17th were 874,229 cwts. wheat, and 70,799 cwts. flour. Last Monday's market was rather thinly attended, and the increased steadiness which characterised the trade on the previous Friday was dissipated by the fine weather which prevailed during market hours. An advance of 1s. per qr. was nevertheless maintained for foreign wheat, but the demand was mainly of a retail consumptive nature. Prices were irregular and difficult to quote or the few samples of the new English crop on offer, and the supply of old being again very light factors were enabled to obtain the full currencies of the preceding Monday. The week's imports of foreign amounted to 46,240 qrs., an important feature in the return being the large arrivals of wheat from Australia and New Zealand, more than half the total supply being contributed by these countries. America furnished 13,797 qrs., and Russia only 2,840 qrs. the remainder being from Germany, Persia, and the East Indies. Less buoyancy was observable in the trade for all descriptions, and although prices were generally quoted 1s. per qr. dearer on the week, the improvement chiefly affected sprung American sorts, upon which the inquiry was mainly directed. There was a marked increase in the exports, which were 3,795 qrs., against 1,387 qrs. in the previous week. The supply of barley consisted of 250 qrs. of English, and 9,211 qrs. of foreign. A moderate demand was experienced for both malting and grinding descriptions, and prices underwent no

quotable change. The arrivals of maize amounted to 29,414 qrs., all from American Atlantic ports, and an advance of 6d. per qr. was obtainable for flat corn, both off stand and to arrive. The imports of oats were 61,576 qrs. and a better feeling was observable in the trade, especially for Russian varieties, upon which an advance of 6d. per qr. was established. On Wednesday the return showed 160 qrs. of home-grown wheat, and 29,490 qrs. of foreign. Sales progressed very slowly, and the tendency of prices was against sellers. Flour was also difficult to move, but feeding corn ruled steady at Monday's values. On Friday the supply had increased to 300 qrs. of English and 13,660 qrs. of foreign. Increased firmness was observable in the trade as supplies were moderate and the weather wet. All descriptions were quoted 6d. to 1s. per qr. dearer, but the advance was chiefly noticeable in American sorts. Feeding corn was steady, but not quotably dearer. The imports of flour into the United Kingdom for the week ending August 17th were 70,799 cwts. against 76,229 cwts. in the previous week. The receipts into London were 11,436 sacks of English, and 1,865 sacks and 13,113 barrels of foreign. Business has ruled quiet throughout the week, and in some instances buyers have obtained a slight concession. The week's import of beans were 77,801 cwts., and of peas 59,695 cwts., showing an increase of 40,477 cwts. on the former, and a decrease of 2,680 cwts. on the latter. Beans being scarce have steadily supported late rates, while peas, under the pressure of large supplies, have given way about 1s. per qr. The deliveries of malt were 13,256 qrs., and the exports 1,323 qrs. No quotable advance has taken place, but holders have shown less desire to press sales, owing to the unsettled state of the weather. A fair amount of business has been done in agricultural seeds during the past week, and trifolium, rape, and mustard have all engaged some attention, but as the clearing of the land has been delayed by the wet weather the demand for autumn-sowing has scarcely attained its usual proportions. A few samples of new white mustard have appeared, but the condition has left something to be desired. New rape has been in rather better inquiry, but unaltered in value, while canary is firmly held at the recent improvement without attracting buyers. With very moderate supplies of both old and new wheat, the trade in the principal provincial markets has been slow, and prices very irregular. The weaker tendency which was observable at the beginning of the week has been to some extent checked by the subsequent showery weather, but scarcely sufficiently to improve values. Maize has in some cases sold for rather more money while barley and oats have been inactive at about late rates. At Liverpool, on Tuesday, the market was fairly attended, and a moderate consumptive demand was experienced for wheat at the currencies of the preceding Tuesday, the interim improvement of 1d. to 2d. per cental which took place on the previous Friday having been lost. Red winter American was, however, about 1d. per cental cheaper on the week, owing to the liberal supplies. Flour and feeding corn were steady, but the demand for maize was checked by the advance of 6d. per qr. asked by holders by reason of diminished

shipments from America, and 23s. 9d. was the closing price. The week's imports were heavy, and consisted of 75,000 qrs. of wheat, and 77,000 qrs. of maize. At Newcastle the trade has been dull for wheat and flour, and no change has taken place in prices. Spring corn has been fairly steady. At Leeds a slow sale has been met for English wheat, but foreign has been rather active. Beans have advanced 3d. to 6d. per qr., but other sorts of spring corn have moved off slowly at about late rates. At Edinburgh the market has been fairly supplied, and wheat has met an improved demand at fully last week's curriences. Barley has not varied, but oats have given way 6d. to 1s. per qr., while beans have advanced to a like extent. At Leith harvest operations have been carried on satisfactorily in spite of occasional thunder-showers. With large arrivals from abroad of wheat and maize, the trade has ruled firm for both articles at fully last week's prices. There was a large supply of Scotch wheat at market on Wednesday, and sales were effected without difficulty. Foreign was likewise inquired for, and quotations were well supported. Spring corn was firm, and maize the turn in sellers' favour. At Glasgow the grain trade has been steady, and prices have not given way, but buyers have not operated very freely of late, as arrivals from abroad have been on a rather more liberal scale. At Dublin the market has been quiet but steady, and wheat and maize have fully maintained late rates as the weather has been dull and showery. At Cork business has not been very brisk, but in the sales effected wheat has realised rather higher prices, while maize, although in limited request, has advanced 6d. per qr.

The following are the arrivals in Mark Lane during the past three weeks:—

MONDAY, August 19.

The arrivals during the past week have been: English Wheat, 2,996 qrs.; foreign, 46,240 qrs.; Exports, 3,795 qrs. The supply of English Wheat fresh up to market this morning, was light and sales progressed slowly, but last week's prices were fairly well maintained: of foreign the arrivals were moderate, and with fine weather and a rather thinner attendance than usual, the trade was scarcely so firm as at the end of the previous week, but prices indicated 1s. per qr. advance on the currencies of last Monday. Country Flour, 11,486 sacks; foreign, 1,865 sacks, and 13,113 brls. Both sacks and barrels were in moderate request at about late rates. English Barley, 250 qrs.; foreign, 9,211 qrs. A steady trade for malting and grinding descriptions without any material alteration in value. Malt: English, 14,696 qrs.; Scotch, 560 qrs. Exports, 1,323 qrs. Very little business passing, but last week's prices were maintained. Maize, 29,414 qrs. Rather firmer, and 3d. to 6d. dearer for Mixed American, both off stands and to arrive. English Oats, 303 qrs.; foreign, 61,576 qrs. Exports, 33 qrs. In fair demand, and about 6d. per qr. dearer for Russian sorts. English Beans, 125 qrs. Foreign, 2,691 qrs. A quiet but steady trade at last week's prices. Linseed, 2,427 qrs. Dull and unaltered in value.

MONDAY, August 12.

The arrivals during the past week have been: Wheat, 3,000 qrs.; foreign, 10,917 qrs. Exports, 1,387 qrs. The small supply of English Wheat on offer at market this morning met a quiet demand at about last week's prices. Of foreign the arrivals were unusually light, and

with a good attendance of millers, and unsettled weather. A steady sale was experienced, especially for American descriptions, at an advance of 1s. per qr. on the fortnight. Country Flour: 10,356 sacks; foreign, 2,110 sacks, and 2,343 barrels. Increased steadiness was observable in the trade, and prices were the turn in sellers' favour for both sacks and barrels. Millers have reduced the nominal top price of Town Flour from 46s. to 43s. English Barley, 461 qrs.; foreign, 5,649 qrs. Business was dull for grinding and malting sorts, with no quotable change in values. Malt: English, 17,424 qrs.; Scotch, 100 qrs. Exports, 463 qrs. A quiet trade at about last week's prices. Maize, 19,481 qrs. Round corn was slow but unchanged, while American mixed was about 6d. per qr. cheaper on the fortnight. English Oats, 198 qrs.; Scotch, 27 qrs.; foreign, 66,654 qrs. Exports, 441 qrs. Dealers operated sparingly, and were enabled to satisfy their wants at 3d. to 6d. per qr. less money. English Beans, 316 qrs.; foreign, 1,968 qrs. In fair request at previous currencies. Linseed, 1,813 qrs. Exports, 516 qrs. Steady, but very quiet.

MONDAY, August 26.

The arrivals during the past week have been: English Wheat, 2,280 qrs.; foreign, 41,593 qrs. Exports, 3,182 qrs. The supply of new English Wheat at market this morning was very light, and the quality of the samples shown varied considerably. The trade was slow at about 47s. to 52s. for white, and 44s. to 48s. for red. Foreign sorts, with moderate arrivals, were in fairly active request at fully Friday's prices, which indicate an advance of about 1s. per qr. on the week. Country Flour, 12,338 sacks; foreign, 3,447 sacks and 9,886 barrels. There was no quotable change in values, and business, although quiet, ruled firm for both sacks and barrels. English Barley, 519 qrs.; Scotch, 349 qrs.; foreign, 13,889 qrs. A somewhat improved demand was experienced but there was no change in prices either of malting or grinding descriptions. Malt: English, 16,590 qrs.; Scotch, 550 qrs. Exports, 530 qrs. A very slow sale at nominally last Monday's currencies. Maize: 34,584 qrs. Both round and flat corn were in fair demand at an improvement of 3d. to 6d. per qr. Oats: English, 552 qrs.; Scotch, 69 qrs.; Irish, 177 qrs.; foreign, 71,313 qrs. Exports, 108 qrs. Under pressure of continued heavy arrivals from abroad the trade ruled dull, and sellers were unable to establish an advance. Beans: English, 80 qrs.; foreign, 500 qrs. Quiet, but steady at fully late rates. Linseed: 2,956 qrs. Steady, but unaltered in value.

CURRENT PRICES OF BRITISH GRAIN AND FLOUR IN MARK LANE.

	Shillings per	Quarter	
WHEAT, Essex & Kent, white.....	old 46 to 50	new 47 to 52	
	red	old 43 14 new 44 45	
Norfolk, Linclish., and Yorksh. red old	12	new 43 45	
BARLEY	Chevalier new.....	40 50	
Grinding	36 to 39.....	Distilling	33 36
MALT, pale.....	new 67 to 73.....	old brown.....	52 66
RYE			35 38
OATS, English, feed 23 to 27	Potato.....	—	
Scotch, feed.....	Potato.....	—	
Irish, feed, white 25	Fine.....	—	
Ditto, black.....	24 25	Potato.....	—
BEANS, Mazagan	30 34	Ticks.....	35 40
Harrow.....	—	Pigeon, old 42	47
PEAS, white boilers 38	42 Maple 38 to 40.....	Grey 35	37
FLOUR, per sack of 280lbs., town households			38 43
Best country households,			36 38
Norfolk and Suffolk,			31 33

FOREIGN GRAIN.

	Shillings per	Quarter	
WHEAT, Dantzic, mixed	53 to 56.....	extra.....	— to 53
Konigsberg	52	extra.....	— 59
Rostock	50	old.....	—
Pomer., Meckberg., and Uckermark.....	red		48 56
Ghirka 39 to 41.....	Russian, hard, 41 to 41.....	Saxonska 41	43

Danish and Holstein, red —	red American 16	48	
Chilian, white 50.....	California 51	Australian 49 52	
East Indian, No. 1 Club white, 47 to 48;	No. 2 45	16	
	Ord. white 12 to 41; red 41 to 42; hard 10	42	
BARLEY, grinding 21 to 23.....	Distilling	33 40	
OATS, Dutch, brewing and Poland 21 to 21.....	feed 21	22	
Danish and Swedish, feed 20 to 22.....	Stralsund	22 21	
Canada 60 to 60.....	Riga 16 to 17.....	Petersburg.....	17 22
BEANS, Fresland and Holstein.....		—	
Italian.....	36 to 37.....	Egyptian	36 38
PEAS, feeding and maple.....	36 37	fine boilers	37 38
MAIZE, Black Sea	26 27	Mixed American 23	25
FLOUR, per sack, French 32	Spanish, p. sack 38		39
Hungarian, per sack.....	43 55		—
TARES, Spring			35 40

BRITISH SEEDS.

Mustard, per bush., brown 11s. to 14s., white ..	10s. to 15s.	
Canary, per qr.....	new 44s. to 46s. fine.....	47s. 48s.
Cloverseed, fine red and dark purple 90s., com.....	60s. 64s.	
Coriander, per cwt.		22s. 24s.
Tares, winter, new, per bushel.....	5s. 6d. 6s. 0d.	
Trefol, fine new.....		20s. 22s.
Ryegrass, per qr., old and new		22s. 24s.
Linseed, per qr.	sowing 66s. to 68s., crushing 53s.	55s.
Linseed Cakes, per ton	£10 5s. to £10 7s. 6d.	
Rapeseed, per qr.	new.....	60s. 66s.
Rape Cake, per ton		45 to 46 0s.

FOREIGN SEEDS.

Coriander, per cwt.....		22s. to 24s.
Cloverseed, red 58s. to 64s.	white 76s.	90s.
Hempseed, small 32s. to 34s. per qr.	Dutch 40s.	42s.
Trefol		18s. 20s.
Ryegrass, per new Italian Bale of 2 cwt.		32s. 34s.
Linseed, per qr.	Baltic 52s. to 53s., Bombay 51s.	52 4
Linseed Cakes, per ton	£10 5s. to £10 7s. 6d.	
Rape Cake, per ton	£5 10s. to £6 0s.	
Rapeseed, Calcutta		62s. 64s.
Carraway ..		35s. 36s.

LONDON AVERAGES.

Wheat.....	560 qrs.	50s. 14.
Barley.....	—	—s. 0d.
Oats.....	—	—s. 0d.

IMPERIAL AVERAGES

For the week ending Aug. 24, 1878.		
Wheat	26,278 qrs.	45s. 2d.
Barley	1981 ..	36s. 3d.
Oats	1,198 ..	27s. 9d.

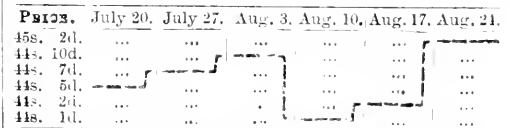
COMPARATIVE AVERAGES.

Years.	WHEAT.		BARLEY.		OATS.	
	Qrs.	s. d.	Qrs.	s. d.	Qrs.	s. d.
1874...	43,901	51 6	1,371	15 11	2,211	30 4
1875...	29,713	52 9	210	31 1	1,427	28 0
1876...	28,631	49 4	271	32 7	1,427	28 1
1877...	19,133	63 10	291	33 9	1,513	28 4
1878...	26,278	45 2	198	36 3	1,198	27 9

AVERAGES

FOR THE SIX WEEKS				
	Wheat.	Barley.		Oats.
		s. d.	s. d.	
July 20, 1878.....	44 5	35 5	27 6	
July 27, 1878.....	44 7	37 4	23 5	
Aug. 3, 1878.....	44 10	33 3	27 0	
Aug. 10, 1878.....	44 1	35 3	24 1	
Aug. 17, 1878.....	44 2	33 3	26 1	
Aug. 24, 1878.....	45 2	36 3	27 9	
Aggregate Avg. of above.....	44 7	35 2	26 10	
The same period in 1877.....	64 6	31 8	28 1	

FLUCTUATIONS in the AVERAGE PRICE OF WHEAT



FOREIGN GRAIN ENTERED FOR HOME CONSUMPTION DURING THE WEEK ENDING AUG. 24.

Wheat.....	cwts. 232462	Peas	cwts. 17250
Barley.....	51972	Maize	102088
Oats.....	165135	Flour	58723
Beans	5920		

Covent Garden Market.

LONDON, THURSDAY, Aug. 22.

The same remarks as last week apply to this Market, except that Filberts and Cobs have met with a more ready sale.

FRUIT.

Table of fruit prices: Apples, Apricots, Figs, Filberts, Grapes, Lemons, Melons, Oraages, Peaches, Pears, Pine Apples, Plums.

VEGETABLES.

Table of vegetable prices: Artichokes, Eng. Globe, Asparagus, Eng., per doz., Aubergines, Beans, Beet, Cabbages, Carrots, Cauliflowers, Celery, Chilies, Green, Cucumbers, Endive, Batavian, Garlic, Herbs, Horse Radish, Leeks, Lettuce, Potatoes.

Potatoes are very plentiful, and in some places much diseased. Prices range:—Myatt's, 120s. to 160s.; Regents, 100s. to 130s.; Early Rose, 110s. to 120s. per ton.

Wendenhall Leather Market.

LONDON, SATURDAY, Aug. 24.

CROP HIDES.

Table of crop hide prices: English, lbs. 28 to 56.

BUTTS.

Table of butt prices: English, lbs. 14 to 33.

FOREIGN.

Table of foreign hide prices: lbs. 16 to 32.

OFFAL.

Table of offal prices: English Shoulders, Cheeks and Faces, Do. Bellies, Do. Middle do., Foreign Shoulders, Do. Necks, Do. Bellies, Do. Middle do., Dressing Hide Shoulders, Do. do. Bellies, Kip Shoulders, Do. Bellies.

DRESSING HIDES.

Table of dressing hide prices: Common, Do., Do., Do., Saddlers, Do., Sulls, Shaved, Do., Do., Do., Do., Scotch do., Coach, per hide.

HORSE BUTTS, SHAVED.

Table of horse butt prices: English, Spanish.

HORSE HIDES.

Table of horse hide prices: English, Spanish, Do. do. inferior, Do. do. dry do., Do. do. inferior.

CALF SKINS.

Table of calf skin prices: Av. weight, Do., Do., Do., Do., Do., Do., Welsh, unrounded, Av. wght. p. doz., Do.

KIPS.

Table of kip prices: R. I. dry salted, Do., Do., Do. thirds, Do. inferior, English, Do., Do.

SHEEP SKINS.

Table of sheep skin prices: Basis, unstrained, Do. strained, Do. facing, White Sheep, Do. aprons, Tan Sheep and Lambs, Sumach roans, Do. skivvers, Bark skivvers.

SUNDRIES.

Table of sundry prices: Hog Skins, best, Seal Skins, split, Do. for bindings, Calf Skins, Sumach-tanned, Do. white, Horse Hides, white, Hide Splits, per lb.

Wool Markets.

ENGLISH WOOL MARKET.

LONDON, MONDAY, August 26.—The sales of colonial wool commenced on Saturday last with a good attendance and a spirited character at rates showing little or no difference from those current at the previous series. Combing sorts were decidedly firm, and they continued in demand at a fractional improvement. In the market for English wool the demand remains quiet, and though prices may be said to be well supported holders showing no disposition to force sales, the tendency is towards weakness.

Table of wool prices: CURRENT PRICES OF ENGLISH WOOL, FLEECES—Southdown hoggs, Half-bred ditto, Kent fleeces, Southdown ewes and wethers, Leicester, Soats—Clothing, picklock, Combing, wether mat.

Oil Market.

LONDON, SATURDAY, Aug. 24.—Linsced Oil was steady but not active. Rape was quiet. Other Oils sold slowly.

OILS.

Table of oil prices: Olive, Florence, Castor, French, American.

RESIN.

Table of resin prices: English, American.

PITCH.

Table of pitch prices: Gallipoli, Spanish, Linsced, K. pale, Crown.

TAR.

Table of tar prices: S. pale, Crown, yel., American, Stockholm.

TURPENTINE.

Table of turpentine prices: Southern, Cocoa Nut, Pum.

Metals.

LONDON, SATURDAY, Aug. 24, ENGLISH IRON.

Table of English iron prices: Bars, Nailrods, Hoops, Sheets, Pig, No. 1, in Wales, Bars, Rails, Pig, No. 1, Dlyde.

FOREIGN IRON.

Table of foreign iron prices: Swedish.

FOREIGN STEEL.

Table of foreign steel prices: Swedish keg.

ENGLISH LEAD.

Table of English lead prices: Pig, per ton, Sheet.

FOREIGN TIN.

Table of foreign tin prices: Banca, Straits (unroast).

ENGLISH COPPER.

Table of English copper prices: Tile, Tough Oake, Sheaths and Bolts, Sheet, Bottoms, Yellow Metal.

ENGLISH TIN.

Table of English tin prices: Block, per ton, Bar.

SPELTER.

Table of spelter prices: On the spot.

ZINC.

Table of zinc prices: Sheets.

Hide and Skin Markets.

LONDON, SATURDAY, August 24.

Table of hide and skin prices: MARKET HIDES, Horsehides, Calfskins, Full, Sheep Skins, Lambs, Shearings, Tegs.

Printed by HAZELL, WATSON, & VINEY, 265, Strand, London.

THE FARMER'S MAGAZINE.

C O N T E N T S

AUGUST, 1878.

PLATE.—LEONORA.

	Page
DESCRIPTION OF PLATE	159
THE CATTLE DISEASES ORDERS, 1878	159
SHEEP POISONING	166
AGRICULTURAL RETURNS FOR 1878	167
AGRICULTURE IN TURKEY	168
AGRICULTURAL SOCIETIES	169, 175, 192
THE IRISH AGRICULTURAL SOCIETY	174
CHAMBERS OF AGRICULTURE	185
LIVE STOCK NOTES	187, 212
FARM PONDS AND HOW TO UTILIZE THEM	188, 209
THE BREEDING AND REARING OF CART-HORSES	190
THE ORIGIN OF DURHAM SHORTHORNS	203
ORIGIN OF THE DUCHESS FAMILY	207
THE JOYS OF HARVEST	208
NOTES FROM A CORNISH FARMER	213
THE NATIONAL ALLIANCE	214
DEER <i>versus</i> SHEEP	215
THE IRISH LAND QUESTION	216
BARLEY FROM OATS	217
SCHOOLS FOR PAUPER CHILDREN	217
FREE TRADE IN LAND	218
ROYAL AGRICULTURAL SOCIETY OF ENGLAND : TRIAL OF SHEEP BINDERS	220
THE DISTRESS AMONGST THE LABOURING CLASSES IN AMERICA	222
WHAT I SAW OF CANADA IN 1873	223
THE WHEAT CROP OF 1878	223
THE HABITS OF ANTS	224
LARGE <i>versus</i> SMALL FARMS	225
THE USES OF THE EARTHWORM	226
TENANCY <i>versus</i> PROPRIETORSHIP	227
FIXITY OF TENURE	228
REVIEW OF THE CATTLE TRADE DURING THE PAST MONTH	229
MISCELLANEOUS	230
REVIEW OF THE CORN TRADE	233
MARKET CURRENCIES, &c.	235

IMPORTANT TO FLOCKMASTERS.

THOMAS BIGG, Agricultural & Veterinary Chemist,

By Appointment to his late Royal Highness
The Prince Consort, K.G.,

LEICESTER HOUSE, GREAT DOVER STREET,
BOROUGH, LONDON,

BEGBS 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. HERBATH, the celebrated Analytical Chemist:—
Bristol Laboratory, Old Park, January 18th, 1861.

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 "yolk") in the skin, the

Jeec, or the carcase. I think it deserves the numerous testimonials published. I am, Sir, yours respectfully,

WILLIAM HERBATH, Sen., F.C.S., &c.,

To Mr. Thomas Bigg, Professor of Chemistry,
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.

"Scoulton, near Lingham, Norfolk, April 16th, 1855.

"Dear Sir,—In answer to yours of the 1th 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.,

"To Mr. Thomas Bigg."

"R. RENNEY.

☞ 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.

GENERAL ADVERTISING.

C. H. MAY & CO.,

ADVERTISING OFFICES,

78, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1846.

APPOINTED AGENTS TO THE ADMIRALTY, TRINITY HOUSE, &c., &c.

ADVERTISEMENTS INSERTED

IN ALL BRITISH, FOREIGN, AND COLONIAL PAPERS,
TRANSLATIONS IN ALL LANGUAGES.

THE
ROYAL FARMERS' & GENERAL
INSURANCE OFFICE.

ESTABLISHED 1840
TO INSURE AGAINST LOSSES BY
FIRE AND HAIL STORMS,
AND TO GRANT
INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.
Deputy-Chairman—B. P. SHEARER, Esq., 47, Gloucester-place, Portman Square.
Thomas Henry Burroughes, Esq., 17, Lower Berkeley Street. Richard L. Loveland, Esq., 4, Hare Court, Temple.
John Reddish, Esq., 9, Highbury New Park.
William Clutton, Esq., 7, Clifton Villas, Penge. Major F. Anderson Stebbing, 4, Cleveland Gardens,
A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury. Castle Hill, Ealing.
E. J. Hawker, Esq., 37, Cadogan Place, Sloane Street

FIRE.—Insurances at moderate rates.
LIFE.—Insurances on equitable terms. Profits divided every five years.
HAIL.—Crops insured against Hail Storms at 5d. per acre.
LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand London, W.C., or of the Agents.

THE
MARK LANE EXPRESS
AND
AGRICULTURAL JOURNAL

IS THE

LARGEST AND THE LEADING FARMER'S AND GRAZIER'S NEWSPAPER.

PUBLISHED EVERY MONDAY EVENING, IN TIME FOR POST.

Office of Publication and for Advertisements, 265, Strand, London. May be had of all Booksellers and Newsmen throughout the Kingdom, price 7d., or £1 10s. 4d. per annum.

J. C. NESBIT AND SON, Analytical, Agricultural, and Consulting Chemists (Manager A. Anthony Nesbit, F.C.S., &c.), undertake the analysis of manures, feeding stuffs, seeds, soils, waters, and all agricultural requisites. And may be consulted upon the cause of the failure of crops, or any questions in scientific agriculture. Laboratory: 38, Gracechurch Street, E.C. A list of fees sent on application.—[ADVT.]

No. 4, Vol. LIII.]

OCTOBER, 1878.

[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.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

PORT	...	...	24s.,	30s.,	36s.,	42s.	per dozen & upwards.
SHERRY	...	...	18s.,	24s.,	30s.,	36s.	„ „
MADEIRA	...	...	30s.,	36s.,	42s.,	48s.	„ „
<small>(As supplied to the wounded in the East.)</small>							
MARSALA	...	...	20s.,	24s.,	28s.,	32s.	„ „
CHAMPAGNE	...	...	30s.,	36s.,	42s.,	50s.	„ „
CLARET	...	...	12s.,	15s.,	18s.,	24s.	„ „
BURGUNDY	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		36s.,	42s.,	48s.,	54s.	„ „
MOSELLE	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
HOCK	...	...	20s.,	24s.,	30s.,	36s.	„ „
HOCK	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
SAUTERNE	...	...	18s.,	24s.,	30s.,	36s.	„ „
BRANDY	...	...	38s.,	42s.,	48s.		„ „
WHISKY	...	...	38s.,	42s.			„ „
RUM	..	...	40s.,	42s.			„ „
GIN	...	...	30s.,	32s.			„ „

PORT in Quarter Casks of 28 gallons, from £14 14s.

SHERRY in Quarter Casks of 27 gallons, from £10 10s.

Sole Agent for Rouseau & Cie Reims Champagne,
Rivaz & Cie Cognac Brandies.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

SAMPLES ON APPLICATION.

ALL GOODS FORWARDED CARRIAGE PAID.



Meeting at an

THE FARMER'S MAGAZINE.

OCTOBER, 1878.

PLATE.

TREEING A CUB.

The cubhunter must be an early riser, and if he wish to lengthen his days there is nothing like it—even Lord Palmerston's recipe of "stealing a few hours from the night," my dears, for he must be off with the pack for the woodlands before Sol in all his glory has skimmed the earth of its morning's cream, *alias* the dew. On his return, if he have an eye of a sportsman as to hounds we shall expect that he will be able to tell the lovers of the sheets which of the young hounds show the most signs of arriving at eminence in their profession, with a few hints on scent and summering the hunter; on chuckle-heads, egg-sucking looking brutes, and chanters—or at any rate how to eat a good breakfast, for which the cubhunter is as eager as the

pack in our plate, where stands the huntsman, knife in hand, with a treed cub, as calmly as a butcher waiting for his customers before he begins cutting up and singing out "Buy! Buy! Buy!" Foxes are fond of trees, and many have saved their lives by taking to them, and it was only the other week when out for a drive that a lover of foxhunting pointed out to us a fine old oak standing in the middle of a field of turnips, from which there had been one or two good runs, but a fondness for trees and being "tree'd, or up a tree," like Charles Charley, as some old-fashioned foxhunters still call a fox when giving a description of the best they ever saw over a second bottle of good old port, are very different things. Good health.

S E E D C O R N .

BY T. BOWICK:

All cereals are liable to degeneracy by continued culture on similar soils, and, I believe, there is nothing in the experience of the farmer, or in the agricultural writings of the past, to disprove that statement. There are, indeed, some soils noted for producing good seed wheat and other grains for long periods without change, while the same seed when grown on a different soil degenerates rapidly, and as a rule the worse the soil the more rapid the degeneracy. Oats change into long lank-tailed grain with a tendency to revert to wild oats; wheat also loses quality and productiveness by degrees, and is very susceptible of climate; and a renewal of barley seed though less liable to decline than either oats or wheat, is found to be advantageous. The remarkable vigour and vitality which some varieties of corn acquire when introduced into a new locality is noteworthy. Fenton wheat, for example, when brought first from Scotland to the South of England, showed a new productive power; but such was the untoward state of the elements in the North last year that that variety could scarcely be procured of a quality suitable for seed

up the strain of wheat, and perpetuating its quality for more years than light and sandy soils. Still the fact remains that many varieties that have been famous for a time, have degenerated and ultimately disappeared, where no means had been used for their renovation. It would be something to know the changes they have undergone and the history of their decline. Doubtless the distinction between winter and spring wheats arises from acquired habit, and they can be converted into each other by sowing earlier or later, and thus gradually accelerating or retarding their growth. The difference in colour between red and white wheats is owing mainly to the soil; white wheats become gradually darker, and ultimately undistinguishable from red on some stiff wet soils if grown for a period of time, and red wheats lose their colour, and gradually change on other descriptions of ground. These opinions are doubted by some, for the change is only effected by slow degrees, and therefore not perceptible to the senses within a short period of years. The grain changes colour sooner than the chaff and straw; hence, there are red wheats with white chaff, and white wheats with red chaff, which on the foregoing principle is readily explained.

Clay land is constitutionally better adapted for keeping

OLD SERIES.

R

VOL. LXXXIV.—No. 4.

There is but one opinion among good farmers as to the paramount importance of sowing good and prolific seed; with them it is very much "as the seed so the crop," and it is surprising how little has been said on the subject by agricultural writers in the bygone centuries, if we except the concluding part of last century. The earliest English writer on Agriculture, Fitzherberde, in his "Boke of Husbandrye" published three hundred and fifty years ago, obviously refers to one means of getting good seed in the following quaint paragraph:—"The husband that hath not sufficient of the corn called discretion, it is lawful for him to borrow of his neighbours that have. If his neighbours will not lend part of their seed for this seed of discretion hath a wondrous virtue, for the more it is either taken of or lent the more it is." Till the time when Sir John Sinclair and other pioneers called attention to the capabilities of the country, and aroused the dormant minds of husbandmen to the improvement of the art of agriculture, little had been done in the seed department. But in truth till the improved method of culture, which they were greatly instrumental in introducing, obtained a footing, no great progress could be expected in the improvement of seeds.

To that energetic baronet is due the institution of the Board of Agriculture, for he proposed and carried it through Parliament in 1793, and Parliament voted about £3,000 annually to aid in carrying out its operations; but the annual vote being withdrawn it ceased to exist in 1813. He secured as his coadjutors the best talent of the day, and their county reports, especially the reprints that were published in the first decade of the present century, or soon after, are valuable as well as comprehensive, and many of them may be consulted with advantage at the present day. In fact they contain a great mass of information, but unfortunately there was no cheap press in that day, and very few of the volumes found a place in the library of the ordinary farmer.

As the beginning of the present century was the era of the dawn of modern farming, it may not be deemed out of place or uninteresting to inquire into what was said and done at that time respecting seed corn. The wisdom of our ancestors "is not to be slighted or ignored," for although their knowledge in that department was not very precise it must be confessed that no great advances have yet been attained. There is a good deal of the agricultural literature of the present day that seems but an echo of the past; many of the practices are based on the past, and a departure from the old lines, although it may not be deemed of much consequence, sometimes leads into error. So a glance at some of the important points which from time to time and in various districts received the attention of accredited authorities may not be deemed a waste of time. The soil, the seed, the moisture, and the seasons claimed the attention of our forefathers, and with the very same things the husbandman has to deal at the present day.

Among the ablest of these county reports, which were drawn up under the direction of the Board of Agriculture, was the one written by the philosopher Hendrick on Forfarshire, and published in 1813. In that report a brief chapter is given on what is called the "breed of plants," the prominent points of which we summarise below. First surprise is expressed that, amidst the great success that had been attained in the breeds of animals, so little had been done in the improvement of the breeds of plants, a subject of equal if not more importance. In relation to wheat Mr. Hendrick remarks that it universally degenerates in the county, if the same seed be used successively more than two, or at the most three, years. The seed was procured from England and sometimes from the Carse of Gowrie, and the kind cultivated was commonly what was called Eng-

lish or Essex wheat. The change from England was reckoned far preferable, though three bushels of English, including freight, cost as much as four bushels of Scotch the former sowed as much land as the latter, and pickling was universally practiced. Five varieties of oats are enumerated, and a sixth, namely, the Blainslie, is mentioned, which originated on a farm of that name in the high grounds of Tweeddale, at the middle of last century, and it is probably the oldest kind that has kept up its repute to the present day. It consisted of a few stalks, and was picked from a mossy or moorish field of common oats, on account of its earliness and abundance of straw. It soon came into great demand on both sides of the Tweed, and the strain was said to have been kept up on that farm by always selecting the best ears to propagate from, without change from other places since it was discovered. The circumstances to be attended to in the improvement of corn are stated to be the selection of those possessing, 1st, Early maturity; 2nd, Thinness of husk; 3rd, The best straw; and 4th, Hardiness. It is asserted that when plants of the same class, but varying in their individual qualities, are allowed to grow promiscuously in the same field the pollen or the fecundating powder of the one set of plants is often brought in contact with the female organs of another; unlish breeds are thereby produced, and the uniform consequence of such intermixtures is a degeneracy of the plants. These views may be taken at what they are worth; they, at any rate, are endorsed by the ingenious Dr. Coventry, who was an authority at the beginning of the century, and the first Professor of Agriculture in the University of Edinburgh.

Dr. Kitto wrote a valuable report of Aberdeenshire at the same period, from which we learn that the ancient native oat was commonly cultivated on poor and upland grounds before 1782, and that in that year there was a great frost in August when the oats on the best farms were in flower, which damaged the crop so much as to render it useless for seed. This led to the introduction of a number of different varieties, much to the advantage of the husbandman. The original oat only yielded 60 to 70 lb. of meal per boll of six bushels, instead of the 140 or 150 lb. from the best modern strains. There was a serious deficiency also in 1799, and the oat referred to entirely disappeared in the early years of the present century. It had a long beard like wild oats, from which it is easily distinguished, and it obtained the name of "Shiacks" in the Braes of Angus. That oat, according to Dr. Singer, of Kirkpatrick-Juxta, was extensively cultivated in the South of Scotland and North of England at the middle of last century. It is described as a grey awned oat, and it obtained the name of *Flaver avena fatua*. Some years ago we had a sample of oats from North Yell, a remote island of the Shetland group in the far North, which think were identical with the native oat referred to. They were extremely thin, and would not, we suppose, have weighed over 25 or 30 lb. per bushel. Some of them were grown here and produced large plants, and we transmitted some of them to Professor Buckman, who cultivated them for some time at Braiford Abbas. He stated that they grew into some fine plants, but without showing much improvement in the kernel, and that they were the *Avena strigosa*, which Dr. Lindley supposed may have been the parent of our crop oat. The wild oat or *Avena fatua* was also experimented with by the Professor, and he was led to the opinion that to it must be ascribed the origin of the crop oat. It is still very common in some places, and proves almost an invincible foe in some grounds. About fifteen years ago an observer writing from East Lothian stated that some farms are much infested with it, and that he had examined a vigorous plant with ten stalks,

on each of which there was an average of one hundred grains—thus the original seed multiplying itself a thousand fold.

A capital account appeared of the leading Border county of Berwick at the same time as the foregoing reports. It was written by Robert Kerr, F.R.S., farmer, Ayton, in which he bears the same testimony as to the value of a change of seed. He states, as a matter of long experience, that the produce of spring-sown wheat used as spring seed ripens about a fortnight earlier than the produce of the same wheat, winter sown, when used as spring seed. We are further told that some Northumberland farmers always commanded a superior price for the grain produce of their farms as seed, on account of persisting in a careful yearly selection of ears for preserving good and pure varieties. Having a particular variety of approved character, a small quantity of the best and purest ears is most carefully picked, and this culled quantity is sown by itself. The produce of that is again cultivated on a larger scale, and all is preserved separate till an adequate quantity is obtained for field culture. In reference to this method for improving and keeping up the quality and productiveness of the corn crops Mr. Kerr remarks that action in that line must ever remain in the hands of a few as a particular business, for if generally followed, the time, labour, and attention required would greatly counterbalance the benefit, as competition among sellers would reduce the price to that of ordinary grain.

Cromwell's officers about 230 years ago are reported to have been the first to introduce white oats into the Northern Kingdom; but in the then state of farming they must have degenerated much, for before potatoes came into general use that country was often reduced to a state bordering on famine. The first of the barley was also obtained from England, from which a renewal of seed was pretty often drawn, chiefly from Lincolnshire, but it did not quite sustain the purity and sleekness of its English progenitor for many years without a change. Bere or bigg, it may be noticed, was the old Scotch name for barley, whether having two or more rows in the ear. The two-rowed English barley was grown on low ground, and the bere or bigg on account of its early ripening quality was cultivated on the late and high-lying grounds. Scotland was thus supplied with improved qualities of wheat, barley and oats at first, and it still continues to draw large quantities of seed wheat from England. It is not now very common with the Northern farmer to renew his barley seed from England, but on the contrary the English farmer has of late years found it advantageous to procure his seed barleys from Scotland, North of the Tay. From being produced in a colder climate it is hardier and grows better in cold untoward weather, so in consequence the yield is often a quarter or a quarter-and-a-half more on the acre.

Some particular strains of corn often become established in a district and hold their own against all competitors, such as the "Tam Flulay" variety in the South West of Scotland. To renew seed in such circumstances a plan is sometimes had recourse to which is worth imitation, namely, to send that particular kind to a better soil and climate, to be grown for one or more years, and then returned to the old locality. The above named sort which is so well adapted for Ayrshire and the West, was sent by a friend to a leading farmer in Fife, and it came back after being grown there, with a much plumper kernel, fewer awns, and in short very much renovated. The same method was adopted lately by Mr. Bowie, a careful grower on the sea-board of Angus with the famous Cheyne barley. He sent it to a farmer noted for growing good seed in the fine county of Norfolk, and being returned after growing two years there it manifested a new vigour

and vitality. Such changes often do good service, but there are exceptions to all laws, for it is a fact that the plants of one country do not always thrive in another, although the plants of the latter may do well in the former.

The foregoing reports relate mainly to the Scotch counties and were we to quote those of the English counties of the same age it would be very much a repetition of the same things. Such of the county reports of England as we have seen which were published early in the century are less comprehensive but in them all the utility of a frequent change of seed is acknowledged. Mr. Batchelor, in his Report of Bedfordshire, published in 1803, says that many farmers preferred wheat that grew on land newly broken up from a state of pasture, although the corns of such wheat are commonly thin, with a more than ordinary deep line on the flat side. An experiment at Liddington is related for the purpose of discovering the effect of the quality of the seed on the growth of the crop. Four rows of wheat were planted in the autumn of 1805; two of the rows consisted of the plumpest grain, and two of the thinnest and most shrivelled. The growth of the thin corns showed an evident inferiority, both in the length of the stalk and the broadness of the flag; but the birds and mildew rendered it impossible to ascertain conclusively the respective yields. In the same report reference is made to a strain of wheat grown in the parish of Burwell, which was famous as seed, and commanded a price considerably above the average. It was called a brown wheat, that is, as I understand, a red wheat, and it possessed the good quality of ripening earlier than other kinds for two or three succeeding seasons by those who bought it for a change of seed. It appears to have been a favourite about 1840, when experiments were being carried out under the auspices of the Royal Agricultural Society of England, and it is one of the 24 varieties cultivated on the half-acre experimental plots at Rothamstead at the present day. Mr. Hancock, Don, near Sheffield, wrote in April last that he had cultivated this wheat for twenty years, or a variety that bears a very close resemblance to it. He also enclosed some ears, which look very common-place, but he obligingly tells us that he got a return of six quarters an acre some years, often five, and rarely as little as four. It stands up well in a climate by no means the best for wheat, and produces plenty of straw, which, from its firm heavy quality makes the best of thatch. He further remarks that in a wet late season it ripens earlier and better than other kinds, but in dry early seasons it is a little later, and that difference he attributes to its having strong roots, which go farther away from surface influences. Our correspondent concludes by saying that when good in quality and secured in good condition, it is liked by millers; but lately it has got shorter in the ear and less productive, owing, he supposes, to having been long sown without a change.

In the above Report the advantage of using large seed as compared with small is shown by an experiment, which is confessedly very incomplete, but indeed it is a great principle running throughout nature within certain limitations that "like produces like." The plant like the animal sucks its mother, participates in her disposition and hereditary habits, and seeks provision for itself when its mother's milk is exhausted. So the bigst grain having the largest pabulum is the best nurse of the embryo plant, and imparts the most strength to it before being thrown on its own resources. It is in accordance with common sense that a light, weak, and piny seed cannot produce a strong plant, or result in so large a produce as a large and sound kernel. The vegetable power of a seed does not indeed consist in the size and plumpness of the grain, but possessing as it does a full supply of food

it nourishes and gives an early start in growth. Whether the advantage of starting well be maintained in the after stages of growth depends upon other conditions. An early vigorous plant on a poor soil, or in cold, barren weather in early summer, is no gain; again, in fertile land that peculiarity of the plant's growth leads sometimes to the kneeing as well as the laying of the crop, or lodging, as it is called in the phraseology of the North. A friend who farms land in Renfrewshire purchased some fine Canadian oats from Warwickshire. The natural weight of the bushel was no less than fifty pounds, and when sown the stems came up strong and large in circumference, almost like willows; but the part of them that was grown on light land yielded little more than the ordinary seed corn of the district. On another field with a deep staple the crop was admired by everybody for its earliness and abundance. In the light land experiment a circumstance was noted about which there seems to be some misapprehension; the large kernel—and it certainly was large, for twenty of them were as heavy as thirty of the round potato oats—did not carry the plant well over the testing time, that is, when deprived of parental support—the stage of growth, or we might say the stage of little growth, which has been descriptively styled the *swoon*. This phase of the crops becomes very apparent in unfavourable weather by the colour and languishing state of the blades.

It is now a quarter of a century since Mr. Ronald, a West Indian merchant, residing in Glasgow, carried out a series of experiments to determine the comparative difference between large and small seeds in growing corn. As an example of one of his experiments, I quote the following from a friend there who was in communication with the gentleman. He bought some white wheat from Messrs. Cross and Son, such as they were selling for seed to the farmers, and he extracted about one-fourth of the whole by screening it with an appropriate size of mesh. The remaining three-fourths that did not pass through the screen were tried numerically against the small seeds, with the following results:—

Large seeds 400, produced 216 plants, and 1,572 ears, which weighed 106 oz.

Small seeds 400, produced 256 plants, and 606 ears which weighed 32 oz.

The respective weights include the straw of the ear, and the experiment shows an extraordinary contrast between the big seed and the little. The seed was dibbled at the rate of fully two pecks an acre, which we think would be from eight to ten seeds per square foot. The same respected gentleman made experiments with oats, barley, and other crops, and he affirmed that there was a gain of about 50 per cent. on the average. Unfortunately such experiments conducted on a small horticultural scale are rarely of great value, and seldom verified when carried out in the field. We may learn from these examples, however, the propriety of removing the weak and light grains from seed corn. There are, indeed, exceptions to this rule, for some farmers go to the light corn of the Fens for a change of seed, and that must surely be on the principle laid down by one experimenter, that an inferior kernel should be used to produce a superior, as when anything got to perfection it began to degenerate.

In looking into the experiments in the growing of seed corn that were carried out under the auspices of the National Agricultural Societies of England and Scotland nearly 40 years ago we find the names of a number of varieties of wheat that are not known now, which makes the experiments of much less account at the present day, even if they had been carried out more perfectly than they were. The late Mr. Patrick Shirreff stated in 1828 that there were said to be 320 varieties and sub-varieties

of wheat growing in Britain, and that scarcely more than a dozen of them were known to ordinary farmers. It would seem next to impossible to trace any appreciable differences among such a number; the nicest shades of distinction, and the imperceptible blending of those bearing the closest similitude, would baffle, we think, even a clever expert to define, and far more to assign descriptive characters or names to one-third of the number. The changes in quality, weight, shape, colour, &c., produced by soils, seasons, and cultivation are certainly numerous; but mere modifications so caused should be disregarded, and only those possessing separate peculiarities are in reality entitled to distinctive names. It must be remembered, too, that many varieties take local names, and these names are sometimes changed in other districts. Again some strains wear out of repute, and their names are lost, and varieties alleged to be new are often introduced, under the attractive names of "Prolific," "Non-such," &c., which on trial may be no better than other kinds.

Mr. Lawson, the well-known agricultural botanist, speaks of 179 varieties of wheat, in his "Vegetable Products of Scotland," a number, too, which is really far beyond the ken of the ordinary farmer. In an exceedingly good paper by Mr. W. W. Fyfe, on "Farm Seeds and Seeding," that appeared in the Journal of the Bath and West of England Society in 1863, the number of wheats in common cultivation are entered at fifty, in which thirty white and twenty red varieties are named. There are 25 varieties named in the recent catalogues of Messrs. McLean and Hope, of Edinburgh, and it may be inferred from the practice of wheat growing farmers that that number is sufficiently comprehensive. The varieties of oats and barley are much fewer. Oats are the leading corn crop in the "Land of Cakes," which is the true type of an oat-growing country, of which twenty varieties are named by the Edinburgh firm; but we believe it would be difficult to procure some of the rarer kinds if wanted for seed. Six kinds of barley are enumerated, but these may be reduced to three, or at most four, so far as their cultivation is concerned.

A good many of the varieties of the wheat and oats in cultivation can be traced to their origin in single ears or plants. These small beginnings are carried on carefully through successive reproductions, in the way we have already indicated till a large quantity is obtained. As showing in how short a time a good strain of wheat may be propagated, I quote a letter of Mr. Jonas, from Vol. III. of the Journal of the Royal Agricultural Society. The increase and exact quantities grown each season were as follows:—

	Produce.	
1838	Dibbled in 50 kernels (30 of which only grew)	14 $\frac{3}{4}$ oz.
1839		14 $\frac{3}{4}$ bush.
1840		45 bush.
1841		537 bush.

The grower remarks that had the crop not been assailed with red-gum he would have had 100 bushels more. This was a white wheat and got the name of Jonas's Prolific, and the acreage yield in 1842 was 43 2-5 bush., while the four varieties grown alongside, all subject to precisely similar conditions, come short of that return by fully 10 bushels. Mr. Sherriff's testimony is equally encouraging, and he says it is soonest accomplished by thin seeding, each kernel occupying from 9 to 12 inches square. Seldom will a third reproduction from a single grain be sufficient for field practice on a considerable scale, but the yield from the fourth reproduction may vary from 25 to 80 quarters. The system of transplanting has also been employed for the rapid multiplication of special sorts. When the plant appears above ground it

begins to grow out new and distinct stems and a corresponding root-bud below the ground is formed for its nourishment. These plants are taken up, and the stems are singled out and replanted.

We said that the origin of many of the varieties is known, and I have already referred to the Blainie oat, which is among the earliest. The potato oat, which still keeps its repute, was picked up in a potato field in 1788 by a servant of Mr. Jackson's, of Arkleby, Cumberland, and after its introduction into field culture it nearly supplanted the Polands and Tartarians. The Sandy oat was discovered by a boy of the name of Sandy Thompson on a recently formed bank of soil on the farm of Noth, in the parish of Rhyrie, in 1824, and it constituted a hardy, well-established kind. It resembles the red oat which was introduced into the North from Peebles in the end of last century, and may claim to be a descendant. The Chevalier barley is a remarkable instance of a fine strain of corn proceeding from one ear. Dr. Chevalier, in the parish of Debenham, seeing an ear of good appearance in 1820 picked it up, and subjected it to garden culture. Against 1825 he was by successive growing able to plant half-an-acre in the field; it took a pre-eminent position both as to quality and produce over the common sorts from the very beginning, and now it is doubtless the most extensively cultivated barley in Great Britain. In wheats the "Hedge" wheat, propagated by a Mr. Wood, of Sussex, in 1790, is perhaps the earliest strain whose origin is traced. The "Thin-chaffed White" wheat was originated from a few stalks growing on a dry hedge bank by an East Lothian farmer, and it has stood the test of nearly fourscore years. The Hopetoun wheat, which was found by Mr. Shirreff in 1824, was a most extraordinary ear. It originally contained 102 grains, but 3 of them dropped off, and the remaining 99 were carefully multiplied. The original ear after the seeds were removed was sent to the Stirling Agricultural Museum. To Mr. Shirreff the wheat-growing farmer is also indebted for Mungoswells wheat, which was discovered a few years anterior to the last named. It was one plant containing 63 ears, which yielded 2,473 grains, and it was the first of Mr. Shirreff's work, producing 42 quarters the fourth time that it was harvested. The Featon wheat was found growing on three ears from one root by the late Mr. George Hope and his father in 1835.

The late Mr. Patrick Shirreff bears a name that has now become a household word in the cereal department, for he spent a long life in their improvement and in the introduction of new varieties. He began in 1819, and his labours only terminated with his declining health, a period considerably over half a century. Besides his contributions to agricultural journals he wrote a concise little volume on the "Improvement of Cereals" in 1873. It was published for private circulation among his friends, and it contains an epitome of his experiments and investigations. We were favoured with a copy from him, and in scanning its contents we find a good deal of interesting and instructive matter. New varieties of cereals, he remarks, are obtained from three sources—from crossing, from natural sports, and from foreign countries. Sports are defined to be plants differing from the common type which appear among cultivated crops, and they are due to the air and insects. From sports have sprung many of the varieties which are found in different climates and countries throughout the world, and they are the gifts of nature to man. The effects of sports are similar to those of artificial crossing, and if constant on reproduction they constitute a new variety.

Mr. Shirreff describes the process of hybridising wheat as follows:—"The crossing of cereals consists in fecundating the stigma of one variety with the pollen of another,

and operations are commenced by shortening the ear of the seed or female breeder a day or two after being clear of the sheath. Every alternate spikelet is removed, and the two outside capsules only are left on a notch. An ear so prepared may consist of four or six notches with eight to twelve capsules, and the mutilations which the ear has undergone facilitates the after manipulations, and prevents the upper florets from shedding their pollen on the florets under operation. An ear or two of the pollen in the same stage of advancement are brought forward, and the chaff scales of the female breeder are opened, then the anthers are removed out of the capsule, and the anthers taken from the female breeder replace them, while the closing of the chaff scales upon them by a slight pressure of the fingers concludes the operation. In removing the anthers of the seed parent care must be taken not to break them, lest the pollen may fall upon the stigma, and thus lead to failure. Little nicety is wanted in changing the anthers of the pollen parent, as the pollen dust retains its fertilising properties for a considerable period, and the bruising of the anthers is not unfavourable to fecundation. Before leaving the scene of operations the ear or ears operated on ought to be fixed to a stake and enveloped in wire gauze, which will effectually protect the plants from being ruffled by one ear rubbing against another in case of wind, and as a guard against birds."

We are farther told that the seeds obtained by crossing are generally little better than abortions in appearance, and the properties of the plants arising from them are only ascertained after two or three reproductions. In Mr. Shirreff's first trials he was by no means successful, and between his first and second periods of hybridising nearly twenty years elapsed, it being only in the year 1836 that he engaged systematically in the work. At an advanced period of his life he tried the budding of a young shoot of one variety upon the stool of another, and he ascribed his non-success to the unsteadiness of his hand.

The most successful cross-fecundation of Mr. Shirreff was the production of "King Richard," which was obtained from fecundating Shirreff's bearded white with pollen from Talavera. From the fourth reproduction an ear was selected from the crop with red chaff, and from its seeds was raised a new variety, called "King Red Chaff White," which he regarded as a good sort. But his chief success was in propagating from natural sports, and in both departments he earned honours and gained a number of prizes. Among other wheats, he brought out Shirreff's Bearded Red, Shirreff's Bearded White, and Pringle's White. The Early Fellow, Fine Fellow, Long Fellow, and Improved Early Angus, are well-known varieties of oats brought out by him, and we notice that some of them took a leading position at the seed competitions in the north-eastern counties of Scotland in the spring of this year.

Mr. Shirreff showed no ambition to shine in borrowed plumage, for he generously complimented Mr. Raybird on account of first offering a hybrid wheat produced by artificial fecundation to the notice of the British farmer. It was obtained by fertilising Piper's Thickset with pollen from Hopetoun wheat, but unfortunately the coarseness of the grain was against its favourable reception. Agricultural Societies, he says, should aim at the following points:—

1. To ascertain by experiment the variety best suited to the district.
2. To give premiums for the most genuine crops, to be inspected in the first place in the field.

3. To give premiums for new and accredited varieties.

In the concluding paragraph of this beautiful presentation volume our author recommends the artificial crossing of Victoria bere with Chevalier barley, in the belief that the stout straw and early ripening of the Victoria and the fine grain of the Chevalier would be a great desideratum. He farther adds that the general improvement of the cereals would lead in all probability to the enlargement of the corn-growing area of Britain, if not to an amelioration of her whole agricultural system. With earlier cereals than are now grown their cultivation would spread to higher altitudes; as the surface suited to the growth of wheat increased so would that of barley, while the cultivation of the hardy oat would be found encroaching on the home of the grouse and the deer.

In the department of wheat improvement Mr. R. Baulam has done good service in bringing out the Browick red wheat, and by repeated selections keeping it up to a high standard, for 34 or 35 years. The secret of his success is the starting anew from the best developed and formed ears he can obtain, confining himself to every second, third or fourth year according as the season brings out a high quality. Browick is admitted to be among the most robust of wheats, as regards its natural constitution, which is palpable in the size of the kernel, formation of the ear, and strength of stem, and to these qualities is doubtless due its comparative exemption from mildew, and other pests. It has outlived the rise and fall of many varieties, and it still maintains all the pristine bloom and vigour of youth, in complete purity, for he grows no other kinds and he has his own thrashing machine, so that that fruitful source of mixing is avoided.

In the early experiments that were carried out under the auspices of the National Societies of England and Scotland in the growth of corn, the results in many cases were disappointing and like what we read of Shreff's trials in some seasons they were entirely frustrated by adverse weather, insects, and vegetable pests. It must be confessed that many conditions are involved in trials from which sound deductions can be derived: there is not only the shades of difference in the same varieties of corn, the kind of land on which the seed has been grown, the constantly varying seasons, and the multitudinous inequalities and varieties of soils, all potent elements in the solution of the problem, and besides these a second and even a third reproduction in successive seasons are wanted to give reliable results. The object that both the National Societies had in view in instituting prizes for seed corn was to ascertain by trial the yield of corn (which was mainly confined to red and white wheats) the produce of the respective countries, and which shall be found best adapted for particular soils and climates. Part of the seed was of such kinds as were selected by the judges previously, and it was arranged to compare the results with the best varieties then generally cultivated, or what was best known in the respective localities.

In the first volume of the *Journal* of the Royal Agricultural Society of England there appears a most excellent report based on what seems to have been a carefully conducted experiment of the growth of sixteen varieties of wheat by the late Mr. John Morton. By means of certain appliances the grains were put in singly at regular distances of three inches by six to a depth of two inches. Besides a number of minor details, the number of ears in each square foot and the produce and the weight of the straw and the roots were given. As an example of the experiment we insert the particulars of four of the

varieties which are best known at the present, namely, Golden Drop, Hunter's, Talavera, and Rivett's.

When planted.	Name of Wheat.	Whence obtained.	Number of seeds planted.	Loss from frost, &c.	Parts or roots in 99 square feet.	Heads of grain in 99 square feet.	Number of ears in square foot.	Weight of grain, 99 square feet.	lb.	Weight of wheat per acre.	Number of bushels (44 lb. weight per acre).	Length of straw.	ft. in.	Weight of straw, 99 square feet.	lb.	Weight of straw per acre.	Weight of roots, with 2 inches stem.	lb.	Weight of roots per acre.	Average number of heads per foot.			
Nov. 13.	Golden Drop.	Pusey, Berks	792	291	501	3542	25	67	26	2	8	463	5	6	154	60	0	3	54	20	2	14	5
"	"	Hunter's	792	237	519	2028	30	42	16	2	16	27	5	6	124	52	0	10	5	19	2	6	4
"	"	Talavera	792	434	358	1956	29	51	20	2	14	36	5	8	142	56	3	14	54	21	2	12	54
"	"	Rivett's	792	528	261	711	7	33	13	0	24	23	6	0	84	31	2	2	3	11	3	4	24

But for the smallness of the scale on which it is carried out the above experiment is very complete and instructive. The hardness of the varieties, unless for the action of slugs and insects, may be fairly deduced from the plan, and also the property of tillering. The loss of plant with the Rivett's, in whatever way explained, renders its comparison with others quite futile. The experimenter states that the difference existing between the several kinds shows that any variety is capable of improvement, and it is also added that the finest and plumpest seeds were used, which being selected for successive cropping would afford corn of a more productive and valuable kind. If the respected writer means the selection of the finest and plumpest seed from the heap of thrashed corn, for the amelioration of the seed, rather than the picking out of the best ears, his opinion is not in accordance with the accepted practice of the present day.

On the year following the date of the above trial an experiment in wheat-growing is reported by Mr. C. Hillyards, of Thorplands, which deserves a passing notice. Two sorts of wheat were used that had been selected at the Oxford Show, the one a brown wheat from Mr. Fisher Hobbs, Essex, and the other a white wheat from Mr. Sewell, of Bookham, Surrey. These were grown against four other kinds on a good loamy soil after mangel, and sown at the rate of two bushels an acre. Very satisfactory crops were obtained, as is seen below.

Name.	Weight	Price	Bush	Price
	per bush.	per qr.	per acre.	per acre.
	lb.	£ s. d.		
Essex White	64	64s.	40	15 17 0
Surrey White	64	66s.	36	14 14 0
Clover Brown	63½	63s.	40	15 13 6
Snowdrop White	63	64s.	39	15 9 0
Barwell Brown	63	62s.	45	17 12 0
Whittington White	62	62s.	36	13 16 9

Mr. Hillyard's report contains full descriptive particulars in regard to wheat-growing generally, and he holds that brown Lummas wheats, such as the Barwell, are best suited to loamy soils. For security against a severe winter he says that wheat should be drilled in four inches deep, as frost does not kill the plant if secured under a good covering of mould. It is stated to be impossible to make light soils too solid for wheat, that wheat is expected to be ripe in six weeks from its blooming, and that, should the weather be old or boisterous at that time, the crops will be more or less curtailed. The above experiment shows how much the acreage produce varies with different kinds of wheat, but in fact like discrepancies occur in all such trials, although grown under precisely similar conditions. The Barwell wheat shows an excess of nine bushels an acre above the Whittington, which in money value amounts to nearly ££ an acre. Here there is a great amount of difference between the most prolific and the least prolific kinds, which shows in bold relief the value of suitable seed. Eight, ten, and twelve bushels of difference on an acre are quite common, and surely, in the prosecution of systematic experiments some more light might be thrown on this matter as a guide to practical agriculture. There are many disturbing causes affecting the investigation, and wheats as well as other corns transmit the influences of soil and climate to succeeding crops, and the same variety repeated on a similar soil may not be much of a criterion in the pursuit of sound deductions. There is, however, no way of estimating corn but by comparative trials. There is, indeed, a natural tendency for some particular sort to establish itself in a district; but sooner or later it is found to degenerate, unless by a change of seed or by other means it is renovated and restored. The subject altogether is a large one, and offers large scope for investigation that may well be considered worthy of the attention of the practical and experimental agriculturist.

Forty years ago Mr. Russell, of Beauston, gave it forth to the world as his opinion that the non-improvement of cereals was owing not so much to the want of attention to the subject by the farmer as to its injudicious application. In their eagerness to procure some new variety on the eve of harvest, no attention was given to the improvement of existing kinds. There is no end of varieties that have been raised from a single ear that have claimed attention for a while and then sunk into oblivion; but Hunter's wheat, that esteemed variety which was raised from one plant by the farmer of Tynfield at the beginning of the century, shows no amelioration, for the simple reason that it has not been subjected to any system of judicious improvement. The laws which govern vegetable life are intricate, but it is in the husbandman's power to make a

skillful selection of ears, and by so doing he will exercise a beneficial control over the produce of the following year. From these again let the ears combining the most valuable properties be selected and so on for a series of years, and the result, he adds, is sure to be successful.

Mr. Hallatt has distinguished himself in this line of improvement. He chooses a promising ear of wheat, plants all the seeds, takes that plant of the series which is the best, chooses its best ear, and after a series of harvests obtains the ultimate produce, which, being rapidly multiplied, is sold as pedigree seed. The table which he publishes to illustrate the importance of each additional generation of selection is very striking. The original ear of 1857—4½ inches long, containing 17 grains—produces an ear 8½ inches long containing 123 grains in 1861, by selecting the finest ear in each re-production, while at the same time the number of ears on the finest stool increased from 10 to 52. Such an extraordinary increase by careful growing and selection could not, one would think, be obtained but only in exceptional cases, but the principles on which he proceeds are undeniably sound. That the different kinds of corn vary in quality and productiveness is palpable to the most common observer, and it appears not less obvious that "like produces like" in a greater or less degree, but we believe that corn, however much ennobled, has a tendency to degeneracy unless the strain is kept up by selection.

A remarkable instance of the difference between large and small seeds in turnip cultivation appears in a paper that was published in the Transactions of the Botanical Society of Edinburgh last year. The experimenter, Mr. Stephen Wilson, of Summerhill, says that in seven field trials there was a gain on the average of 19 per cent. in weight of crop in seedling with large seeds as compared with small. Both kinds were taken from the same parcels and separated by a sieve, but no shelled seeds were used, about 100 of the small weighting 60 of the large. The heavy and fine seeds are thus shown to produce the largest bulbs; the result is the more surprising in consequence of the diminutiveness of turnip seed at the best, and the trifling difference in the weight and substance of the seed. From this it may be concluded that the *vis vite* resides in the germ, and the zerm is more developed in the plump seed. The fact is brought out, too, by these experiments that many seeds will only produce a small bulb, however much clear space may be allocated to them. To give such plants a large area would therefore be a waste of ground, so it is to no purpose that chemistry put manure to the root of a seed which is sterile in the property of bulbing, and certainly the botany of that seed could it be fully read would tell the tale, for the problem seems to be a botanical one.

The question how best to carry out the improvement of cereals under the auspices of the Royal Agricultural Society or other Societies is easier put than answered, for at a former period when the National Societies of England and Scotland carried out a system of prize-giving for seed experiments, the results were not what could be desired. It is further obvious that the mere offering of premiums for samples of grain, when the quality and produce only are regarded, as is practised by several Societies at the present day, will be of little service. An able writer on "Farm crops and Cropping" in *The Journal of Agriculture* remarks that, while almost everything is noted and commented on in agricultural newspapers and publications, there is still a want of experiments with seed corn, and suggests the necessity of Agricultural Societies taking up the subject, in order to set at rest, so far as they can be set at rest, some of the disputed and uncertain points in that department. This writer, however, does not attempt to unfold any practical plan for the purpose; but surely some effective, profitable, and useful scheme could be

devised. It is a complicated subject, soil, locality, climate, and the peculiar and varying nature of seasons and corn and cultivation having all more or less to be taken into account, and besides, the experiments to be of any value must be carried over a succession of seasons.

The relation of the seminal to the coronal root in cereals is a point seldom adverted to that might receive some elucidation. Some may be unaware that a second set of rooting from a knot at the surface of the ground is formed, and that what may be called the navel string from the seed rots away, and the first rooting also decays. In case of a plant from seed springing up from very cloddy open ground new roots spring from more places than one of the strong integument that connects the crown with the seed root. In the case of the seed being put somewhat deeper than ordinary, the braid above ground grows taller and slenderer, and apparently more delicate than when the seed is near the surface. Again, in the case of the seed being dropped on the surface with scarcely any covering, the crown or stool looks as if it were of a piece with the seed and its rootlets; and the opinion is common that in light soils and dry seasons the roots springing immediately from the seed when at a fair depth foster the growth of the plant, and help to resist the drought. It is found that the period when the seminal roots cease to supply nutriment the growth of the plant is governed much by the weather. Of en when corn is passing through the *swoon* the plants become sickly, and there is a loss of plant on weak and poor soils.

The nearer different varieties of corn are together in character and position, they are the more liable to become more or less blended and crossed by natural agency, and, as has been already mentioned, the nature of the soil in continued cultivation modifies the colour and figure of some varieties of corn. A tree, wherever grown, will generally betray to an observing eye something of the conditions of climate and other circumstances of that locality, sometimes even in deformity and distortion, and when transplanted retains for a longer or shorter time traces of its former configuration and *habitat*. The white Kentish wheat when grown a few seasons on the light sands of Norfolk changes into the red wheat of that county, and in that way becomes deteriorated. Such matters are disturbing elements, and naturally raise conflicting views in sowing. Thick and thin seeding, the period of sowing, and the change of seed are all matters on which some would be thrown if experiments were carried out in a judicious way, whereas isolated and personal efforts would be vague and unsatisfactory to a greater or less degree, and can only be solved by an extended series of experiments. One authority says take your seed corn from good land in an early climate, and another not less accredited authority of long experience asserts that it is more profitable to procure seed from a later climate than that where it is to be sown. Both these opinions are true, but the question is under what conditions are they both found to be conformable to fact.

The problem of thick or thin seeding is only solvable locally by personal experience, and poor soils very generally get more seed than medium and fertile land. This seems opposed to common sense, and it is plausibly agreed that if ten plants of corn require a square foot of land to perfect their growth, twenty plants would starve if confined to that area, much the same as if three persons were limited to the food that only suffices for one man. The fact is, however, that the plant does not tiller or stool on poor land, and where the grain produces one stem instead of four the land in consequence must have four seeds instead of one.

At the time when the Royal Agricultural Society of England, in the early years of its existence, was offering prizes for seed growing, the experimenters were requested to notice the following points in their reports:—

1. Preparation and quantity of seed, time and method of sowing, relation to preceding crops, and nature of soil.
2. Power to withstand severe winters, in case of wheat.
3. Time of flowering and maturity.
4. Tendency to degeneracy and liability to disease.
5. Amount of produce in grain and straw.
6. Quality of grain or quantity of bread.

The experimental plots were not to be less than a quarter of an acre. Respecting barley and oats their power to withstand drought and extreme heat were to be noted, as well as the malting quality of the barley.

As to a change of seed, the variety used is a great consideration, for certain soils and districts are more suited to one variety than another. The best changes from different soils is still open to more precise determination, from clay to chalk, peat to loam, or sand to gravel or *vice versa*. There appears little doubt that seed corn that has been grown on virgin soils or land recently broken up from permanent pasture, has a considerable virtue in it, although it may be thin and diminutive. Potatoes, in something the same way, when grown on moss land or land that has been for some time down in grass, are valued for seed, being less liable to disease; but there is a curious phase with potatoes that when grown for some seasons on newly reclaimed moss the tubers become *blind*, that is, they form no eyes, and thus they become useless for seed. The constancy and persistence of some varieties of corn, while other kinds cease to be known, is a good trait of character; but there are many points of importance in seed growing besides those referred to in the foregoing pages, and, whatever difficulties may have to be encountered, were a system of experiments engaged in by the Royal Agricultural Society, we cannot doubt but that good service would be done to agriculture.

"The search itself rewards the pains,
And things well worth his toil he gains."

According to one high botanical authority, a good new strain of wheat, or a revival of some of the old-fashioned ones is much to be desired, and may certainly be arrived at.

A number of Agricultural Societies in the North offer prizes for the best seed corn annually before seed time, and generally the stocks that are brought forward for competition are sold by auction after the awards are declared. These proceedings are serviceable, and it often occurs that the purchasers of prize lots come in for a share of the honours in the succeeding year. I only know one Society where grain crop competition is in use. The crops are judged before harvest, and the prizes are determined by the estimated produce and quality of the crops and the cleanness of the land. The latter system, were it not limited to the corn crops only, is the same as the prize farm competition, and is not directly calculated to improve the strain of cereals. As to exhibiting seed corn for prizes, it often turns upon the thorough dressing of the seed, and those who have good land and good dressing machines rarely fail to carry the day, so unless better schemes are devised the improvement of cereals will continue in the hands of a few enterprising individuals in time to come as it has done in the past.

NOT AT HOME — A young woman, evidently "from the country," was seen standing with a very perplexed air at one of the lamp-post letter-boxes. She was observed to knock several times on the top of the iron box, and, obtaining no response, she passed round to the opposite side, and raising the cover of the slit in which the letters are placed, applied her mouth to the aperture, and called out (or in), "Can ye let me have a postage stamp, if ye please."—*Canada Globe*.

L I F E I N N E W Z E A L A N D.

No. II.

EN ROUTE AT MELBOURNE.

In my last letter (*Farmers' Mig.*, p. 145) I described the passage out to Melbourne. As may very naturally be supposed, all the passengers of the good ship "Essex" were early astir next morning, the Colonials being anxious to get on shore to meet their friends, and the new-comers to get a sight of the land of their adoption. As they trooped on deck a busy scene presented itself to their admiring, and in many instances astonished, gaze; great ships and steamers of enormous bulk, from every quarter of the globe, lined the wharves, containing within their vast recesses every conceivable commodity for domestic, commercial, or agricultural use, the business of loading and unloading going on unceasingly, the wharf being covered with a net-work of railway, over which the engines were continually passing and re-passing, the trucks being loaded or unloaded direct into or from the ships with the least possible expenditure of labour. Dropping on such a scene so suddenly after four months' imprisonment on the lonely ocean, with nothing in sight but sea and sky, the bustle and stir became almost bewildering, and created an impression which most of the people will be unlikely to forget as long as they may live. In a short time our ship was again taken in charge by the pilot, and with assistance of the tug was safely berthed alongside the Sandridge pier, preparation for the discharge of the cargo beginning to be made by the stevedores, who here are a numerous, powerful, and rather respectable body of men, before she was lashed to her moorings. Every one having been busy packing for the previous couple of days, there was now no delay but to step on shore, and those who had been so long companions and associates began to say farewell, which a good many did most regretfully, to the good ship, every sheet, spar, and corner of which being so familiar to them as to begin to look like home, and to their fellow passengers who were like old friends, but the time for parting had come, and however reluctantly the word might be said, it now became unavoidable. All who had come on board in good health left in the same state, and those who had taken the voyage solely for their health were at least no worse on landing, and were in high spirits, confidently anticipating, if not a perfect cure, at least a large amount of benefit from the really, at that season of the year, delicious climate of Victoria, the days, although occasionally almost unpleasantly warm, being invariably followed by delightfully cool and refreshing nights, which induced a state of the most profound repose immediately on retiring. On subsequently meeting some of them they were enthusiastic in praise of the climate, and of the charming scenery of the Yarra-Yarra, a few miles above the city, where they had arranged to stay for a few months, expressing themselves benefited even by the few days' residence, and delighted beyond measure at the abundance and cheapness of all the finer varieties of fruit, grapes particularly, which were a marvel of cheapness, and became thus a great source of comfort and salace to an invalid. All our own company of sixteen landed in perfect health, our little twins included, who were eight months old on beginning the voyage, and had just passed their first birthday a few days before sighting land. One of them was rather delicate in the beginning, the doctor looking somewhat doubtfully as to his chance of seeing the end of the voyage, but he did, and was the pet of the ship, every one being anxious to have him to nurse.

On account of its being a matter of very great interest to many who contemplate a lengthened sea voyage, I may mention that these infants were sustained throughout this long period entirely on preserved Swiss milk, as although there was a cow on board, it was found, before the first week was out, probably from some peculiarity in the feeding, that the children were not thriving on her milk, and they were at once changed to the Swiss preparation, of which we had an abundant supply, and on which they did remarkably well, and are now in fine health, and thriving rapidly. A few hours after landing saw our goodly company of passengers scattered to wide distances, some having left immediately for Sydney, others for Adelaide and Perth, some for Tasmania, and others went into the interior by rail, comparatively few remaining in Melbourne, which at that time was rather a difficult place to obtain employment in, and has been gradually getting worse, so much so that relief works have had to be organized for the unemployed by the authorities. Handy farm lads, however, can at all times obtain employment, ability to milk cows being a high recommendation not only here but in all the colonies, and this English farm men servants are generally good at, much more so than the Scotch and Irish, milking being mostly done by women in both countries. Such men of this stamp as we had on board, got employment at a pound a-week, with board and lodging, at their first visit to Melbourne, returning to the ship in the highest spirits, presenting a great contrast in this respect to those who had come out to seek employment as clerks or shop assistants, of which we had a goodly proportion, openings of this kind worth having being few and far between, but of this more further on. Passing along the wharves for the first time, strangers are struck with the great care and regard for life displayed by the "Harbour Board," as underneath every gangway or plank leading from the ship to the shore there is a strong net extended so that no one slipping from the plank can by any possibility fall into the water, the net receiving him uninjured, and there he may possibly lie, as in the case of a drunken sailor, soundly sleeping, until seen and relieve^d by his comrades in the morning. So important is this precaution considered, that it is enforced by a very strict bye-law, and its neglect punished by a heavy fine. This would be an admirable institution anywhere, and, if universal, would save many lives, but in the southern seas it is an absolute necessity as a protection from the sharks, a shockingly cruel death being almost inevitable if a man has the misfortune to fall into the water, these ferocious scavengers of the deep being at once numerous and formidable. In like manner all the bathing places are protected by piles driven in pretty close and surrounded by wire netting for the protection of bathers, any one going in to bathe in deep water in an unprotected part of the bay or mouth of the river doing so at the peril of his life, and is guilty of a most foolhardy and senseless act by so doing, even if he should escape for the time being. In getting fairly on shore, to have a closer look at the land and its surroundings, we found the town of Sandridge to be truly named, as for miles along the shores of Hobson's Bay all is one vast sandy waste, sand, the particles of which are as fine as snow, white and glittering in the sun, and that drifts and heaps up exactly like snow when

the wind is at all strong. Far as the eye can reach all is a desert plain, scarcely relieved by a sign of vegetation, a few solitary and stunted gum trees here and there, or some rushes or other coarse water plants in the centre of a lagoon being all that is to be seen, and these at very wide intervals indeed. Here and there a deserted house would be met with, the walls nearly hidden in the sand-drift, and even where inhabited the all-pervading sand had drifted up on the blank walls of stables and other outhouses in such a way that one could walk up the sandy slope to the top of the house with perfect ease. Large numbers of milch cows strayed about on this dreary waste with no apparent purpose to a stranger but that of taking a good deal of exercise, and were by no means a poor sort of cattle, but, on the contrary, of good bone and substance, and their condition showed them to be well fed and carefully attended to in every way. I was informed by a cowkeeper, with whom I got into conversation (and who, by-the-bye, had been a printer in London many years ago, and came out here for his health, and turned to cowkeeping at which he had been very successful, and earned a very respectable living) that at certain seasons of the year the Lagoons afford a good deal of rough herbage, which the cows for want of better eat greedily, the great distances they have to travel to procure it being the only drawback. All the cows belonging to different owners, and these were numerous in the locality, are collected into one "mob," the term here given to any large number of animals, whether cattle, horses, or sheep—not nearly so nice a name as "herd" or "flock," however—are under the care of a herdsman, or care-taker, appointed by the Corporation, who collects them in the morning, attends to them during the day, and brings them home in the afternoon, each lot turning in to their own yards as they pass on. Of course all such stocks of cattle depend principally on the food they get in the house, wholly so, in fact, as far as the production of milk is concerned, grains from the Melbourne breweries and distilleries being the leading article of food; bran and hay is also used, the latter being of a description peculiar to all the colonies, and here seen by me for the first time, viz., oats cut green, or just when the grain is formed, and is highly relished by all animals. It is mostly chaff when given, and is sold in bags, the cutting up by steam or other machinery forming a business by which, in connection with some other branches of industry of a like nature, such as crushing and grinding corn for feeding purposes, many an industrious man makes a very independent living, and needs call no man master. Passing through North Sandridge by rail, which has now become so extensive as to be simply a suburb, we reach the parent city of Melbourne, and, although somewhat prepared for a surprise by what we had seen of it in the distance as we lay at the top of the bay, our astonishment and wonder at the extent, regularity, magnificence, and solidity of this wonderful place, which has been the creation of somewhere about forty years, were almost beyond expression. Laid out on a regularly arranged plan, with all the streets perfectly straight, and at right angles to each other, of great breadth, beautifully paved and macadamised, every possible facility is afforded for the despatch of business, and the street traffic goes on smoothly and without interruption, the breadth of the streets permitting a higher rate of speed to be maintained with all vehicles, and with but little danger of accident. The enormous extent and grand architecture of the parliamentary and municipal buildings, post-offices, banks, and many of the leading shops and warehouses is something truly wonderful in so young a city, and they would even in London or any of the great centres of commerce in the Old Country be sources of admiration, wonder, and attraction to visitors. The Museum of Art and Industry is also a noble pile of build-

ings, and the grounds surrounding it beautifully laid out and kept most tastefully, the whole being well worth a visit or series of visits if time permitted as the stranger gets here an excellent lesson regarding the industrial resources of the colony, he will find his ideas on this subject wonderfully expanded even on his first visit; more information, in fact, will be gained in a few hours by quietly looking over the collection of minerals (which by the way is exceedingly rich) and manufactured goods than could be acquired by years of observation and experience amidst the pursuits of daily life, and many valuable hints picked up, which may be turned to good account in settling down to a particular branch of industry. This view seems to be entertained all over the colonies, and the whole range of subjects comprised within the terms art and industry, invested with extraordinary importance, every leading town possessing a museum in which the natural products of the district, province, or country are prominently displayed, both in a raw and manufactured state, as well as many objects of curiosity and interest in connection with the previous history of the colony and its inhabitants. The contrast between the dwellings, clothing, utensils, and weapons of the latter and those of the present day is sufficiently striking, as may well be supposed, to form a speciality in nearly all of them, and visitors for the first time linger long over the quaint carvings, wooden spears, flint hatchets stuck into a cleft stick and fastened with wonderful firmness and precision with a piece of string, villainous-looking knotted clubs, the coarsely-woven blanket, and the rudely-formed and stupid-looking idols of the aborigines.

The butchers' shops of Melbourne are, to all classes of strangers, but especially to those who have been connected with agriculture in the Old Country, one of its most interesting sights, and one is struck with astonishment at the weight of the carcasses and the extraordinary amount of fat, which fills up not only the inside but covers in the richest profusion every part of the animal—literally, the suet hangs in clusters. The great number of carcasses, both of beef and mutton, hanging up at one time shows that the consumption of meat must be both large and universal, and that the population must be unexceptionally a meat-eating one, else so many shops as are here to be seen could never get rid of such vast quantities of meat in anything like time to prevent excessive loss by tainting in such a warm climate. The splendid quality of the meat, the neatness of its arrangement in a semicircle round the shop, so that its contents could be taken in at a glance, the intense cleanliness which pervaded its every part, the many farms in which the material meat was made up for sale—from the steamed-minced sausage to the baron of beef—the smaller articles forming a special display in the window—all combined to form a picture on which the eye delighted to dwell, and which served as a splendid illustration of the capabilities and resources of the New Country. Here, also, we first became practically acquainted with the low value of all kinds of butchers' meat in the colonies, beef, mutton, and lamb averaging scarcely threepence a pound to the consumer, while at the boiling-down establishments legs of mutton could be had in almost any quantity at a shilling each. With such prices it is no wonder that the settlers of Victoria, New South Wales, and New Zealand take a deep interest in all refrigeratory processes, and look very anxiously forward to the time when, with the aid of science, the general principles on which depend success in carrying meat long distances and at a high temperature, will become more fully developed, and enable them on an extended and economical scale to seek a market in the thickly-populated towns and cities of the United Kingdom. Unlike London, or other old-established towns, Melbourne

presents few historical objects possessing much of interest to visitors, or monuments to departed heroes or statesmen whose lives were spent in promoting the welfare of their country; but there is one monument to departed worth, perseverance, and indomitable courage which is well worth a visit; this is the memorial to the celebrated Australian explorers, Burke and Wills, the memory of whose daring feats in penetrating the hitherto unexplored interior, amidst the most frightful hardships, in which they eventually lost their lives, perishing in awful misery for want of food and water, is thus perpetuated. The figures are understood to be singularly life-like, and form a striking group, in probably the most commanding position in Melbourne. The history of the expedition which proved so fatal to these brave men is given in *relievo* round the pedestal, showing the start with Burke at its head, and waggons, horses, and other beasts of burden together with a goodly company of drivers and other assistants, down to the time when miserably broken down in mind and body they lie down to die, the whole forming rather a painful picture, so melancholy and depressing even to look at that few would care to dwell any length of time on the study of its heart-rending details. With so much to admire in Melbourne it looks almost out of place to particularize a matter which strikes a stranger as being most unsightly, viz., the conveyance of the sewage in open channels on the surface of the streets, an arrangement which is at once unsightly, unpleasant, and inconvenient. All the vehicular traffic must of course dash through the stream, and as it could not be stepped over by foot-passengers wooden bridges are provided at every crossing, so that they may get over dry-shod.

I visited the Chinese quarter, and found this remarkable people living in the heart of Melbourne as distinct as if they were in Canton, their peculiarities of dress and general habits being faithfully adhered to. Every house appeared to be a workshop, and the inmates all busily engaged, principally it seemed to me in cabinet makers' work, at which they are adepts, but the narrow streets in which they live were not very inviting, and most people get through them as quickly as possible, the inhabitants first of all appearing to have a decided objection to being stared at, or made objects of curiosity, and secondly, I suppose, from their habit of preserving all secretions most rigidly to dispose of to their countrymen outside the city who grow vegetables, &c., the exhalations are not always of the most salubrious character, and were highly suggestive of being a source of anxiety and trouble to the Sanitary Board.

The horses of Melbourne are simply grand, and for whatever purpose well kept, their appearance whether in dray or carriage being all that the most fastidious could possibly desire. For slow work the Clydesdale is decidedly the favourite, judging from the many splendid specimens of this breed to be seen on the streets, and large sums are annually expended, principally, too, by a very humble class of men, who have made a little money by tanning industry, and who make this business a speciality, in importing stallions of this breed from Scotland. I happened to see four magnificent animals land from the s.s. Somersetshire, and they came across the gangway rearing, and prancing, in as noble condition, and as fine spirit, after their lengthened confinement in a narrow horse-box, as when they entered the Glasgow showyard, and in quality, size, and stamina seemed well calculated to prevent deterioration of the breed which they represented in Victoria. Carriages, cabs, and coaches, of which latter, notwithstanding the great extension of railways there is still a large number, are all remarkably well horsed, the animals being mostly three-quarter bred, and are famed for speed and endur-

ance, qualities for which Australian horses generally are distinguished to an eminent degree, climatic influence and the highly nutritious quality of the herbage on which they are reared having a good deal to do with their development, but at the same time it is easy to see that the sires used have been of pure descent, and of the very best strains of blood in England or elsewhere.

In visiting the places of interest around Melbourne no one should omit the Governor's house and grounds, and the Botanic Gardens, which are in the immediate vicinity of the former, and form a very valuable and pleasing addition to the outlook, the position being exactly as if the gardens formed a portion of the ornamental grounds in connection with the house, the beautiful entrance from the one to the other keeping up the idea. The Gardens, which are largely used by the inhabitants as a pleasing and instructive recreation ground, are beautifully laid out, all the natural advantages which the form of the ground confers having been made the best of by the garden architect, each turn of the leading walks unfolding a fresh prospect and new beauties, now a magnificent conservatory and anon a lake (here called a lagoon), covered with water-fowl, and again a beautiful lawn dotted with ornamental shrubs or interspersed with flower beds, literally a mass of bloom. The gardens are beautifully kept, delighting the eye with the fresh and delicious verdure which in such a dry season as that of 1877 was to us both unexpected and surprising, but it was sustained by continual watering, the expense of which was surely amply repaid by the gratifying result. From the gardens a fine view is obtained of the Yarra-Yarra as it sweeps slowly yet majestically past its sunny slopes far into the interior, being covered with the mansions of the merchant princes of Melbourne, each embowered in groves of the most beautiful shrubbery, and surrounded with well kept gardens and orchards, in which peaches, grapes, figs, and all that in the Old Country is known by the name of fine fruit, and require the protection of glass and the aid of fire-heat to bring them to perfection, grow with the utmost luxuriance in the open air, and with no extra cultural attention.

During our stay in Melbourne the leading subjects of conversation, amongst all classes, from the pilot who met us outside the Port Philip Heads, up to the Opposition Members of the House of Assembly, were *politics*, the *dry season*, and the *rabbit nuisance*.

All of these subjects we heard discussed, the first particularly, with a zeal and fervour, fluency, and oftentimes vituperation of language, which would almost lead one to believe the parties using it had studied under the Irish Obstructionists. Trade was rather dull, and had been so for a considerable time previous, with no immediate prospect of improvement, and the whole blame of this stagnation, was laid at the door of the Legislature. Never in the annals of history it would appear from various speakers had democracy got so fair a trial and never before had it been doomed to so signal a failure as in the Colony of Victoria. Although wholly a people's Government, the working classes themselves reaped least advantage from the wholesale system of class legislation as it then existed, as capitalists and employers of labour would not risk their money under the circumstances, which prudent conduct, of course reaching on those whose only capital was their labour, skilled or unskilled, threatened to plunge them into the direst distress. The summary dismissal of some of the high-paid Government officials just at that time showed that popular opinion struck pretty well at the truth, that the necessity for retrenchment and change of tactics was beginning to be recognised by the Ministry. The language used by those who conceived themselves injured by the action of the Legislative Assembly was

invariably more distinguished for force than elegance, and much more striking than complimentary, showing very plainly the difficulty with which a so-called popular Government has to contend when it tries to please one party in particular. Even the administration of the law throughout the colony was violently assailed, and its representatives spoken of with the bitterest contempt, as being utterly incompetent and demoralised, their positions having been attained not through their abilities or fitness, but solely as a reward for election services. So notorious had this become, said a canny Scotchman to me, with whom I travelled over twelve hundred miles, himself having a large property stake in the country both in land and mines, that "Justices' justice" has become a proverb and a bye-word, not only in the colony of Victoria itself, but amongst the nations of the earth—a striking illustration surely, but one that a disinterested stranger could easily imagine to be overdrawn. The rabbit nuisance occupied a considerable amount of attention, but in a more restricted sense than the subject of politics, although to those who suffer from their depredations it is important enough to force itself on them, and command their attention whether they like it or not. The fine climate and favourable soil proving so congenial to the habits and constitution of these prolific little quadrupeds, they have bred in such numbers as to drive off the sheep, and in many cases man himself, as he necessarily must retire when his means of living is taken from him. Wholesale measures for their extermination seem to be in progress, and as the carcasses and skins are endeavoured to be utilised and sent to market, the former preserved or potted, the receipts may possibly pay for the expense of clearing them off the land and leave a small margin for profit besides.

The dry season has proved a great calamity, inasmuch as that the drought has been much more severely felt on account of its having been one of a series which has fallen on the colony during the past three years, that of 1877 having been the worst and longest, extending probably over a period of ten months—a terrible trial in a country where even large rivers dry up. While we remained in Melbourne the accounts that came daily from the interior were most heartrending—sheep, cattle, and horses dying by thousands for want of food and water, the latter principally, without the slightest possibility of saving them or alleviating their sufferings; and hundreds of miles of fencing burnt, the excessive heat and drought having dried the materials to tinder, requiring only a spark to set the whole in a blaze, and when once set a-going nothing could be done but let it run its course until exhausted. The first news that awaited one of our passengers on reaching port, from his partner up the country, was the loss of 25,000 sheep; and before we parted, a telegram arrived stating that 15 miles of fencing had been burnt—numbers which to us appeared extraordinary at the time, but a few days' residence familiarised us with far greater losses than that, some men having lost 100,000 sheep, and the remainder of their flock so weakened as to be almost worthless. Gangs of men were kept continually at work skinning the carcasses, which, although only worth a very trifling sum each (about fourteen pence), the enormous numbers made the amount thus saved as a whole a very large and important one. Where there was a possibility of procuring water, even by the most laborious effort, gigantic exertions were made to do so, and strings of horses were kept almost day and night carting it for the stock. A small stock owner, with whom I passed a few very pleasant days, had six horses draining water continually from a distance of nine miles, the poor creatures thus employed being worn almost to skin and bone by hard work and want of herbage. The only available water

was an article so muddy as to be of the consistency of cream, and yet so eager were the animals to get at it that they surrounded the carts the moment they came within reach, rendering it difficult to divide it without excessive waste and some danger, and when all was finished, and the carts removed, every portion of earth that had been saturated by the overflow was cleanly licked up by the suffering cattle, not a trace of moisture being left. The tremendous losses thus incurred have caused a heavy strain on the banks for accommodation, and many with their help will, of course, be able to tide over their difficulties, but a great number must unavoidably go to the wall. A great impetus has been given to the construction of dams, and wherever practical those who can afford it, or raise the money, are laying out large sums, in many cases thousands of pounds, in the construction of works for the collection and preservation of water throughout the year.

With many drawbacks, there is no doubt, however, but Victoria is a wealthy and thriving colony, where an industrious man, able and willing to exert himself, may soon become his own master, and although the climate is warmer than Europeans have been accustomed to, it is on the whole both pleasant and healthy. Even under the rays of a vertical sun, and with the sweat starting from every pore on the least exertion, I felt no inconvenience nor feeling of lassitude, but rather enjoyed exercise, and the nights were so delightfully cool that both mind and body became amply refreshed by the unbroken rest which invariably followed the fatigues of the day. J. S.

JOURNALISM IN CYPRUS.—We have received the first number of "*Cyprus*, a Weekly Journal of Agriculture and Commerce," published at Larnaca on the 29th ult. It consists of four pages of four columns each, one half of the paper being in English and the remainder in Romance, and, notwithstanding its modest dimensions, the price is 5d. per number. The chief contents of *Cyprus*, which is believed to be the first newspaper ever published in the island, are announcements relating to Sir Garnet Wolseley and the British occupation, and articles on the advantages of the English protection, with several columns of advertisements. This new venture in journalism adds a new illustration to the saying that wherever Englishmen settle one of the first results is the publication of a newspaper.—*Times*.

GEORGE COMBE'S MARRIAGE.—It is quite true that I am about to change my condition, and I can scarcely tell how it came about. The lady's head and mine bear a close resemblance in many of the most important organs, and there was a natural sympathy established between us from the first, which insensibly ripened into a more serious attachment. She is six years younger than myself, and her interests are of a moral and intellectual character, so that she is fitted to be a companion to me, and will go along with me in my pursuits. The projected union will not take place until September. It was sent abroad by a blunder, and thus we had no alternative but to announce it, although it is too long to have such a matter hanging in the wind, and the subject of discussion. I have obeyed the natural laws, so far as my skill and knowledge went, and if evil happen I shall learn a new chapter, for the instruction of others. In 1825 I took Dr. Spurzheim's opinion on my own constitution, after telling him my previous history; and he said that I might marry with propriety, but not to select a young wife, but one whose faculties would act with my own. I examined the lady's head, and took my brother's advice whether her constitution was good in itself and suitable to mine, and received a favourable opinion. My niece, Miss Cox, who is a pretty good judge of women, told me that if I did not make love to Miss Siddons I need never expect to find another so well suited to me; so that I did not yield blindly to inclination, or act without calling in the best guides to my own judgment I could. This is confidential, and is mentioned just to let you know that I do not preach one doctrine and practice another.—*Gibbons' Life of George Combe*.

"How greedy you are!" said one little girl to another who had taken the best apple in the dish; "I was going to take that."

AGRICULTURAL SOCIETIES.

NORTHAMPTONSHIRE.

MEETING AT NORTHAMPTON.

The early part of the opening day of this meeting was very unpromising, the rain falling in torrents, but toward the afternoon it cleared and a very fair attendance was made. The show was held on the racecourse, and the showyard was well arranged so far as the comfort and safety of the stock was concerned; but there was a great deal of riding about amongst the crowd, and especially in front of the cattle sheds, which was not altogether consistent with safety to sightseers. The horses and the Shorthorns were the chief features of the show, and in both these divisions the entries were numerous and the competition good. The horse ring was a very large one containing a water jump in the centre; and this was, as usual, the chief attraction, especially the competition for the prizes offered for "jumping the artificial fences in the best form according to the opinion of the judges;" the chief prize for jumping, however, was to be awarded on the second day (Sept. 13). There were 127 entries of hunting, riding, and driving horses and ponies, and many excellent animals were amongst the number. Several pairs of draught horses were in their places, and there was a very capital class of cart mares and foals, the judging of which we were unable to attend, the entries numbering eighteen. Amongst the cart geldings and fillies there were some very creditable animals shown, and the classes were tolerably well filled.

The sheep classes were not arranged according to breed, but simply as long-woolled and short-woolled; consequently the competition was that of breed against breed, which is never very satisfactory either to the judges or to the public. Thus the contest in the shearing ewes long-woolled class, was between Lincolns and Cotswolds, Mr. Smith, of Deddington, Oxon, taking first prize with the latter breed, and Mr. C. Sell, of Bassingbourne, Cambs., second, with the former. The short-woolled sheep were mostly Oxford Downs, with a few Shropshires and cross-breeds. Mr. Phipps and Mr. Barge secured first and second prizes for shearing ewes with Oxford Downs. Amongst the short-woolled or cross-bred tegs Mr. Oliver, of Towcester, exhibited two pens of Shropshires of very nice character which did credit to Mr. Sheldon's flock, from which they were bred. We are not aware if they were honoured by the judges, nor can we be quite certain which sheep took prizes in any of the classes, inasmuch as the awards were signified by plain blue and red ribbands which were tied on the top part of the division of the pens—the sheep classes being arranged in double rows of pens in tents—so that it was difficult to ascertain to which pen of sheep (the one in front or the one on the opposite side) the ribband referred. A crucial test might possibly have been made of the bow in which the said ribband was tied, providing it was tied in a bow, being towards the successful pen, and sometimes the character of the opposite pen of sheep would be a guide; but it is a bad plan to trust to such marks of distinction, especially with horses, whose bridles or headstalls are often decorated with red or blue ribbands of some sort or another. There may have been prize cards put up later in the day, but we do not remember to have seen any. The classes for rams were chiefly limited to animals which were the property of the exhibitor, or hired by him for his own use, the animals to have proved themselves to be stock-getters, and some very good Lincolns and Oxford Downs were exhibited, six useful Oxford down shearing rams being shown in Class 9. The lamb classes were not

particularly good. Pigs were a very fair show indeed, and some well-known exhibitors sent their stock for competition.

The cattle division commenced with fat stock, there being four classes, numbering sixteen entries, of oxen, steers, cows, and heifers, containing some fairly good animals but nothing out of the common run of show fat stock, the awards for which will be found in the appended prize list. Then came a class, open to all England, for the best bull of any age, which brought seven entries, amongst them being Mr. Griffin's Telemachus 10th, bred by the Marquis of Exeter, Mr. Bland's General Fusce, Mr. S. Lipscomb Seckham's Duke of Worcester 3rd, by 18th Duke of Oxford (25953), and Mr. St. John Ackers' two bulls, Clovis and Sir Roland. Duke of Worcester 3rd is a plain bull, but has deep quarters and some few merits; neither this animal nor Mr. Ackers' pair were noticed, nor did they call for it. General Fusce was put first, and Telemachus 10th second, which award does not leave very much margin for cavil, as Telemachus 10th, though a good bull, and of better stock, is not above criticism and is not equal to certain other members of that excellent family. The Duke of Buccleuch showed a useful bull, Don Juan, which is not exactly in place at a show. The next class—for the best bull "above two years old, the property of, or hired by the exhibitor, that has proved himself a stock-getter, which shall stand in the county, and to be at the service of members for five months, at a fee not extending £5 5s."—was easily headed by the Marquis of Exeter's Telemachus 9th, who took first prize quite as easily at Coventry two days before, being on that occasion very rightly placed before General Fusce, who at this show, as already stated, defeated Telemachus 10th. The second prize fell to Mr. T. H. Bland's General Flirt, a yearling bull which has a lot of work yet to do before getting into the front rank. Mr. Bland also exhibited in this class Earl of Waterloo 2nd, a six and a half years old bull, which we did not greatly admire, and Mr. Loder's Lord York Fawsley, in spite of his grand name, was a very plain animal to look at, like many of the Shorthorn aristocracy, not one of which would impress an outsider with the "grandeur" of the breed. In the class for yearling bulls, to stand in the county under the same conditions as the last, Colonel Loyd Lindsay's Churchill was placed before Mr. Bland's General Favourite, and Mr. C. W. Griffin's Beaconsfield, by Telemachus 10th, was no great credit to his sire. Amongst the bull calves was one good animal, the Marquis of Exeter's Telemachus 17th, a worthy scion of Telemachus 6th. Nine Shorthorn cows competed, none of them very good ones. Mr. J. Sharpe's Julia 11th, a cow with a most unsightly rump, was first, and Mr. St. John Ackers' Princess Georgie second. The heifers were better, but here, most unaccountably, Mr. St. John Ackers' Lady Carew 2nd, which was only highly commended at Coventry, was put before Captain Ashby's Innocence, which on that occasion took second prize, and it must be remembered that this was the relative position of these two heifers at the Royal, although Innocence was not noticed at the Bath and West, where Lady Carew 2nd held the reserve number. Lady Carew 2nd has long quarters, is of nice quality, and has merits with fanciers, but she is very patchy-rumped, and has not the character, nor the wealth of flesh, nor the smallness of bone, nor the excellence of back, chine, and rib possessed by Innocence, which is, however, barely so pleasant to the hand. Captain Ashby also exhibited in this class a long and level Telemachus heifer, Dorothy, and Mr. Griffin another, Lady Blanche 8th, both of them doing credit to the

family name. The yearling heifers were five in number; and here again Mr. St. John Ackers took the lead with Lady Carew 3rd., a dirty-nosed patchy-rumped heifer, bare on her loins, and plain in her countenance; but her greater depth and superior scale, which her age would partly account for, presumably induced the judges to place her before the Marquis of Exeter's Sea Lark, a beautifully-coated, mellow-handling, Telemachus heifer. In the subscribers' class for yearling heifers the Duke of Buccleuch's red heifer, with very little Shorthorn character about her, and a patchy rump, but long in her quarters and on a good scale, was put before the Marquis of Exeter's Coralina, which is not quite so good in her quarters, but in every other respect a lot the better animal—better coal, better character, better fleshed, and likely to breed better stock. But the greatest interest in this division of the show was centred in the competition for the 100 guineas Burghley Park Challenge Cup, open to all England, for the best "Shorthorned bull, cow, or heifer in the showyard, eligible for Herd Book entry." For this a number of animals in the various classes were entered, and the Marquis of Exeter's Telemachus 6th was specially entered for this prize alone. There were some sixteen animals competed, although the actual competition was almost *nil*. There were but two animals there which could stand such comparative test, and one of these, Captain Ashby's Innocence, was out of the hunt from having been put second in her class, and the other was Telemachus 6th. However, one after another were sent out of the ring, until Telemachus 6th, Telemachus 9th, and Lady Carew 3rd alone were left. It looked as if they were settling about the reserve number; but when Telemachus 9th went away, and Lady Carew 3rd stayed behind with Telemachus 6th, we began to think that something might happen akin to the Lancaster awards in respect to the old bull—and so it did, for he was sent away, and the dirty-nosed, patchy-rumped, plain-headed heifer, bare on her loins and uneven in her flesh, was awarded the rosette! It was a thing to be seen to be believed, and when seen not soon to be forgotten; and the incident is, perhaps, one of the most extraordinary which has ever occurred in the annals of Shorthorn judging.

The money taken for admission at the Show amounted to £1,112 11s. 6d.; the number of persons present on Friday being about 20,000.

ROYAL AND CENTRAL BUCKS.

The twentieth exhibition of this Society was held on Sept. 11, at Wycombe Abbey. We can only find space for the prize list.

PRIZE LIST.

HORSES.

AGRICULTURAL.

Cart stallion, three years old and upwards, the winners of the first and second prizes to travel within twenty miles of Aylesbury, and to remain at Aylesbury three nights, and at High Wycombe one night in each week during the whole of the ensuing season.—First prize, £50, G. H. Morrell, Oxford; second, £20, W. Coles, Long Crendon.

Geldings, three years old and upwards.—First prize, a silver cup or piece of plate, value £5 5s., J. Harper, Edgott; second, £2, J. P. Perry, Putlowes.

Cart mare and foal.—First prize, a silver cup or piece of plate, value £5 5s., W. R. Rowland, Creslow.

Mares, over two years, limited to tenant farmers residing within fifteen miles of Eythroe.—Prize, a silver cup or piece of plate, value £5 5s., W. R. Rowland.

Cart mare and foal.—First prize, a silver cup or piece of plate, value £5, E. M. M. Lucas; second, £2 10s., N. G. Lambert.

Cart mare and foal.—First prize, £3, W. R. Rowland; second, £1, Lord Chesham.

Cart gelding, under three years old.—First prize, a silver cup or piece of plate, value £5, W. R. Rowland; second, £1, W. Flowers, Beachendon.

Horse, gelding, or mare, belonging to tenant farmers residing within six miles of Wycombe Abbey.—First prize, £3, J. Lee, Hughenden; second £1 10s., G. Long, Loudwater.

Yearling nag colt or filly, bred within twenty-five miles of Mentmore.—Prize, the Mentmore Cup, value £10 10s. J. Poore, Brill.

Cart mare, under three years.—Prize, a silver cup or piece of plate, value £3, J. and R. Simons, Berryfield.

Mare, over two years of age.—First prize, £5 5s., G. Humphreys; second, £2, W. R. Rowland.

Cart gelding or mare, irrespective of breed, age, or size, belonging to and owned ever since the 1st of January, 1873, by some person resident within twelve miles of Wycombe Abbey.—Prize, a silver cup or piece of plate, value £5 5s., Lord Chesham.

Horse, having been used for van purposes in connection with the chair trade, belonging to and owned ever since the 1st of January, 1873, by some person resident within six miles of Wycombe Abbey.—Prize, a silver cup or piece of plate, value £5 5s., G. Gaister and Gibbons, High Wycombe.

Van horse.—First prize, a silver cup or piece of plate, value £5 5s., J. Lee; second, £3 3s., E. H. Blyths, Horzstone.

Hunter, horse or mare, judging to be a point of merit.—First prize, a silver cup or piece of plate, value £21, J. Sanders, Fleet Marston; second, £5 5s., G. Kingham, Weston Mead.

Horse or mare, for hunting purposes.—First prize, a silver cup or piece of plate, value £7 7s., J. Sanders; second, £3 3s., G. A. Lepper, Aylesbury.

Nag geldings and mares, for riding and general purposes.—First prize, £5 5s., J. Harper; second, £2 2s., F. White.

Yearling nag colt.—Prize, Memorial Cup, value £10 10s., T. Robinson, High Wycombe.

Cob, over 14 and under 15 hands, equal to 12 stone.—First prize, a silver cup, value £5, W. A. Redington, High Wycombe; second, £1, R. W. Selby Lowndes, jun., Broughton, Newport Pagnell.

Harness horse, in harness, exceeding 14 hands and not exceeding 15 hands.—First prize, a silver cup, value £5, G. Weller, Amersham; second, £1, J. K. Shrimpton, Evington.

Pony not exceeding 14 hands.—First prize, a silver cup or piece of plate, value £4 4s., G. C. Pratt, Oving; second, £2 2s., J. B. Hobbell, High Wycombe.

CATTLE.

Bulls, any breed, two years old and upwards.—First prize, a silver cup or piece of plate, value £5 5s., J. Williamson, Pitstone; second, £2, E. M. M. Lucas.

Bulls, under two years.—First prize, a silver cup or piece of plate, value £5 5s., Colonel Lloyd-Lindsay, V. G., M. P., Lockinge Park, Wantage; second, £2, J. Dadwell, Loud Crendon.

Cows, in milk or in calf.—First prize, a silver cup or plate, value £5, J. A. Mumford, Chilton; second, £2, G. Underwood, Little Gaddesden.

Three cows, in milk or in calf.—First prize, a silver cup or piece of plate, value £10, J. and E. Denchfield, Burston; second, £5, C. Elliott, Hulcott.

Cows in milk or in calf, belonging to or owned since the 1st of January, 1873, by some person resident within six miles of Wycombe Abbey.—First prize, a silver cup or piece of plate, value £5 5s., C. Beeson, Penn; second, £2 2s., C. Beeson.

Heifers in milk or in calf, under three and over two years.—First prize, a silver cup or piece of plate, value £5 5s., T. Kingsley; second, £2, C. Elliott, Hulcott.

Heifers in pairs, under two years.—Prize, a silver cup or piece of plate, value £5 5s., T. Kingsley.

Fat cows.—First prize, a silver cup or piece of plate, value £5 5s., W. Cottrell, Thame; second, £2 2s., J. A. Mumford.

A silver cup or piece of plate, value £10 10s., for the best horned animal in the yard, being the property of a tenant farmer within 20 miles of Aylesbury, was awarded to T. Kingsley.

SHEEP.

Rams, any breed.—First prize, a silver cup or piece of plate, value £5 5s., and second, £2 2s., J. Treadwell.

Five store ewe lambs, for breeding purposes.—Prize, a silver cup or piece of plate, value £5 5s., 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, A. Brassey.

Five fat shearling wethers.—First prize, a silver cup or piece of plate, value £5 5s., A. Brassey, Heythrop Park; second, £2, the Prince of Wales.

Five ewes any breed, intended for breeding purposes.—First prize, a silver cup or piece of plate, value £5 5s., A. Brassey; second, £2, J. Treadwell.

Five thieves any breed, intended for breeding purposes.—First prize, a silver cup or piece of plate, value £5 5s., and second, £2, J. Treadwell.

Five thieves, Southdown.—Prize, a silver cup or piece of plate, the Prince of Wales.

Tea ewes any breed, for breeding purposes.—Prize, a silver cup or piece of plate, value £5 5s., G. Humphreys.

Ten ewes, Hampshire Down.—Prize, a silver cup or piece of plate, value £5 5s., T. Biss, jun.

Boars, any breed.—First prize, £3 3s., Lord Chesham; second, £2, W. Wheeler, Long Compton, Shipston-on-Stour.

Sows, either in pig or with litter.—Prize, a silver cup or piece of plate, value £5 5s., R. Fowler, Broughton.

Sows, either in pig or with litter.—First prize, £3 3s., E. D. Lee, Hartwell; second, £2, W. Wheeler.

Three fat pigs.—First prize, £3 3s., and second, £2, W. Wheeler.

CARTMEL.

The annual exhibition of the above Society was held as usual in the fields belonging to Mr. Watson, situated near the Church, on September 10, and as the day was a delightfully fine one, this successful meeting was more successful than ever, not only as regarded the attendance, but also in respect of the number and quality of the stock exhibited. The Short-horns were really first-class specimens, and gave the judges in many instances considerable study in discriminating the points of merit so as to make a proper award, and this was especially the case with respect to the cows or heifers for breeding purposes. There was a numerous display of horses, of various classes, and perhaps the best animals were to be found as a whole in those for agricultural purposes, of which there was a large entry. The turn-outs were most excellent, and we heard it over and over again averred that they and also the leaping were better than those at the recent county show at Lancaster. The sheep, as might be expected in so famous a district for sheep-breeding as Cartmel, were superior animals, and here again the judges had at times some trouble in awarding the prizes. The pigs were said to be a very good class. The butter was so excellent that it gave the lady judges some difficulty in determining who were to take the honours; and the potatoes and turneps were large and well-grown. There were some remarkable roots of mangel wurtzel.—*Ulverston Advertiser*.

KESWICK AND LAKE DISTRICT.

The biennial show of the above Society was held on September 11, in the Fitz Park, by the Greta side. The show was an exceedingly nice one in all departments, especially that of the native breed of Herdwick sheep, in which Mr. Howell, of Lonsdale, ran a very close race with Mr. Nelson, of Gatesgarth, whose fame in this class has long been paramount. The turn-out of Shorthorns was also creditable. Mr. James Spencer was first in the old bull class with an animal that was never shown before and came fresh from the field. Mr. Edmond, of Grosseanohy, won two first prizes, beating the celebrated White Rose in one competition. There was a fairly good lot of horses, both for the farm and the road. Some of the young classes were particularly encouraging, of which we may mention the two-year-old cart classes and the pines. Mr. Moncrieff was first with his hackney among a handsome lot—a position he occupied two years ago. Mr. Hilton, of Kendal, secured the prize for hunters.—*Carlisle Patriot*.

MERIONETHSHIRE.

The annual show of this Society was held at Town on Sept. 11. The principal feature of the show was the exhibi-

tion of Welsh cattle, which was beyond the average in merit. Of other cattle there was not a good show. The sheep were few in number, and chiefly Welsh. There was a rather small show of pigs. Of horses the show was good for the district. Roots, corn, and dairy produce were also exhibited.

MIDDLETON.

The twentieth annual show of the Middleton Agricultural Society was held on Sept. 12. The number of visitors to the show-ground was large, but scarcely equal to the attendance at last year's exhibition. There were 1,704 entries, a decrease of 376 as compared with the show of 1877, and of 525 on that of 1876. The entries in the principal classes were as follows:—Horned cattle, 50; horses, 168; pigs, 22; poultry, 248; dogs, 150; vegetable produce, 89; implements and miscellaneous articles, 792. Compared with the preceding show these figures give an increase of 17 in horned cattle, 11 in pigs, and 119 implements, &c.; a decrease of 102 in horses, and of about 40 in dogs. In the more important classes, with the exception of the tenant-farmers' cattle, heavy horses, and the yearlings in the light class, there was a preponderance of inferiority, and the competition in several classes was almost nil. To some extent this may be accounted for by the fact of the show clashing with that at Birkenhead, a competition at which had been preferred by several well-known exhibitors; whilst in the horse classes there were not to be found any of the familiar animals of Mr. Statter, who has taken more than a score of his stud to Paris for exhibition purposes. Of the whole a more inferior set of light horses has, perhaps, never been placed on the Middleton show-ground.—*Manchester Examiner*.

NORTH SHROPSHIRE.

This Society held its annual show at Newport on Sept. 13. For a small show the horses were a good lot, but of cattle the entries were few, and the quality was by no means striking. As a matter of course the show of Shropshire sheep was the most creditable feature of the exhibition. In these classes some of the best breeders competed. The entries of pigs were not very numerous. There was also a show of dairy produce, poultry, and implements.

PEMBROKESHIRE.

This Society held its annual show at Haverfordwest on September 6. The exhibition was considered, as a whole, to be a successful one, and there was a good attendance. The horses were not remarkable for general excellence, though in some of the classes there were some arrivals of decided merit. In the cattle classes the most interesting feature was the show of black cattle, some very useful specimens of the breed being exhibited. The sheep and pigs do not call for comment.

PENRITH.

The thirty-seventh annual meeting of this Society was held in the Foundry Field on Sept. 12. The weather, unfortunately, was very unfavourable, the early part of the day, rain falling heavily, but as noon approached the clouds dispersed, and the remainder of the day was exceedingly fine. As usual there was a great entry in all the classes, particularly of horses and cattle, the entries closing with a total of 419. Aged bulls made a good show, but the cows were even better, and certainly more numerous, there being 26 catalogued. Younger animals, in the same class, turned up in large numbers, and there appeared to be a marked evenness in the quality of the different lots. Heavy horses were assigned the first place in the catalogue, and deservedly so. They were of grand quality, and a credit to the district. Light-legged horses were not so numerous as we have sometimes seen at this show. Among the sheep were many of the animals which have taken prizes at other shows this season. There was again a large display of agricultural implements, &c.—*Carlisle Patriot*.

RADNORSHIRE.

The annual exhibition of this Society was held on September 13 at Peubyont. The stock shown was ar-

ranged in about fifty classes. Of horses and ponies there were 83 entries, cattle 66, sheep, 70, and pigs 4. In the extra stock there were 18 entries, of sheep-dogs 15, and of hunters 13. The number corresponded very favourably with those of previous years, and altogether the show cannot be considered but a great success. Of horses, however, there was only a moderate show. Mr. J. Watson's King of the Vale deserved its honours, as all admitted, and it was certainly a very good class of animal for farming purposes. Mr. M. Evans and Mr. J. Watkiss were also successful exhibitors; the latter with a very pretty pony stallion, which was certainly above the average of merit of the ponies shown. The agricultural mares and other horses adapted for husbandry were perhaps up to the average of previous shows, but the ponies can certainly be improved upon. The cattle were excellent, Radnor having imported the white faces from Hereford with marked success and great benefit to the breeder and consumer. Several splendid bulls were exhibited, and the cows and calves were also smart, symmetrical animals. The sheep were a good useful sort, well suited to the district and credited to the breeder, but of pigs there was a very small show.—*Shrewsbury Chronicle*.

TODMORDEN.

The ninth annual show of the Vale of Todmorden Agricultural Society was held on September 7 at Sandholme, Todmorden. The entries, which were about the same as last year, numbered 1,028, the strength of the principal classes being as follows:—Horned cattle, 64; horses, 125; sheep, 31; pigs, 26; poultry, 197; pigeons, 210; dogs, 156; vegetable produce, 118; implements, 21. In the open competition of cattle Mr. C. W. Brierley, Prestwich, secured the leading prizes in the classes of aged bulls, bull calf under one year, and aged cow in calf or milk. In the first and last-named classes the second place was assigned to Mr. T. Atkinson, Unsworth, near Bury, and this exhibitor carried all before him in the three classes immediately following, consisting of cow or heifer, above two and under three years, in calf or milk, heifer above one and under two years, and heifer under one year. Mr. Benjamin Bee, of Goosnargh, near Preston, usually a strong exhibitor, confined himself to a single entry, in the class of bulls above one and under two years, and won the first prize with ease. Mr. John Coekcroft, Todmorden, was placed first in the competition of Alderney, Jersey, or Guernsey cows or heifers, his closest rival being the President of the Society (Mr. J. Fielden, Dobroyd Castle). In the class of two dairy cows, Short-horns excluded, Mr. John Crabtree, Lower Ashes, was an easy winner. The first prize for fat calf not over eight weeks old was awarded to Mr. S. Whittam, Castle Gardens. Mr. T. Atkinson was adjudged to have the best of any pure-bred or fanciful cross-bred animal for milking or feeding. Mr. A. Stansfield, Rodwell Head, occupying the next place. In the class for fat stock, ox, or cow, the premium was taken by Mr. T. Riley, Ewood Hall, Mytholmroyd, who was the sole exhibitor. In the next class, two dairy cows, the competition in which was restricted to gentlemen and tenant-farmers in the Society's district, the silver cup was secured by Mr. Robert Barker, of Sile, the second prize falling to Mr. S. Lord, Todmorden. The premiums for tenant-farmers in the Society's district were, with one or two exceptions, strongly contested. The silver cup for bull of any breed, one year old and upwards, was won by Mr. R. Barker, the second place being awarded to Mr. G. Higgin, Hebden Bridge. In the class of bull calves, under one year, the first and second prizes were awarded respectively to Mr. Barker and Mr. S. Lord, High Barn, Todmorden.

WAYLAND.

This annual exhibition took place at Watton on September 11. The entries were, save one, the same in the aggregate number as last year; and the several classes also about the same, except pigs, of which there was a larger number of entries. Mr. G. Jacobs, of Watton, carried off Lord Walsingham's prize, a silver cup, for his excellent cart stallion. Mr. R. Horsley, however, who was placed second, came very close indeed to him in merit, and if we mistake not the judges seemed somewhat to hesitate which of the two they should

place first. There was also a close run in Class 2 (cart mares), between Mr. T. A. Barton and Mr. W. Wilson. Only one prize was awarded in Class 3, for the best three-year-old cart gelding, there being only two entries, Miss Rook's Beauty being adjudged the best, the same lady being first in the two-year-old class with her Brisk, Mr. T. R. Brasnett being second. Mr. E. Seed, of Ashill, carried off the first prize for the best cart filly of any age; Mr. T. A. Barton was first with his cart foal, and Mr. W. Goulder second. The hackney class was a little better represented than last year. Mr. W. How, jun., was first, and Mr. J. B. Baker a very good second. In the pony class Mr. T. R. Brasnett carried off the prize. The class for hunters was better filled up this year. Mr. W. How, jun., took the prize for the best jumper. In the cattle, sheep, and pig classes there was a deal of what may be considered "equal merit," but we believe the judges gave general satisfaction. The show of poultry was quite equal to any former occasion. There was a dispute for the honour of taking Lady Walsingham's prize for the best pen in eight of the classes, as to whether it should be given to Mr. How or Mr. Alp for a pen of Dorking fowls.—*Norfolk Chronicle*.

WIRRAL AND BIRKENHEAD.

The annual exhibition of this Society took place on September 11 and 12. The weather was fine, and the natural result was a large influx of exhibitors. The entries numbered 1,320, which is considerably in excess of last year, and the exhibitors included some of the leading contributors not only in the Hundred of Wirral, but in this part of the county. Of the stock on the ground the horses were the best, both in numbers and quality, there being no fewer than 220 entered—a number which compares favourably with previous years, and which would outvie even some of the county shows in other parts of England. Among the principal prize-takers were the Duke of Westminster, who took the first prize with a fine bay filly, and Mr. R. C. Naylor, of Hooton, whose grey mare Sally carried off the first in Premium 1, while Mr. J. L. Turton, of Raby, took the second prize in this premium with a fine bay horse (Prince). There was a protest entered against the prize for the Duke of Westminster's bay filly, on the ground that his Grace is not a resident in the Society's district, to which the competition is confined. Mr. Joseph Perrin and Mr. Thomas Langley, team-owners, Birkenhead, showed some fine animals in this department. Mr. J. Boulton, of Leigh ton, obtained the first prize for the best two-year-old filly or gelding; and in the open competition for agricultural roadsters Mr. J. Dickson, of Chester, was successful. In the hunter class the prize for fifteen-stone horses was carried off by Mr. E. J. Thornhill, of New Brighton, and for twelve-stone animals by Mr. J. H. Hind, of Caughton. There was considerable dissatisfaction evinced by some of the exhibitors in Premium 6, for the best entire horse for draught or agricultural purposes travelling in that district. The animals were not first-class, certainly, but there was merit in some of them, and the judges awarded the first prize to Mr. R. Kynaston, of Thornton Hall, for his dark Grey, Duke of Thornton; and the second to Mr. James Dale, of Poulton Lodge. This, however, was no sooner done than a veto was put upon the award by one of the vice-presidents, on the ground that there was not sufficient merit in the animals to deserve the prize. The horned cattle were good in quality, and though their numbers were few, yet they showed a decided advance even in this respect to the exhibitions of former times. In this department Mr. Barton, of Caldy Manor, showed a splendid bull, which was worthy of the admiration it excited. Sheep and pigs were few, but good; and the same might be said of the entries of cheese, grain, and roots.—*Chester Chronicle*.

A SURE SIGN.—An Irish labourer, who was lying in a ditch very much the worse for liquor, was encountered by the priest of his parish. Very much shocked, his reverence turned the drunkard over, who muttered, "Where am I?" "On the road to hell," replied the priest sternly. "I thought, said Pat, with national readiness, even in his cups—'I thought so when I heard Father Murtagi's voice on the road too.'"—*World*.

THE CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

[From *The Mark Lane Express* of September 2.]

In our Supplement to-day we give a full reprint of the Contagious Diseases (Animals) Act, 1878, which was issued on Thursday. Our readers will now see, stated in the precise language of an Act of Parliament, the provisions which have been made for dealing with home and foreign animals, with a view to the prevention or control of disease. The home provisions, it will be seen, are already to a great extent prospectively put into action by the Orders of Council published in our columns last week. The regulations as to the foreign traffic have already become generally known, and have been frequently discussed; but the exact terms in which the intentions of Parliament are expressed we now see for the first time. Foreign animals are, as heretofore, to be landed only at a part of a port defined for that purpose by special Order of Council, and in such manner, and at such time, and subject to such supervision and control as the Commissioners of Customs from time to time direct. As a general rule they are not to be moved alive out of the wharf. These provisions, however, are not to apply to animals "intended for exhibition or other exceptional purposes," except when the animals are diseased, or are known to have been in contact with diseased animals. The precise manner in which these animals are to be dealt with is left to the discretion of the Privy Council and the Commissioners of Customs, who may from time to time make what regulations they think fit for the supervision, control, and quarantine of such animals, which, it will be understood, are not fat animals intended for slaughter. With respect to foreign animals generally, and those from the Channel Islands and the Isle of Man, the regulations are as follow:—

"In relation to animals brought from the Channel Islands or the Isle of Man the Privy Council may from time to time, if they think fit, by general or special Order or by licence, alter or add to the provisions of this Schedule relating to slaughter or to quarantine, as the case may require.

"In relation to foreign animals other than those brought from the Channel Islands and the Isle of Man, if and as long as, from time to time, the Privy Council are satisfied, with respect to any foreign country, that the laws thereof relating to the importation and exportation of animals, and to the prevention of the introduction or spreading of disease, and the general sanitary condition of animals therein, are such as to afford reasonable security against the importation therefrom of diseased animals, then, from time to time, the Privy Council, by general or special Order, shall allow animals, or any specified kind of animals, brought from that country, to be landed, without being subject, under the provisions of this Schedule, to slaughter or to quarantine, and may for that purpose alter or add to those provisions as the case may require: but every such Order shall forthwith, after the making thereof, if Parliament

is then sitting, and if not, then forthwith after the next meeting of Parliament, be laid before both Houses of Parliament."

We do not intend to criticise minutely at present the provisions for dealing with disease in this country. In commenting last week upon the recently issued Orders, which interpret these home provisions, we stated it as our opinion that, as a whole, they were in themselves well adapted for their purpose. If they had been accompanied with sufficiently stringent regulations for preventing the importation of disease from foreign countries there would have been the strongest grounds for congratulating the stock-owners and the country generally upon the new Act. Farmers would have submitted cheerfully to the inconveniences which these provisions will cause, and any imperfections would soon have been made apparent, and probably remedied, as experience pointed them out. But, as we have often before remarked, there will be constantly hanging over us the depressing fear that, however good these home regulations may be, and however effectually they are carried out, the whole of the efforts and care-taking and inconvenience and loss which they will entail may, and probably will, go for nothing, or next to nothing, because we have no real safeguard against the inroads of disease from foreign countries. It is true that with an omniscient and immaculate Privy Council the new regulation as to foreign countries would be satisfactory, because there can be no reasonable objection to cattle coming from any foreign country free from disease and secure against its contraction from any other country; but with a Privy Council liable to make mistakes, to be duped, and to be unduly influenced by popular clamour, there is no real security whatever. Even if we had a heaven-sent Council to-day we might have one of very different origin to-morrow. Certainly the opponents of the Cattle Diseases Bill, as first introduced, have no fear of such perfect action on the part of the Privy Council as could alone give us security against foreign infection: for they are rejoicing in the form which the foreign regulations have taken, and are anticipating, as the *7* state, "a large importation of foreign cattle." At the present time if we were only to import live animals otherwise than for slaughter at the ports from those European countries which are perfectly safe we should only import from Norway, while America would certainly be in the list of unsafe countries. But who for a moment supposes that every European country but one, and America also, will be scheduled by the Order shortly to be issued with respect to foreign countries? "Reasonable security" is a term of very elastic meaning. In our opinion the only reasonable security in a case of this kind is perfect security, and that we have not the slightest hope of obtaining under the present Act. The Act is undoubtedly an improvement upon the laws previously in force, in so far as it

makes slaughter at the ports the rule and immunity from slaughter the exception, instead of the converse; but the extent to which this improvement in the letter of the law will be carried into effect depends entirely upon the discretion of the Privy Council. In connection with the stringent restrictions which are to be imposed upon the home traffic in animals such uncertainty in the foreign regulations is utterly unsatisfactory. Nothing short of the slaughter of all foreign animals at the ports, with the exception, perhaps, of choice animals for exhibition or other purposes, for which special regulation in each case should be necessary, would be sufficient to justify and render tolerable the home provisions of the new Act. In the absence of such safeguards against the inroads of foreign diseases there is reason to fear, as stated on a previous occasion, that the new Act will prove a curse rather than a blessing.

We were so near getting a satisfactory Act that the substitution of the present abortion is all the more tantalising. The Government brought forward a measure which, with a few alterations, would have been a blessing to the country, and such a blessing they had it in their power to bestow. But they shrank from the threatened clamour of the town populations, and so lost the best chance which there is likely to be in this generation of securing to the country healthy cattle and abundant meat. They sacrificed the vital principle of their Bill in the fear of an election cry, trusting to the too frequently experienced forgiveness of the farmers for this as for previous desertions.

The members of the Government are responsible for the failure to which we are calling attention but are they chiefly to blame? Pestered with the strongest and most persistent pressure from their opponents and from persons and bodies interested in the foreign cattle traffic, they were left alone to fight the battle as they could. It is hardly too much to say that at the most critical period of the struggle—when the Bill was going into Committee in the House of Commons—not a stockowner raised his voice in public to urge the Government to be firm. The Agricultural Press did not cease to give sound advice; but even in its own columns this met with no support from outsiders. We cannot call to mind a single letter on the subject as having appeared in any agricultural paper at this particular time. In these columns we earnestly pointed out the necessity of some demonstration on the part of the stockowners of the country for the purpose of urging and encouraging the Government to be firm. If this suggestion had been acted upon—if a great meeting of the stockowners of the United Kingdom had been held in London, and a deputation had been sent from it to the Government, we believe that at the present time we should have had before us a satisfactory Cattle Diseases Act; but the only meetings and deputations got together were composed of the vigorous opponents of effectual cattle disease legislation, and neither in nor out of Parliament was there any publicly-made protest against the desertion which there was reason to fear the Government were contemplating. The farmers got up their agitation well, and on no question in recent years have they shown such unanimity as was manifested upon the

Cattle Diseases question. The great Agricultural Societies, the Clubs, and the Chambers held meetings and passed resolutions in favour of slaughter at the ports on this or the other side of the water, and influential deputations waited upon the Duke of Richmond to plead for stringent legislation; but after the Government had taken the matter up the great agitation entirely collapsed, and when the brunt of the battle came the farmers and their associations all retired into the rear, and quietly looked on while their supposed champions in Parliament were giving way, sometimes inch by inch and sometimes by sudden retreats, and till their enemies had been allowed to capture their chief stronghold, and ignominious terms of peace were accepted. Thus the stockowners have chiefly themselves to blame for the emasculation of the Cattle Diseases Bill; and, having themselves chiefly to blame, they can hardly with a good grace ask their representatives in Parliament why they, too, allowed the vital principle of slaughter at the ports to be given up without a single vigorous public protest. We fear that amongst the wire-pullers of our own side on this Cattle Disease question, both in and out of Parliament, there has been too much fear of "harassing the Government," and that to the supposed exigencies of the party the interests of the farmers have been sacrificed.

THE BILL.

PART I.—GENERAL.

1.—This Act may be cited as the Contagious Diseases (Animals) Act, 1878.

2.—(1) This Act shall, except as otherwise expressed, commence and have effect from and immediately after the thirtieth day of September one thousand eight hundred and seventy-eight, which time is in this Act referred to as the commencement of this Act.

(2) But on and after the passing of this Act any Order of Council and Order in Council necessary or proper for bringing this Act into operation at the commencement thereof, and any order of regulation of a local authority authorised by any such Order of Council or in Council, may be made so that the same do not take effect before the commencement of this Act; and on and after the passing of this Act any committee and any inspector or other officer may be appointed to act under this Act as from the commencement thereof.

3.—This Act is divided into parts, as follows: Part I.—General, Part II.—England, Part III.—Scotland, Part IV.—Ireland.

4.—(1) The enactments described in the First Schedule are hereby repealed, subject to the qualifications and exceptions in this Act mentioned.

(2) The repeal of enactments or any other thing in this Act shall not—

(i.) Affect the past operation of any of those enactments, or any Order of Council or in Council or regulation of a local authority made, or any licence granted, or any committee or sub-committee constituted, or any appointment made, or any right, title, obligation, or liability accrued, or any money borrowed, or any market, wharf, lair, landing-place, or other accommodation provided, or any rate or mortgage made, or the validity or invalidity of anything done or suffered under any of those enactments before the commencement of this Act.

(ii.) Interfere with the institution or prosecution of any action or proceeding, civil or criminal, in respect of any offence committed against, or penalty or forfeiture incurred or liability accrued under or in consequence of, any of those enactments or any order or regulation made thereunder;

(iii.) Take away or abridge any protection or benefit given or to be enjoyed in relation thereto.

(3) Notwithstanding the repeal of enactments or any other

thing in this Act, every Order of Council and in Council and other thing in this section mentioned shall continue and be as if this Act had not been passed; but so that the same may be revoked, altered, or otherwise dealt with under this Act, as if it had been made or done under this Act.

(4.) This Act, instead of the Contagious Diseases on (Animals) Act, 1869, shall be deemed to be referred to in the Destructive Insects Act, 1877; and the penalties under the provisions of that Act relating to Great Britain shall be recoverable in manner provided in Parts II. and III. of this Act.

5.—(1.) In this Act—

- (i.) "Cattle" means bulls, cows, oxen, heifers, and calves.
- (ii.) "Animals" means, except where it is otherwise expressed, cattle, sheep, and goats, and all other ruminating animal, and swine;
- (iii.) "Disease" means cattle plague (that is to say, rinderpest, or the disease commonly called cattle plague), contagious pleuro-pneumonia of cattle (in this Act called pleuro-pneumonia), foot-and-mouth disease, sheep-pox, or sheep-scab;
- (iv.) "Disease" means affected with disease;
- (v.) "Suspected" means suspected of being diseased;
- (vi.) "Carcase" means the carcase of an animal, and includes part of a carcase, and the meat, bones, hide, skin, hoofs, horns, offal, and other part of an animal, separately or otherwise, or any portion thereof;
- (vii.) "Fodder" means hay or other substance commonly used for food of animals;
- (viii.) "Litter" means straw or other substance commonly used for bedding or otherwise for or about animals.
- (ix.) "Foreign," applied to a country, denotes a country out of the United Kingdom of Great Britain and Ireland, and applied to animals and things, means brought to the United Kingdom of Great Britain and Ireland from a foreign country;

(x.) "Inspector of the Privy Council" or "inspector of a local authority" means a person appointed to be an inspector for purposes of this Act, by the Privy Council, or by a local authority as the case may be; and "inspector" used alone means such a person, by whichever authority appointed.

(xi.) "Veterinary inspector" means an inspector being a member of the Royal College of Veterinary Surgeons, or any veterinary practitioner qualified as approved by the Privy Council;

(xii.) "Treasurer" means the Commissioners of Her Majesty's Treasury;

(xiii.) "The Corporation of London" means the Mayor and Commonalty and Citizens of the City of London, acting by the Mayor, Aldermen, and Commoners of that City in Common Council assembled;

(xiv.) "The Customs Acts" means the Customs Consolidation Act, 1876, and any enactment amending or substituted for that Act;

(xv.) "Justice" means justice of the peace;

(xvi.) "Court of summary jurisdiction" means two or more justices sitting in petty sessions at a court or other public place appointed in that behalf, or a police, stipendiary, or other magistrate or officer, however designated, having by law power to act for any purpose with the authority of two justices, and sitting at a police court or other place appointed in that behalf;

(xvii.) "Railway company" includes a company or persons working a railway under lease or otherwise;

(xviii.) "Persons" includes a body corporate or unincorporate;

(xix.) "Part" means Part of this Act, and "Schedule" means Schedule to this Act.

(2) The schedules shall be construed and have effect as part of this Act.

(3) In the computation of time for purposes of this Act, a period reckoned by days from the happening of an event or the doing of an act or thing shall be deemed to be exclusive of the day on which the event happens or the act or thing is done.

PART II.—ENGLAND.

6. Part II. applies to England.

7. In and for the purposes of Part II.—

(i.) "County" does not include a county of a city or a county of a town, but includes a riding or division or parts of a county having a separate commission of the peace:

(ii.) The liberty of the Isle of Ely and the soke of Peterborough are each a county;

(iii.) Every other liberty or franchise of a county is part of the county by which it is surrounded, or, if partly surrounded by two or more counties, is part of that county with which it has the longest common boundary;

(iv.) "Metropolis" has the same meaning as in the Metropolis Management Act, 1855;

(v.) "Borough" means—

(a.) A place for the time being subject to the Municipal Corporation Act, 1835; or

(b.) A place having for the time being under any general or local Act of Parliament, or otherwise, a separate police establishment.

(vi.) Every place not being a county, borough, part of the Metropolis, or named in the Second Schedule, forms part of the county to the county rate whereof it is assessed, or if it is not so assessed forms parts of the county whereof it is situate.

PRIVY COUNCIL.

8.—(1.) In this Act Her Majesty's Most Honourable Privy Council is referred to as the Privy Council, and an Order of the Privy Council under this Act is referred to as an Order of Council.

(2.) Powers by this Act conferred on the Privy Council may be exercised by the Lords and others of the Privy Council, or two of them; and as regards the making of orders and doings of Acts affecting only particular local authorities, persons, ports, towns, districts, places, areas, vessels, or things, and as regards the issuing and revocation of licences, and the appointment or removal of inspectors and other officers, may be exercised by the Lord President of the Council or one of Her Majesty's Principal Secretaries of State.

LOCAL AUTHORITIES.

9. For the purposes of this Part the respective districts, authorities, rates and officers described in the Second Schedule shall be the district, the local authority, the local rate, and the clerk of the local authority, but subject as regards the Metropolis to the following provisions:

(i.) The Corporation of London shall alone be the local authority in and for the Metropolis for purposes of the provisions of this Act relating to foreign animals;

(ii.) The City of London and the liberties thereof shall contribute for purposes of this Act to the Metropolitan Consolidated Rate;

(iii.) No part of the expenses of the local authority for a county shall be included in any precept or warrant for the levying or collection of a county rate within the Metropolis.

CATTLE PLAGUE.

10.—(1) Where it appears to an inspector that cattle plague exists, or has within ten days existed, in a cow-shed, field, or other place, he shall forthwith make and sign a declaration thereof.

(2) He shall serve a notice, signed by him, of that declaration on the occupier of that cow-shed, field, or other place.

(3) Thereupon that cow-shed, field, or other place, with all lands and buildings contiguous thereto in the same occupation shall become and be a place infected with cattle plague, subject to the determination and declaration of the Privy Council.

(4) The inspector shall serve a like notice, signed by him unless, in the circumstances, this appears to him not to be expedient, on the occupiers of all lands and buildings, any part whereof lies in his judgment within one mile in any direction from that cow-shed, field or other place, or on the occupiers of any of those lands and buildings.

(5) Thereupon, all the lands and buildings aforesaid, on the occupiers whereof the inspector serves such a notice shall become and be part of the aforesaid place infected with cattle plague, subject to the determination and declaration of the Privy Council.

(6) The inspector shall, with all practicable speed, inform the Privy Council and the local authority of his declaration and notices, and shall send to the Privy Council his declaration and a copy of his second-mentioned notice (if any).

(7) The Privy Council shall forthwith on receipt of the information inquire into the correctness of the inspector's declaration.

(8) If the Privy Council are satisfied of the correctness of

that declaration as regards the existence or past existence of cattle plague they shall by order determine and declare accordingly, and prescribe the limits of the place infected with cattle plague.

(9.) If the Privy Council are not satisfied of the correctness of the inspector's declaration as regards the existence or past existence of cattle plague they shall by order determine and declare accordingly; and thereupon, as from the time specified in the order, the place comprised in the inspector's declaration and notices shall cease to be a place infected with cattle plague.

11. The Privy Council may at any time, if they think fit, on any evidence satisfactory to them, by order declare any cow-shed, field, or other place, with or without any lands or buildings adjoining or near thereto, to be a place infected with cattle plague.

12. The Privy Council may from time to time, if they think fit, by order declare any area, wherein a place infected with cattle plague is situate, to be an area infected with cattle plague.

13. The Privy Council may from time to time, if they think fit, by order extend, contract, or otherwise alter the limits of a place or area infected with cattle plague.

14. The Privy Council may at any time, if they think fit, by order declare a place or area infected with cattle plague, or part thereof, to be free from cattle plague.

15.—(1.) The Privy Council shall cause to be slaughtered—

(i.) All animals affected with cattle plague;

(ii.) All animals being or having been in the same shed or stable, herd or flock, or in contact, with an animal affected with cattle plague.

(2.) The Privy Council may, if they think fit, in any case cause to be slaughtered—

(iii.) All animals suspected of cattle plague, or being in a place infected with cattle plague.

(iv.) All animals being in such parts of an area infected with cattle plague as are not comprised in a place infected with cattle plague (but in this last-mentioned case subject to such regulations as the Treasury from time to time think fit to make).

(3.) The Privy Council shall, for animals slaughtered under this section, pay compensation as follows, out of money provided by Parliament:

(a) Where the animal slaughtered was affected with cattle plague the compensation shall be one half of its value immediately before it became so affected, but so that the compensation do not in any such case exceed twenty pounds;

(b) In every other case the compensation shall be the value of the animal immediately before it was slaughtered, but so that the compensation do not in any case exceed forty pounds.

PLEURO-PNEUMONIA.

16.—(1.) Where it appears to an inspector of a local authority that pleuro-pneumonia exists, or has within fifty-six days existed, in a cow-shed, field, or other place, he shall forthwith make and sign a declaration thereof.

(2.) He shall serve a notice, signed by him, of the declaration on the occupier of that cow-shed, field, or other place.

(3.) Thereupon that cow-shed, field, or other place shall become and be a place infected with pleuro-pneumonia, subject to the determination and declaration of the local authority.

(4.) The inspector shall, with all practicable speed, inform the local authority of his declaration and notice, and shall send his declaration and a copy of his notice to the local authority.

(5.) The local authority shall forthwith on receipt of that information enquire into the correctness of the inspector's declaration, with the assistance and advice of a veterinary inspector, or of a person qualified according to this Act to be such.

(6.) If the local authority are satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease they shall by order determine and declare accordingly, and prescribe the limits of the place infected with pleuro-pneumonia, and may, if they think fit, include within those limits any lands or buildings adjoining or near to the cow-shed, field, or other place to which the inspector's declaration relates.

(7.) The local authority may include in a place infected with pleuro-pneumonia any adjoining part of the district of

another local authority, with the previous consent in writing of that authority, but not otherwise.

(8.) If the local authority are not satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease they shall by order determine and declare accordingly; and thereupon, as from the time specified in that behalf in their order, the cow-shed, field or other place to which the inspector's declaration relates shall cease to be a place infected with pleuro-pneumonia.

(9.) The local authority shall forthwith report to the Privy Council the declaration of the inspector, and the proceedings of the local authority thereon, and shall state whether or not it is, in their opinion, expedient that an infected area, comprising the infected place, shall be declared, and, if so, what should, in their opinion, be the limits of that area, and whether or not there is within that area any place need for the holding of a market, fair, exhibition, or sale of cattle, and, if so, whether or not it is, in their opinion, expedient that the holding in that area, while infected, of a market, fair, exhibition, or sale of cattle should be prohibited or restricted by Order of Council.

(10.) This section shall, notwithstanding anything therein contained, be construed and have effect subject to the subsequent section in this Act contained, whereby the Privy Council are required to make, by order, provision respecting the case of cattle found to be affected with pleuro-pneumonia while exposed for sale or exhibited in a market, fair, sale-yard, or place of exhibition, and in other circumstances specified in the same section, and generally while being in a place not in the possession or occupation, or under the control, of the owner of the cattle.

17.—(1.) The Privy Council may at any time, if they think fit, on any evidence satisfactory to them, by order declare any cow-shed, field, or other place, with or without any lands or buildings adjoining or near thereto, to be a place infected with pleuro-pneumonia.

(2.) The Privy Council may from time to time, if they think fit, by order extend the limits of a place infected with pleuro-pneumonia, declared either by a local authority or by the Privy Council.

18.—(1.) The Privy Council may at any time, if they think fit, on any evidence satisfactory to them, by order declare any area wherein a place infected with pleuro-pneumonia is situate to be an area infected with pleuro-pneumonia, and may from time to time, if they think fit, by order extend the limits of such an area.

(2.) The Privy Council, on making any such order, shall consider whether it is necessary or expedient to prohibit the holding in that area, while infected, of any market, fair, exhibition, or sale of cattle, and shall either prohibit the holding thereof accordingly, or allow the same to be held on such terms and conditions as they think fit to prescribe.

19. The rules set forth in the Third Schedule shall have effect in relation to a place or area infected with pleuro-pneumonia.

20.—(1.) Where a local authority have declared a place to be infected with pleuro-pneumonia they may, if they think fit, at any time after the expiration of fifty-six days from the date of the cessation therein of that disease, but not sooner, declare by order that place to be free from pleuro-pneumonia.

(2.) Where the Privy Council or a local authority have declared a place to be infected with pleuro-pneumonia the Privy Council may, if they think fit, at any time after the expiration of fifty-six days from the date of the cessation therein of that disease, but not sooner, declare by order that place to be free from pleuro-pneumonia.

(3.) Where the Privy Council have declared an area to be infected with pleuro-pneumonia they may, if they think fit, at any time when there is not within that area, or within some particular portion thereof, any place infected with pleuro-pneumonia, declare by order that area, or that portion thereof, to be free from pleuro-pneumonia.

21.—(1.) A local authority shall cause all cattle affected with pleuro-pneumonia to be slaughtered within two days after the existence of the disease is known to them.

(2.) A local authority may, if they think fit, cause any cattle being or having been in the same shed or herd, or in contact, with cattle affected with pleuro-pneumonia to be slaughtered.

(3.) The local authority shall out of the local rate pay compensation as follows for cattle slaughtered under this section:

(i.) Where the animal slaughtered was affected with pleuro-pneumonia the compensation shall be three-fourths of its value immediately before it became so affected, but so that the compensation do not in any such case exceed thirty pounds.

(ii.) In every other case the compensation shall be the value of the animal immediately before it was slaughtered, but so that the compensation do not in any case exceed forty pounds.

FOOT-AND-MOUTH DISEASE.

22.—(1.) Where it appears to an inspector of a local authority that foot-and-mouth disease exists, or has within ten days existed, in a cow-shed, field, or other place, he shall forthwith make and sign a declaration thereof.

(2.) He shall serve a notice, signed by him, of that declaration on the occupier of that cow-shed, field, or other place, and also on the occupier or occupiers of any lands or buildings contiguous thereto as he shall consider necessary.

(3.) Thereupon that cow-shed, field, or other place shall become and be a place infected with foot-and-mouth disease, subject to the determination and declaration of the local authority.

(4.) The inspector shall, with all practicable speed, inform the local authority of his declaration and notice, and shall send his declaration and a copy of his notice to the local authority.

(5.) The local authority shall forthwith on receipt of that information inquire into the correctness of the inspector's declaration.

(6.) If the local authority are satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease they shall by order determine and declare accordingly, and prescribe the limits of the place infected with foot-and-mouth disease, and may, if they think fit, include within those limits any lands or buildings adjoining or near to the cow-shed, field, or other place to which the inspector's declaration relates.

(7.) The local authority may include in a place infected with foot-and-mouth disease any adjoining part of the district of another local authority, with the previous consent in writing of that authority, but not otherwise.

(8.) If the local authority are not satisfied of the correctness of the inspector's declaration as regards the existence or past existence of disease they shall by order determine and declare accordingly; and thereupon, as from the time specified in that behalf in their order, the cow-shed, field, or other place to which the inspector's declaration relates shall cease to be a place infected with foot-and-mouth disease.

(9.) The local authority shall forthwith report to the Privy Council the declaration of the inspector and the proceedings of the local authority thereon, and shall state whether or not it is, in their opinion, expedient that an infected area, comprising the infected place, shall be declared, and, if so, what should, in their opinion, be the limits of that area, and whether or not there is within that area any place used for the holding of a market, fair, exhibition, or sale of animals, and, if so, whether or not it is, in their opinion, expedient that the holding in that area, while infected, of a market, fair, exhibition, or sale of animals should be prohibited or restricted by Order of Council.

(10.) This section shall, notwithstanding anything therein contained, be construed and have effect subject to the subsequent section in this Act contained, whereby the Privy Council are required to make, by order, provision respecting the case of animals found to be affected with foot-and-mouth disease while exposed for sale or exhibited in a market, fair, sale-yard, or place of exhibition, and in other circumstances specified in the same section, and generally while being in a place not in the possession or occupation, or under the control, of the owner of the animals.

23.—(1.) The Privy Council may at any time, if they think fit, on any evidence satisfactory to them, by order declare any cow-shed, field, or other place, with or without any lands or buildings adjoining or near thereto, to be a place infected with foot-and-mouth disease.

(2.) The Privy Council may from time to time, if they think fit, on any evidence satisfactory to them, by order extend the

limits of a place infected with foot-and-mouth disease declared either by the Privy Council or by a local authority.

24.—(1.) The Privy Council may at any time, if they think fit, on any evidence satisfactory to them, by order declare any area wherein a place infected with foot-and-mouth disease is situate to be an area infected with foot-and-mouth disease, and may from time to time, if they think fit, by order extend the limits of such an area.

(2.) The Privy Council, on making any such order, shall consider whether it is necessary or expedient to prohibit the holding in that area, while infected, of any market, fair, exhibition, or sale of animals, and shall either prohibit the holding the roof accordingly or allow the same to be held on such terms and conditions as they think fit to prescribe.

25.—The rules set forth in the Fourth Schedule shall have effect in relation to a place or area infected with foot-and-mouth disease.

26.—(1.) Where a local authority have declared a place to be infected with foot-and-mouth disease, they may, if they think fit, at any time after the expiration of fourteen days from the date of the cessation therein of that disease, or of such longer period, not exceeding twenty-eight days from that date, as the Privy Council from time to time by general order direct, but not sooner, declare by order that place to be free from foot-and-mouth disease.

(2.) Where the Privy Council or a local authority have declared a place to be infected with foot-and-mouth disease the Privy Council may, if they think fit, at any time after the expiration of fourteen days from the date of the cessation therein of that disease, or of such longer period, not exceeding twenty-eight days from that date, as the Privy Council from time to time by general order direct, but not sooner, declare by order that place to be free from foot-and-mouth disease.

(3.) Where the Privy Council have declared an area to be infected with foot-and-mouth disease they may, if they think fit, at any time when there is not within that area, or within some particular portion thereof, any place infected with foot-and-mouth disease, declare, by order, that area, or that portion thereof, to be free from foot-and-mouth disease.

EXCEPTIONAL POWERS FOR TRANSIT, AND OTHER CASES.

27.—(1.) The Privy Council shall, as soon as may be after the passing of this Act, and thereafter from time to time, by general order, make such further or other provision as they think necessary or expedient respecting the case of animals found to be affected with pleuro-pneumonia or foot-and-mouth disease—

(i.) While exposed for sale or exhibited in a market, fair, sale-yard, place of exhibition, or other place; or

(ii.) While placed in a lair or other place before exposure for sale; or

(iii.) While in transit or in course of being moved by land or by water; or

(iv.) While in a foreign animals' wharf or foreign animals' quarantine station; or

(v.) While being in a slaughter-house or place where animals are slaughtered or are kept with a view to slaughter; or

(vi.) While being on common or unenclosed land; or

(vii.) Generally, while being in a place not in the possession or occupation or under the control of the owner of the animals.

(2.) The Privy Council shall, by general orders under this section, from time to time make such provision as they think fit for the consequences under this Act of animals being so found in the circumstances aforesaid, as well with regard to the animals as with regard to the places where they are when so found and other places, and with regard to animals being or having been in the same shed or stable, herd or flock, or in contact with animals so found.

(3.) The Privy Council may from time to time, by special orders under this section relating to particular places, make such provision as they think fit for the consequences aforesaid.

(4.) Every order under this section shall have full effect notwithstanding any provision of this Act requiring the declaration of a place infected by pleuro-pneumonia or foot-and-mouth disease, or relating to any consequence thereof, or to any matter connected therewith, and notwithstanding any other provision whatsoever of this Act.

INFECTED PLACES AND AREAS, GENERALLY.

28.—(1) The Privy Council may, from time to time, make such general orders as they think fit, subject and according to the provisions of this Act, for prescribing the cases in which places and areas are to be declared to be infected with a disease other than cattle plague, pleuro-pneumonia, or foot-and-mouth disease, and the authority, mode, and conditions by, in, and on which declarations in that behalf are to be made, and the effect and consequences thereof, and the cessation and (2.) Every discontinuance thereof, and other matters connected therewith.

(2.) Every place or area so declared infected, as well as a place or area declared infected with cattle plague, pleuro-pneumonia, or foot-and-mouth disease, shall be an infected place or area within this Act.

(3.) Notwithstanding anything in this Act, where the Privy Council, on inquiry, and after communication with the local authority, but without prejudice to the powers of the Privy Council as regards cattle plague, are satisfied that a declaration of a place being an infected place has been made in error respecting the existence or past existence of disease or respecting the limits of a place, or respecting any other matter of fact whereon the declaration proceeded, the Privy Council may, by order, cancel the declaration as regards the infected place, or as regards any part thereof, as they think fit.

(4.) Where, in accordance with the provision of this Act, a place or area or a portion of an area is declared free from a disease, or a declaration of a place being an infected place is cancelled, as regards the place or as regards any part thereof, then, as from the time specified in that behalf by the Privy Council or a local authority, as the case may be, the place or area, or that portion of the area, or that part of the place, shall cease to be, or to be in, an infected place or area.

(5.) An order of the Privy Council or of a local authority declaring a place or area to be an infected place or area, or a place or area, or a portion of an area, to be free from disease, or cancelling a declaration, shall be conclusive evidence to all intents of the existence or past existence or cessation of the disease, or of the error, and of any other matter whereon the order proceeds.

SLAUGHTER IN DISEASE, AND COMPENSATION GENERALLY.

29.—The Privy Council may from time to time make such orders as they think fit, subject and according to the provision of this Act, for directing or authorising, in case of the existence of any disease other than cattle plague or pleuro-pneumonia, slaughter of animals by local authorities, either generally or in particular instances, and in all or any of such cases payment of compensation for the same by local authorities out of the local rate.

30.—(1.) The Privy Council may, notwithstanding anything in this Act, reserve for observat on and treatment an animal liable to be slaughtered under this Act by order of the Privy Council or of a local authority, but subject to payment of compensation by the Privy Council or the local authority, as the case may be, as in case of actual slaughter.

(2.) Where an animal is slaughtered under this Act by order of the Privy Council or of a local authority the carcass of the animal shall belong to the Privy Council or to the local authority as the case may be, and shall be buried, or sold, or otherwise disposed of by them, or as they direct, as the condition of the animal or carcass and other circumstances may require or admit; and any money received by a local authority on any such sale shall be carried by them to the credit of the local rate.

(3.) If, in any case, the sum received by the Privy Council or a local authority on sale of a carcass under this section exceeds the amount paid for compensation to the owner of the animal slaughtered by the Privy Council or local authority, as the case may be, shall pay that excess to the owner, after deduction of reasonable expenses.

(4.) Where an animal is slaughtered under this Act by order of the Privy Council or a local authority the Privy Council or local authority, as the case may be, may use for the burial of the carcass any ground in the possession or occupation of the owner of the animal and suitable in that behalf, or any common or unenclosed land, but, as regards the use by a local authority of common or unenclosed land, not without the approval of the Privy Council:

(5.) If the owner of an animal slaughtered under this Act by order of the Privy Council or of a local authority has an insurance on the animal the amount of the compensation awarded to him under this Act may be deducted by the insurers from the amount of the money payable under the insurance before they make any payment in respect thereof.

(6.) A local authority shall keep, as the Privy Council from time to time by general order direct, a record relative to slaughter, which record shall be admitted in evidence.

(7.) Notwithstanding anything in this Act, the Privy Council or a local authority, as the case may be, may, if they think fit, withhold, either wholly or partially, compensation or other payment in respect of an animal slaughtered under this Act by their respective order, where the owner or the person having charge thereof has, in their respective judgment, been guilty, in relation to the animal, of an offence against this Act, or where the animal, being a foreign animal, was, in their respective judgment, diseased at the time of its landing.

NOTICE OF DISEASE TO POLICE.

31.—(1.) Every person having in his possession or under his charge an animal affected with disease shall, as far as practicable, keep that animal separate from animals not so affected, and shall, with all practicable speed, give notice of the fact of the animal being so affected to a constable of the police establishment for the police district or area, county, borough, town, or place wherein the animal so affected is.

(2.) The constable to whom notice is given shall forthwith give information thereof to such person or authority as the Privy Council from time to time by general order direct.

(3.) The Privy Council from time to time may make such general orders as they think fit for prescribing and regulating the notice to be given to or by any person or authority in case of any particular disease, or in case of the illness of an animal, and for supplementing or varying for those purposes any of the provisions of this section.

DISEASE AND MOVEMENT, GENERALLY.

32. The Privy Council may from time to time make such general or special orders as they think fit, subject and according to the provisions of this Act, for the following purposes, or any of them:—

(i.) For prescribing and regulating the publication by placards, handbills, or otherwise, in the immediate neighbourhood of a place or area declared infected, of the fact of such declaration.

(ii.) For prohibiting or regulating the movement of animals and persons into, in, or out of an infected place or area.

(iii.) For prescribing and regulating the isolation or separation of animals being in an infected place or area.

(iv.) For prohibiting or regulating the removal of carcasses, fodder, litter, utensils, pens, hurdles, dung, or other things into, in, or out of an infected place or area.

(v.) For prescribing and regulating the destruction, burial, disposal, or treatment of carcasses, fodder, litter, utensils, pens, hurdles, dung, or other things, being in an infected place or area, or removed thereon.

(vi.) For prescribing and regulating the cleansing and disinfecting of infected places and areas, or parts thereof.

(vii.) For prescribing and regulating the disinfecting of the clothes of persons coming in contact with or employed about diseased or suspected animals, or being in an infected place, and the use of precautions against the spreading of disease by such persons.

(viii.) For prohibiting or regulating the digging up of carcasses buried.

(ix.) For prohibiting or regulating the exposure of diseased or suspected animals in markets or fairs or sale-yards, or other public or private places, where animals are commonly exposed for sale, and the placing thereof in lairs or other places adjacent to or connected with markets or fairs, or where animals are commonly placed before exposure for sale.

(x.) For prohibiting or regulating the sending or carrying of diseased or suspected animals, or of dung or other thing likely to spread disease, or the causing the same to be sent or carried, on railways, canals, rivers, or inland navigations, or in coasting vessels, or otherwise.

(x.) For prohibiting or regulating the carrying, leading, or driving of diseased or suspected animals, or the causing them to be carried, led, or driven on highways or thoroughfares, or elsewhere.

(xii.) For prohibiting or regulating the placing or keeping of diseased or suspected animals on commons or uninclosed lands, or in fields or other places insufficiently fenced, or on the sides of highway.

(xiii.) For prescribing and regulating the seizure, detention, and disposal of a diseased or suspected animal exposed, carried, kept, or otherwise dealt with in contravention of an Order of Council; and for prescribing and regulating the liability of the owner or consignor or consignee of the animal to the expenses connected with the seizure, detention, and disposal thereof.

(xiv.) For prescribing the mode of ascertainment of the value of an animal slaughtered, or liable to be slaughtered, by order of the Privy Council or of a local authority.

(xv.) For regulating applications for, and the mode of payment of, compensation to be paid out of money provided by Parliament.

(xvi.) For prescribing and regulating the destruction, burial, disposal, or treatment of carcases of animals slaughtered by order of the Privy Council or of a local authority, or dying while diseased or suspected.

(xvii.) For prohibiting or regulating movement of animals, and the removal of carcases, fodder, litter, dung, and other things, and for prescribing and regulating the isolation of animals newly purchased.

(xviii.) For prescribing and regulating the issuing and production of licences respecting movements and removal of animals and things.

(xix.) For prohibiting or regulating the holding of markets, fairs, exhibitions, and sales of animals.

(xx.) For prescribing and regulating the cleansing and disinfecting of places used for the holding of markets, fairs, exhibitions, and sales of animals, or for lirage of animals, and yards, sheds, stables, and other places used for animals.

(xxi.) For prescribing and regulating the cleansing and disinfecting of vessels, vehicles, and pens and other places, used for the carrying of animals for hire or purposes connected therewith.

(xxii.) For prescribing modes of cleansing and disinfecting.

(xxiii.) For insuring for animals carried by sea a proper supply of food and water and proper ventilation during the passage and on landing.

(xxiv.) For protecting them from unnecessary suffering during the passage and on landing.

(xxv.) For protecting animals from unnecessary suffering during inland transit.

(xxvi.) For securing a proper supply of water and food to animals during any detention thereof.

(xxvii.) For prescribing and regulating the marking of animals.

(xxviii.) For prohibiting, absolutely or conditionally, the use, for the carrying of animals or for any purpose connected therewith, of a vessel, vehicle, or pen or other place in respect whereof, or of the use whereof, a penalty has been recovered from any person for an offence against this Act.

(xxix.) For prescribing and regulating the payment and recovery of expenses in respect of animals.

(xxx.) For prescribing and regulating the form and mode of service or delivery of notices and other instruments.

(xxxi.) For authorising a local authority to make regulations for the purposes of this Act or of an Order of Council, subject to such conditions, if any, as the Privy Council, for the purpose of securing uniformity and the due execution of the provisions of this Act, think fit to prescribe.

(xxxii.) For applying all or any of the provisions of this Act to horses, asses, and mules, and to glanders and farcy and other diseases thereof.

(xxxiii.) For extending, for all or any of the purposes of this Act, the definition of diseases in this Act, so that the same shall for those purposes comprise any disease of animals in addition to the diseases mentioned in this Act.

(xxxiv.) Generally, for the better execution of this Act, or for the purpose of in any manner preventing the spreading of disease.

33. (1) Every railway company shall make a provision, to the satisfaction of the Privy Council, of water and food, or either of them, at such stations as the Privy Council from time to time, by general or specific description, direct, for animals carried, or about to be or having been carried, on the railway of the company.

(2) The water and food so provided, or either of them, shall be supplied to any such animal by the company carrying it, on the request of the consignor or of any person in charge thereof.

(3) As regards water, if in the case of any animal such a request is not made, so that the animal remains without a supply of water for twenty-four consecutive hours, the consignor and the person in charge of the animal shall each be guilty of an offence against this Act; and it shall be on the person charged to prove such a request and the time within which the animal had a supply of water.

(4) But the Privy Council may from time to time, if they think fit, by order prescribe any other period, not less than twelve hours, instead of the period of twenty-four hours aforesaid, generally, or in respect of any particular kind of animals.

(5) The company supplying water or food under this section may make in respect thereof such reasonable charges (if any) as the Privy Council by order approve, in addition to such charges as they are for the time being authorised to make in respect of the carriage of animals. The amount of those additional charges accrued due in respect of any animal shall be a debt from the consignor and from the consignee thereof to the company, and shall be recoverable by the company from either of them, with costs by proceedings in any court of competent jurisdiction. The company shall have a lien for the amount thereof on the animal in respect whereof the same accrued due, and on any other animal at any time consigned by or to the same consignor or consignee to be carried by the company.

DAIRIES, COW-SHEDS, AND MILK-SHOPS.

34. The Privy Council may from time to time make such general or special order as they think fit subject and according to the provisions of this Act, for the following purposes or any of them:

(i) For the registration with the local authority of all persons carrying on the trade of cowkeepers, dairymen, or purveyors of milk.

(ii) For the inspection of cattle in dairies, and for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cow-sheds in the occupation of persons following the trade of cowkeepers or dairymen.

(iii) For securing the cleanliness of milk stores, milk-shops, and of milk-vessels used for containing milk for sale by such persons.

(iv) For prescribing precautions to be taken for protecting milk against infection or contamination.

(v) For authorising a local authority to make regulations for the purposes aforesaid, or any of them, subject to such conditions, if any, as the Privy Council prescribe.

FOREIGN ANIMALS

35.—(1) The Privy Council may from time to time make such general or special orders as they think fit for prohibiting the landing of animals, or of any specified kind thereof, or of carcases, fodder, litter, dung, or other thing, brought from any specified foreign country, or any specified part thereof.

(2) Any such order may be made at any time after the passing of this Act, but shall not take effect before the first day of January one thousand eight hundred and seventy-nine, and until that day Part III., relating to foreign animals, of the Contagious Diseases (Animals) Act, 1869, and all other provisions relating to foreign animals of that Act and of any other Act repealed by this Act, shall, notwithstanding that repeal, or any other thing in this Act, be in force as if this Act had not been passed.

(3) On and after the first day of January one thousand eight hundred and seventy-nine the provisions set forth in the Fifth Schedule shall apply to foreign animals, the landing whereof is not for the time being prohibited by Order of Council made under this section.

36. (1) The Privy Council may from time to time make

such general or special orders as they think fit, subject and according to the provisions of this Act, for the following purposes, or any of them.

(i.) For prescribing the ports at which alone foreign animals may be landed.

(ii.) For defining the limits of ports for purposes of this Act.

(iii.) For defining parts of ports.

(iv.) For prohibiting or regulating the movement of animals into, in, or out of a defined part of a port.

(v.) For prescribing and regulating the inspection and examination, and the mode, time, and conditions of slaughter, of animals in a defined part of a port.

(vi.) For prescribing and regulating the disposal of animals, not being foreign animals, and being in a defined part of a port.

(vii.) For regulating the removal of carcases, fodder, litter, utensils, dung, or other things into, in, or out of a defined part of a port, and the disposal thereof, when likely to introduce or spread disease.

(viii.) For prescribing and regulating the cleansing and disinfecting of a defined part of a port or of parts thereof.

(ix.) For prescribing and regulating the disinfecting or destruction of things being in a defined part of a port or removed thereout.

(x.) For regulating the movement of persons into, in, or out of a defined part of a port.

(xi.) For prescribing and regulating the disinfecting of the clothes of persons employed or being in a defined part of a port, and the use of precautions against the introduction or spreading by them of disease.

(xii.) For prescribing and regulating the seizure and detention of any foreign animal, carcase, fodder, litter, dung, or other thing whereby disease may be introduced or spread.

(xiii.) Generally, for the better execution of this Act in relation to foreign animals, carcases, fodder, litter, dung, or other things, or for the purpose of in any manner preventing the introduction or spreading thereby of disease.

(2.) Notwithstanding anything in this Act, a defined part of a port, or any part thereof, shall not be declared to be an infected place, or be made part of an infected place, otherwise than by the Privy Council.

(3.) Where the district or part of a district of a local authority described in the Second Schedule is or comprises, or is comprised in, a port or part of a port, the Privy Council may from time to time, if they think fit, in relation to that port or part of a port, by order, make any body, other than the body constituted the local authority by the Second Schedule, the local authority for the purposes of the provisions of this Act relating to foreign animals, and, in connection with the local authority so made, prescribe the local rate, if any, and the clerk of the local authority.

POWERS AND DUTIES OF LOCAL AUTHORITIES.

37. A local authority, not being a body corporate, may sue and be sued, and take and hold land, and otherwise act and be dealt with for all purposes of this Act, by the name or title of the local authority under this Act for their district, as if they were incorporated.

38. The provisions in the Sixth Schedule shall have effect with respect to committees of local authorities.

39.—(1.) A local authority may provide, erect, and fit up wharves, stations, lairs, sheds, and other places for the landing, reception, keeping, sale, slaughter, or disposal of foreign animals, carcases, fodder, litter, dung, and other things.

(2.) There shall be incorporated with this Act the Markets and Fairs Clauses Act, 1847, except sections six to nine and fifty-one to sixty thereof, all inclusive.

(3.) A wharf or other place provided by a local authority under this section shall be a market within that Act; and this Act shall be the special Act; and the prescribed limits shall be the limits of lands acquired or appropriated for purposes of this section; and byelaws shall be approved by the Privy Council, which approval shall be sufficient without any other approval or allowance, notice of application for approval being given, and proposed byelaws being published before application, as required by the Markets and Fairs Clauses Act, 1847.

(4.) A local authority may charge for the use of a wharf

or other place provided by them under this section such sums as byelaws from time to time appoint, and the same shall be deemed tolls authorised by the special Act.

(5.) All sums so received by the local authority shall be carried to a separate account, and shall be applied in payment of interest on money borrowed by them for the purposes of Part III., relating to foreign animals, of the Contagious Diseases (Animals) Act, 1869, or of this section, and in repayment of the principal thereof, and, subject thereto, towards discharge of their expenses under this Act.

(6.) The local authority shall make such periodical returns to the Privy Council of their expenditure and receipts in respect of the wharf or other place as the Privy Council from time to time require.

(7.) The Privy Council, if satisfied on inquiry that the tolls taken by the local authority for the wharf or other place may properly be reduced, regard being had to the expenditure and receipts of the local authority in respect thereof, and to any money secured on the tolls, and to the other circumstances of the case, may require the local authority to submit to the Privy Council, for their approval, a new schedule of tolls, and on failure of the local authority to do so, to the satisfaction of the Privy Council, may, by order, prescribe such tolls as they think fit, in lieu of those before approved by them.

(8.) The provisions of this section shall apply to a wharf or other place provided by a local authority under the Contagious Diseases (Animals) Act, 1869.

40.—(1.) A local authority may purchase, or may by agreement take on lease or at a rent, land for wharves or other places, or for use for burial of carcases in cases where there is not any ground suitable in that behalf in the possession or occupation of the owner of the animal, or any common or uninclosed land suitable, and approved by the Privy Council, in that behalf, or for any other purpose of this Act.

(2.) They may (subject to any agreement) dispose of lands so acquired, but not required for this Act, carrying the money produced thereby to the credit of the local rate.

(3.) The regulations contained in section one hundred and seventy-six of the Public Health Act, 1875, shall be observed with respect to the purchase of land by a local authority for purposes of this Act, as if the local authority were a local board, and purposes of this Act were purposes of that Act; save that the requisite advertisements and notices may be published and served in any two consecutive months, and that the local rate be substituted for the rates therein mentioned.

(4.) The powers conferred by this section may be exercised by a local authority with respect to land within or without their district.

41.—(1.) Every local authority shall execute and enforce this Act and every Order of Council, as far as the same are to be executed or enforced by local authorities.

(2.) Where a local authority fail to execute or enforce any of the provisions of this Act, or of an Order of Council, the Privy Council may by order empower a person therein named to execute and enforce those provisions, or to procure the execution and enforcement thereof.

(3.) The expenses incurred thereby by or on behalf of the Privy Council, including compensation for animals slaughtered, shall be expenses of the local authority, and the amount thereof shall be paid to the Privy Council, on demand, by the treasurer or other proper officer of the local authority; and in default of payment the same shall be recoverable from the local authority, with costs, by a person appointed by the Privy Council to sue in that behalf.

(4.) For the purposes of this section an order of the Privy Council shall be conclusive in respect of any default, amount of expenses, or other matter therein stated or appearing.

(5.) The provisions of this section shall be without prejudice to the right or power of the Privy Council, or any other authority or any person, to take any such proceedings for requiring a local authority to execute or enforce any of the provisions of this Act, or of an Order of Council.

42.—(1.) Every local authority shall from time to time appoint so many inspectors and other officers as they think necessary for the execution and enforcement of this Act, and shall assign to those inspectors and officers such duties, and salaries or allowances, and may delegate to any of them such

authorities and discretion as to the local authority seem fit, and may at any time revoke any appointment so made.

(2.) Every local authority shall keep appointed at all times at least one veterinary inspector, and shall appoint and at all times keep appointed so many other veterinary inspectors as the Privy Council, having regard to the extent and circumstances of the district of the local authority from time to time direct.

(3.) The Privy Council, on being satisfied on inquiry that an inspector of a local authority is incompetent, or has been guilty of misconduct or neglect, may, if they think fit, direct his removal, and thereupon he shall cease to be an inspector.

43. Every local authority and their inspectors and officers shall send and give to the Privy Council such notices, reports, returns, and information as the Privy Council from time to time require.

44.—(1.) An order or regulation of a local authority may be proved—

(i.) By the production of a newspaper purporting to contain the order or regulation as an advertisement; or

(ii.) By the production of a copy of the order or regulation purporting to be certified by the clerk of the local authority as a true copy.

(2.) An order or regulation so proved shall be taken to have been duly made, unless and until the contrary is proved.

(3.) An order or regulation of a local authority authorised by this Act, or by Order of Council, shall alone be deemed for purposes of this Act an order or regulation of a local authority.

45. The provisions of this Act conferring powers on, or otherwise relating to, a local authority, or their inspectors or officers, shall, unless otherwise expressed, be read as having reference to the district of the local authority; and powers thereby conferred shall, unless it is otherwise expressed, be exercisable and shall operate within and in relation to that district only.

EXPENSES OF LOCAL AUTHORITIES.

46. The expenses of a local authority shall be defrayed out of the local rate; and such sums as may be necessary to defray those expenses shall from time to time be levied with and as part of the local rate.

47.—(1.) The local authority of a borough assessed to the county rate of a county shall be paid by the local authority of the county the proportionate amount paid by the several parishes and parts of parishes in the borough towards the expenses under this Act of the local authority of the county.

(2.) The local authority of a borough having a separate court of quarter sessions shall be exempt from contributing towards the expenses under this Act of the local authority of the county within which the borough is situate; and the treasurer of the county shall, out of the account required by the Municipal Corporation Act, 1835, to be kept by him of money expended out of the county rate for other purposes than those in that Act mentioned, exclude the expenses under this Act of the local authority of the county; and the amount to be paid to the treasurer of the county by the borough shall be varied accordingly.

48. The existence of an order or precept for the making or collection under any former Act of a rate remaining uncollected wholly or in part at the commencement of this Act shall not affect the validity of any rate thereafter made.

BORROWING BY LOCAL AUTHORITIES.

49.—(1.) Where the amount or proportion of the local rate levied or required for this Act exceeds or would exceed in any financial year sixpence in the pound a local authority may borrow at interest on the credit of the local rate any money necessary under this Act, and may secure the repayment thereof, with interest, by mortgaging the local rate for any term not exceeding seven years.

(2.) Where the amount or proportion aforesaid exceeds or would exceed in any financial year ninepence in the pound the Local Government Board may, if they think fit, on application of the local authority, extend the term to any period not exceeding fourteen years.

(3.) A local authority, borrowing for the purposes of this section, shall borrow subject to the provisions of the Local Loans Act, 1875; and every loan raised under this section shall be discharged in manner prescribed by section thirteen

of that Act, for which purpose a sinking fund is hereby prescribed, if in any case the Local Government Board so direct, but not otherwise.

(4.) The Public Works Loan Commissioners may, on the recommendation of the Local Government Board, advance money to a local authority in manner provided by the Public Works Loans Act, 1875, and any enactment amending or substituted for that Act, the same to be repaid, with interest, within the term aforesaid, and the local authority may so borrow accordingly.

(5.) A local authority, borrowing for purposes of the provisions of this Act relating to foreign animals, may, if they think fit, give as security, either with the local rate, if any, or separately therefrom, the charges which they are authorised to make for the use of a wharf or other place provided by them under this Act, and any estates, revenues, or funds belonging to them and not otherwise appropriated by law; and in that case the limitations in this section respecting the amount or proportion of rate and term of years shall not operate.

P. LICE.

50.—(1.) The police of each police district or area, county, borough, town, and place shall execute and enforce this Act and every Order of Council.

(2.) Where a person is seen or found committing, or is reasonably suspected of being engaged in committing, an offence against this Act a constable may, without warrant, stop and detain him; and if his name and address are not known to the constable, and he fails to give them to the satisfaction of the constable, the constable may, without warrant, apprehend him; and the constable may, whether so stopping or detaining or apprehending the person or not, stop, detain, and examine an animal, vehicle, boat, or thing to which the offence or suspected offence relates, and require the same to be forthwith taken back to or into any place or district wherefrom or whereout it was unlawfully removed, and execute and enforce that requisition.

(3.) If any person obstructs or impedes a constable or other officer in the execution of this Act or of an Order of Council or of a regulation of a local authority, or assists in any such obstructing or impeding, the constable or officer may without warrant apprehend the offender.

(4.) A person apprehended under this section shall be taken with all practicable speed before a justice, and shall not be detained without a warrant longer than is necessary for that purpose; and all enactments relating to the release of persons on recognizances taken by an officer of police or a constable shall apply in the case of a person apprehended under this section.

(5.) The foregoing provisions of this section respecting a constable extend and apply to any person called by a constable to his assistance.

(6.) A constable shall forthwith make a report in writing to his superior officer of every case in which he stops any person, animal, vehicle, boat, or thing under this section, and of his proceedings consequent thereon.

(7.) Nothing in this section shall take away or abridge any power or authority that a constable would have had if this section had not been enacted.

GENERAL.

51.—(1.) An inspector shall have, for purposes of this Act, all powers which a constable has under this Act or otherwise in the place where the inspector is acting.

(2.) An inspector may at any time enter any land, or dairy or cow-shed to which this Act applies, or milk-stores or milk-shop, or other building or place wherein he has reasonable grounds for supposing—

(a.) That disease exists or has within fifty-six days existed; or

(b.) That the carcass of a diseased or suspected animal is or has been kept, or has been buried, destroyed, or otherwise disposed of; or

(c.) That there is to be found any pen, place, vehicle, or thing in respect whereof any person has on any occasion failed to comply with the provisions of this Act, or of an Order of Council, or of a regulation of a local authority; or

(d.) That this Act or an Order of Council or a regulation of a local authority has not been or is not being complied with.

(3.) An inspector may at any time enter any pen, vehicle,

vessel, or boat in which or in respect whereof he has reasonable grounds for supposing that this Act or an Order of Council or a regulation of a local authority has not been or is not being complied with.

(4.) An inspector entering, as in this section authorised, shall, if required by the owner, or occupier, or person in charge of the land, building, place, pen, vehicle, vessel, or boat, state in writing his reasons for entering.

(5.) A certificate of a veterinary inspector to the effect that an animal is or was affected with a disease specified in the certificate shall for the purposes of this Act be conclusive evidence in all courts of justice of the matter certified.

(6.) An inspector of the Privy Council shall have all the powers of an inspector throughout England or that part thereof for which he is appointed.

52.—(1.) Where an inspector of the Privy Council is satisfied that this Act or an Order of Council or a regulation of a local authority has not been or is not being complied with on board a vessel in a port, then, on the representation in writing to that effect of the inspector, stating particulars of non-compliance, the vessel may be detained until the Privy Council otherwise direct.

(2.) The officer detaining the vessel shall forthwith deliver to the master or person in charge of the vessel a copy of the representation.

(3.) Section thirty-four of the Merchant Shipping Act, 1876, shall apply in the case of such detention, as if it were effected under an Act in that section mentioned.

53. Where a carcase washed ashore is buried or destroyed under the direction of a receiver of wreck, with authority from the Board of Trade, the expenses thereof shall be expenses of the local authority, and shall be paid by them to the receiver on demand, and in default of payment shall be recoverable with costs from them by the receiver.

54. A person owning or having charge of animals in a place or area declared infected with any disease may affix, at or near the entrance to a building or inclosure in which the animals are, a notice forbidding persons to enter therein without the permission mentioned in the notice; and thereupon it shall not be lawful for any person, not having by law a right of entry or way into, on, or over that building or inclosure to enter or go into, on, or over the same without that permission.

55.—(1.) An action, prosecution, or proceeding against a local authority, or an inspector or officer of the Privy Council or of a local authority, or any person, for any act done in pursuance or execution or intended execution of this Act, or of an Order of Council or regulation of a local authority, or in respect of any alleged neglect or default in the execution of this Act, or of such an order or regulation, shall not lie or be instituted unless it is commenced within four months next after the act, neglect, or default complained of, or, in case of a continuance of injury or damage, within four months next after the ceasing thereof.

(2.) In any such action tender of amends before the action was commenced may, in lieu of or in addition to any other plea, be pleaded. If the action was commenced after such tender, or is proceeded with after payment into court of any money in satisfaction of the plaintiff's claim, and the plaintiff does not recover more than the sum tendered or paid, he shall not recover any costs incurred after such tender or payment, and the defendants shall be entitled to costs, to be taxed as between solicitor and client, as from the time of such tender or payment; but this provision shall not affect costs on any injunction in the action.

(3.) Subject and without prejudice to any other powers a local authority, where the defendant in any such action, prosecution, or other proceeding is their officer, servant, or agent, may if they think fit, except so far as the court before whom such action, prosecution, or other proceeding is heard and determined otherwise directs, pay as part of their expenses in the execution of this Act all or any part of any sums payable by such defendant in or in consequence of such action, prosecution, or proceeding, whether in respect of costs, charges, expenses, damages, fine, or otherwise.

56. No stamp duty shall be payable on, and no fee or other charge be demanded or made for, any appointment, certificate, declaration, licence, or thing under this Act, or an Order of Council, or a regulation of a local authority, or for

any inspection or other act precedent to the granting, making, or doing of a certificate, declaration, licence, or other thing.

57.—(1.) In any proceeding under this Act, no proof shall be required of the appointment or handwriting of an inspector or other officer of the Privy Council, or of the clerk or an inspector or other officer of a local authority.

(2.) Every notice or other instrument under this Act or under an Order of Council or regulation of a local authority may be in writing or print, or partly in writing and partly in print.

(3.) Any such notice or other instrument may be served on the person to be affected thereby, either by the delivery thereof to him personally, or by the leaving thereof for him at his last known place of abode or business, or by the sending thereof through the post in a registered letter addressed to him there.

(4.) A notice or other instrument so sent by post shall be deemed to have been served at the time when the letter containing it would be delivered in the ordinary course.

(5.) In order to prove service by letter of a notice or other instrument it shall be sufficient to prove that the letter was properly addressed, registered, and posted, and contained the notice or other instrument to be served.

(6.) A notice or other instrument to be served on the occupier of any building, land, or place may, except when sent by post, be addressed to him by the designation of the occupier of that building, land, or place, without naming or further describing him; and where it is to be served on the several occupiers of several buildings, lands, or places, may, except when sent by post, be addressed to them collectively by the designation of the occupiers of those several buildings, lands, or places, without further naming or describing them, but separate copies thereof being served on them severally.

58.—(1.) The Privy Council may from time to time alter or revoke any Order of Council.

(2.) Every Order of Council shall have effect as if it had been enacted by this Act.

(3.) Every Order of Council shall be published in *The London Gazette*; save that where an order affects only a particular local authority, person, port, town, district, place, area, vessel, or thing, or is a licence or revocation of a licence, or in the nature thereof, or is an appointment or removal of an inspector or other officer, then the insertion in *The London Gazette* of a notice of the making of the order shall suffice; and a copy of *The London Gazette* containing such a notice shall be evidence of the order, as if the notice were the order.

(4.) Every Order of Council, licence, or other instrument issued by the Privy Council shall be published by and at the expense of every local authority to whom it is sent by the Privy Council for publication, in such manner as the Privy Council direct, and subject to and in the absence of any direction, by advertisement in a newspaper circulating in the district of the local authority.

(5.) The validity or effect of an Order of Council, licence, or other instrument issued by the Privy Council shall not be affected by want of or defect or irregularity in any publication thereof.

(6.) Any act of the Privy Council under this Act, done otherwise than by Order of Council, shall be sufficiently done and signified by an instrument signed by the Clerk of the Council; and every act done and signified by an instrument purporting to be signed shall be deemed to have been duly done by the Privy Council; and every such instrument shall be received in evidence in all courts and proceedings without proof of the authority or signature of the Clerk of the Council or other proof.

59. A return shall be made and laid before both Houses of Parliament not later than the thirty-first day of March in each year setting forth every Order of Council made since the date of the last return and every previous Order of Council required to be published in *The London Gazette* and in force; and stating the proceedings and expenditure under this Act of the Privy Council, and, as far as reasonably may be, of local authorities, in the year ending the thirty-first day of December then last; and showing the number of foreign animals landed and found diseased in that year, specifying separately the different kinds of disease, and the ports of exportation and landing, and the mode of disposal of the animals, and containing such other information respecting the operation of this Act as the Privy Council think fit.

OFFENCES AND PROCEEDINGS.

60. If any person is guilty of an offence against this Act he shall for every such offence be liable—

(i.) To a penalty not exceeding twenty pounds; or
(ii.) If the offence is committed with respect to more than four animals, to a penalty not exceeding five pounds for each animal; or

(iii.) Where the offence is committed in relation to carcasses, fodder, litter, dung, or other thing (exclusive of animals), to a penalty not exceeding ten pounds in respect of every half ton in weight thereof after one half ton, in addition to the first penalty not exceeding twenty pounds.

61.—(1.) If any person, without lawful authority or excuse, proof whereof shall lie on him, does any of the following things he shall be guilty of an offence against this Act:

(i.) If he does anything in contravention of this Act, or of an Order of Council, or of a regulation of a local authority;

(ii.) If, where required by this Act to keep an animal separate as far as practicable, or to give notice of disease with all practicable speed, he fails to do so;

(iii.) If he fails to give, produce, observe, or do any notice, licence, rule, or thing which by this Act, or by an Order of Council, or by a regulation of a local authority, he is required to give, produce, observe, or do;

(iv.) If he does anything which by this Act or an Order of Council is made or declared to be not lawful;

(v.) If he does or omits anything the doing or omission whereof is declared by this Act or by an Order of Council to be an offence by him against this Act;

(vi.) If he refuses to an inspector or other officer, acting in execution of this Act, or of an Order of Council, or of a regulation of a local authority, admission to any land, building, place, vessel, pen, vehicle, or boat which the inspector or officer is entitled to enter or examine, or obstructs or impedes him in so entering or examining, or otherwise in any respect obstructs or impedes an inspector or constable or other officer in the execution of his duty, or assists in any such obstructing or impeding;

(vii.) If he throws or places, or causes or suffers to be thrown or placed, into or in any river, stream, canal, navigation, or other water, or into or in the sea within three miles of the shore, the carcass of an animal that has died of disease, or been slaughtered as diseased or suspected;

(2.) And on a further conviction within a period of twelve months for a second or subsequent offence against the same subsection of this section he shall be liable, in the discretion of the court of summary jurisdiction before which he is convicted, to be imprisoned for any term not exceeding one month, with or without hard labour, in lieu of the pecuniary penalty to which he is liable under this Act.

62.—(1.) If any person does any of the following things he shall be guilty of an offence against this Act:

(i.) If, with intent to unlawfully evade this Act, or an Order of Council, or a regulation of a local authority, he does anything for which a licence is requisite under this Act, or an Order of Council, or a regulation of a local authority, without having obtained a licence;

(ii.) If, where such a licence is requisite, having obtained a licence, he, with the like intent, does the thing licensed after the licence has expired;

(iii.) If he uses or offers or attempts to use as such a licence an instrument not being a complete licence, or an instrument untrue purporting or appearing to be a licence, unless he shows to the satisfaction of the court of summary jurisdiction before which he is charged that he did not know of that incompleteness or untruth, and that he could not with reasonable diligence have obtained knowledge thereof;

(iv.) If with intent to unlawfully evade this Act, or an Order of Council, or a regulation of a local authority, he alters or falsely makes, or antedates, or counterfeits, or offers or utters, knowing the same to be altered, or falsely made, or antedated, or counterfeited, a licence, declaration, certificate, or instrument made or issued, or purporting to be made or issued, under or for any purpose of this Act, or an Order of Council, or a regulation of a local authority;

(v.) If, for the purpose of obtaining such a licence, certificate, or instrument, he makes a declaration or statement false in any material particular, unless he shows to the satisfaction of the court of summary jurisdiction before which he

is charged that he did not know of that falsity, and that he could not with reasonable diligence have obtained knowledge thereof;

(vi.) If he obtains or endeavours to obtain such a licence, certificate, or instrument by means of a false pretence, unless he shows to the satisfaction of the court of summary jurisdiction before which he is charged that he did not know of that falsity, and that he could not with reasonable diligence have obtained knowledge thereof;

(vii.) If he grants or issues such a licence, certificate, or instrument, being false in any date or other material particular, unless he shows to the satisfaction of the court of summary jurisdiction before which he is charged that he did not know of that falsity, and that he could not with reasonable diligence have obtained knowledge thereof, or grants or issues such a licence, certificate, or instrument, having, and knowing that he has, no lawful authority to grant or issue the same;

(viii.) If with intent to unlawfully evade or defeat this Act, or an Order of Council, or a regulation of a local authority, he grants or issues an instrument being in form of a licence, certificate, or instrument made or issued under this Act, or an Order of Council, or a regulation of a local authority, for permitting or regulating the movement of a particular animal, or the doing of any other particular thing, but being issued in blank, that is to say, not being before the issue thereof so filled up as to specify any particular animal or thing;

(ix.) If he uses or offers or attempts to use for any purpose of this Act, or of an Order of Council, or of a regulation of a local authority, an instrument so issued in blank, unless he shows to the satisfaction of the court of summary jurisdiction before which he is charged that he did not know of it having been so issued in blank, and that he could not with reasonable diligence have obtained knowledge thereof;

(x.) If he by means of any fraud or false pretence obtains, or attempts to obtain, compensation from the Privy Council or local authority in respect of an animal slaughtered, or aids or abets any person in such fraud or false pretence;

(xi.) If, without local authority or excuse, proof whereof shall lie on him, he digs up or causes to be dug up a carcass buried

(xii.) If, where an Order of Council has prohibited absolutely or conditionally, the use for the carrying of animals, or for any purpose connected therewith, of a vessel, vehicle, or pen, or other place, he, without lawful authority or excuse, proof whereof shall lie on him, does anything so prohibited.

(2.) And in every case in this section specified he shall be liable, on conviction, in the discretion of the court of summary jurisdiction before which he is convicted, to be imprisoned for any term not exceeding two months, with or without hard labour, in lieu of the pecuniary penalty to which he is liable under this Act.

63. Proceedings and penalties for offences against this Act may be taken and recovered, and expenses and other money by this Act or an Order of Council made recoverable summarily may be recovered with costs, and summary orders under this Act or an Order of Council may be made with costs by or before a court of summary jurisdiction, under and according to the Act of the session of the eleventh and twelfth years of Her Majesty's reign (chapter forty-three) "to facilitate the performance of the duties of justices of the peace out of sessions within England and Wales with respect to summary convictions and orders," and any Act amending the same; but nothing in this section shall apply to proceedings under the Customs Acts.

64.—(1.) If any person thinks himself aggrieved by the dismissal of a complaint by, or by any determination or a judgment of, a court of summary jurisdiction under this Act, he may appeal therefrom.

(2.) The appeal shall be made to the next practicable court of general or quarter sessions for the county or place in which the cause of appeal arises, holden not less than twenty-one days after the decision appealed from.

(3.) The appellant shall, within ten days after the decision, give notice to the clerk of the court whose decision is appealed from of his intention to appeal, and of the grounds thereof, and to the other party.

(4.) The appellant shall within three days after such notice enter into a recognisance before a justice, with two sufficient sureties, conditioned personally to try the appeal.

(5.) The court may adjourn the appeal, and may make such order thereon as the court think fit.

(6.) Nothing in this section shall affect any enactment relative to appeals in cases of summary convictions of adjudication in the city of London or the metropolitan police district or apply to proceedings under the Customs Act.

65.—(1.) If any person lands or ships or attempts to land or ship an animal or thing in contravention of this Act or of an order of Council, he shall be liable, under and according to the Customs Acts, to the penalties imposed on persons importing or exporting or attempting to import or export goods the importation or exportation whereof is prohibited by or under the Customs Acts, without prejudice to any proceeding against him under this Act for an offence against this Act, but so that he be not punished twice for the same offence.

(2.) The animal or thing in respect whereof the offence is committed shall be forfeited, under and according to the Customs Acts, as goods the importation or exportation whereof is prohibited by or under the Customs Acts are liable to be forfeited.

66.—(1.) The description of an offence against this Act in the words of this Act, or of the Order of Council or regulation of a local authority under which the offence arises, or in similar words, shall be sufficient in law.

(2.) Any exception, exemption, excuse, or qualification, whether it does or not accompany the description of the offence in this Act, or in the Order of Council or regulation of a local authority under which the offence arises, may be proved by the defendant, but need not be specified or negatived in the information; and, if it is so specified or negatived, proof in relation to the matter so specified or negatived shall not be required on the part of the informant.

(3.) A warrant of commitment under this Act shall not be held void by reason of any defect therein, if only there is a valid conviction to sustain the warrant, and it is alleged in the warrant that the person named therein has been convicted.

(4.) Where the owner or person in charge of an animal is charged with an offence against this Act relative to disease or to any illness of the animal, he shall be presumed to have known of the existence of the disease or illness, unless and until he shows to the satisfaction of the court of summary jurisdiction before which he is charged that he had not knowledge thereof, and could not with reasonable diligence have obtained that knowledge.

(5.) Where a person is charged with an offence against this Act in not having duly cleansed or disinfected any place, vessel, vehicle, or thing belonging to him or under his charge, and a presumption against him on the part of the prosecution is raised, it shall lie on him to prove the due cleansing and disinfecting thereof.

(6.) A person charged with an offence against this Act may, if he thinks fit, tender himself to be examined on his own behalf, and thereupon he may give evidence in the same manner and with the like effect and consequences as any other witness.

(7.) Every offence against this Act shall be deemed to have been committed, and every cause of complaint or matter for summary proceeding under this Act, or an Order of Council, or regulation of a local authority shall be deemed to have arisen, either in any place where the same actually was committed or arose, or in any place where the person charged or complained of or proceeded against happens to be at the time of the institution or commencement of the charge, complaint, or proceeding.

(8.) Notwithstanding anything in any Act relating to the metropolitan police or to municipal corporations or in any other Act, such part not exceeding one-half of every penalty or forfeiture recovered under this Act (except in proceedings under the Customs Acts) as the court of summary jurisdiction before which it is recovered thinks fit, shall be paid to the person who proceeds for the same, and the residue thereof shall be applied as if this section had not been enacted.

PART III.—SCOTLAND.

67.—(1.) Part III. applies to Scotland only.

(2.) Part II. shall also, by virtue of this section, extend to Scotland, subject to Part III., which shall have effect in substitution for Part II., when so expressed or implied, and otherwise shall have effect in addition to Part II.

LOCAL AUTHORITIES.

68. For the purposes of this Part the respective districts,

authorities, rates, and officers described in the Seventh Schedule shall be the district, the local authority, the local rate, and the clerk of the local authority.

69.—(1.) The commissioners of supply in every county shall meet and nominate not fewer than four or more than fifteen of their number to act on the county board for the purposes of this Act, and shall intimate to the lord-lieutenant of the county and the convener of the county the number and names of the persons so appointed.

(2.) The clerk of supply in each county shall call a meeting of the occupiers of agricultural subjects in the county valued in the valuation roll in force for the time at one hundred pounds and upwards, and of occupiers of such subjects of which they are owners valued in the valuation roll at fifty pounds and under one hundred pounds. The meeting shall be called by advertisement in one or more newspapers circulating in the county for the same day as, or for a day not later than eight days after, the meeting of the commissioners of supply. The advertisement shall specify the time and place of such meeting, and the clerk of supply shall be clerk to such meeting. The meeting shall nominate from among such occupiers, and owners and occupiers, a number of persons equal to those nominated by the commissioners of supply, and the meeting shall also name a convener, who shall intimate the names of the persons so nominated to the convener of the county, and shall have power to call similar meetings by such advertisement when occasion shall require. In the event of such election not being intimated to the convener of the county within fifteen days from the date of such meeting, it shall be lawful to the lord-lieutenant to nominate from among such occupiers or owners and occupiers, such number of persons, and intimate the same to the convener of the county.

(3.) Any such nomination and intimation made for the purposes of the Contagious Diseases (Animals) Act, 1869, shall continue to have effect for the purposes of this Act.

(4.) A local authority may, if they think fit, determine that a certain number of their members, not exceeding one-third thereof, shall retire periodically, at intervals of not less than three years, the members so retiring being re-eligible; and the local authority may lay down such rules as they think fit to regulate the time and manner of such retirement.

(5.) Vacancies from time to time happening by retirement, death, resignation, or otherwise among the members of the local authority shall be filled up by the authority and in the manner by and in which the members vacating office were respectively nominated.

(6.) The persons nominated as in this section provided, and the lord-lieutenant of the county, the convener of the county, and the sheriff of the county (or in his absence such one of his substitutes as he directs by writing under his hand) for the time being shall constitute the local authority.

(7.) As far as not otherwise provided by this Act, such local authority shall have all the powers conferred on the local authority by this Act, and shall have power to elect a chairman, specify a quorum, and make all regulations necessary for carrying the purposes of this Act into effect.

(8.) The chairman of the local authority, and in default of him the convener of the county, and in default of him any three members of the local authority, may at any time call a meeting of the local authority to be held at such time and place as he or they may fix, and the local authority may adjourn as they from time to time think fit.

70.—(1.) The local authority in a county shall from time to time give notice to the commissioners of supply of the sums necessary to be provided under the provisions of this Act by means of the local rate; and the amount so intimated shall be assessed and collected by the commissioners of supply according to the real rent of lands and heritages as appearing on the valuation roll in force for the year, and shall be paid over to the local authority.

(2.) The local authority in a burgh shall in like manner assess and collect the amount required to be raised by local rate within such burgh.

(3.) All such assessments shall be payable one half by the proprietor and one half by the tenant, but may be collected wholly from the tenant, who shall in that case be entitled to deduct one-half thereof from the rent payable by him to the proprietor, or wholly from the proprietor, who shall in that case be entitled to relief against the tenant for one half of the assessment.

(4.) All the provisions in regard to the recovery of assessments in the Act of the session of the twentieth and twenty-first years of Her Majesty (chapter seventy-two), "to render more effectual the police in counties and burghs in Scotland," hereby incorporated in this part as far as the same are not inconsistent with the provisions of this part.

LAND.

71.—The provisions of part II. relating to the purchase of land shall have effect as if section ninety of the Public Health (Scotland) Act, 1867, were thereby applied, instead of section one hundred and seventy-six of the Public Health Act, 1875; and in the said section ninety the local authority and local rate under this part shall be substituted for the local authority and the assessment therein mentioned.

BORROWING.

72.—The provisions of part II. relating to borrowing by local authorities shall, as regards Scotland, be modified as follows:

(i.) Those provisions shall have reference to the amount only of the local rate, and not to the proportion thereof.

(ii.) One of Her Majesty's Principal Secretaries of State shall be substituted for the Local Government Board.

(iii.) Borrowing by a local authority shall not be subject to the provisions of the Local Loans Act, 1875; and in lieu thereof the provisions of the Commissioners Clauses Act, 1847, with respect to the mortgages to be executed by the Commissioners, shall, for the purposes of that borrowing, be incorporated with this Act, the local authority being deemed to be the Commissioners; and any mortgagee or assignee may enforce payment of his principal and interest by appointment of a judicial factor.

INSPECTORS.

73.—(1.) An inspector of the Privy Council shall have all the powers of an inspector throughout Scotland or that part thereof for which he is appointed.

(2.) Any person may be appointed and be a Veterinary Inspector in Scotland who holds the Veterinary certificate of the Highland and Agricultural Society of Scotland.

LEGAL PROCEEDINGS.

74.—(1.) Penalties for offences against this Act, other than penalties recoverable under the Customs Acts, and expenses by this Act or an Order of Council directed to be recovered summarily, and summary orders under this Act or an Order of Council, may, with expenses, be recovered before, and be made by, two justices under the Summary Procedure Act, 1864, and any Act amending the same.

(2.) The terms "justice" and "justices" include any magistrate having jurisdiction under the Summary Procedure Act, 1864.

(3.) In the event of any person refusing or delaying to comply with the order of a local authority, the local authority may give information thereof to the procurator-fiscal of the county or burgh, who may apply to the sheriff for a warrant to carry such order into effect, and such warrant may be executed by the officers of court in common form.

(4.) All judicial powers given to justices and quarter sessions or to magistrates in boroughs by this Act may also be exercised by the sheriff or sheriff-substitute of the county.

(5.) An appeal against a conviction under this Act shall be to the Court of Justiciary at the next circuit court, or where there are no circuit courts, to the High Court of Justiciary at Edinburgh, and not otherwise; and such appeal may be made in the manner and under the rules, limitations, and conditions contained in the Act of the twentieth year of the reign of King George the Second, chapter forty-three, "for taking away and abolishing heritable jurisdictions in Scotland," or as near thereto as circumstances admit; with this variation, that the appellant shall find caution to pay any additional expenses awarded by the court dismissing the appeal.

(6.) Notwithstanding anything in this or any other Act, the part of every penalty or forfeiture recovered under this Act, except in proceedings under the Customs Acts, which is not in this Act directed to be paid to the person who sues or proceeds for the same, shall be paid as follows:

(a.) To the Queen's and Lord Treasurer's Remembrancer, on behalf of Her Majesty, when the court is the sheriff court;

(b.) To the collector of county rates, in aid of the county general assessment, when the court is the justice of the peace court;

(c.) To the treasurer of the burgh, in aid of the funds of the burgh, when the court is a burgh court;

(d.) To the treasurer of the board of police, or commissioners of police, in aid of the police funds, when the court is a police court.

(7.) "Plaintiff" means pursuer, and "defendant" means defender.

(8.) The provisions in Part II. relating to tender and payment into court do not apply to Scotland.

PART IV.—IRELAND.

75.—(1.) Part IV. applies to Ireland.

(2.) Part II. shall also, by virtue of this section, extend to Ireland, subject to Part IV., which shall have effect in substitution for Part II., when so expressed or implied, and otherwise shall have effect in addition to Part II.

76. In Part IV.—

(i.) "Lord Lieutenant" means the Lord Lieutenant or other chief governor or governors of Ireland for the time being;

(ii.) "Chief Secretary" means the Chief Secretary for the time being to the Lord Lieutenant; and any power under this part vested in the Chief Secretary, except as a Privy Councillor, may in his absence be exercised by the Under Secretary for the time being to the Lord Lieutenant;

(iii.) "Net annual value of property" means the net annual value of property rateable to the relief of the poor according to the valuation in force for the time being;

(iv.) "Union funds" means any money in the hands of the treasurer of a poor law union to the credit of the guardians of the union, and if at any time the assets in the treasurer's hands are not sufficient for any purpose of this part, then union funds shall be taken to include the moneys next received by the treasurer and placed to the credit of the guardians.

LORD LIEUTENANT AND PRIVY COUNCIL.

77.—(1.) The powers by Part II. conferred on the Privy Council shall be vested in the Lord Lieutenant acting by the advice of Her Majesty's Privy Council in Ireland, in this Act referred to as the Lord Lieutenant and Privy Council.

(2.) The powers exercisable under part II. by the Lord President of the Council, or one of Her Majesty's Principal Secretaries of State, may, in Ireland, be exercised by the Lord Lieutenant, or by the Chief Secretary as a Privy Councillor.

(3.) An order of the Lord Lieutenant and Privy Council under this Part is referred to therein as an Order in Council.

(4.) Subject to the provisions of this Part, the provisions of Part II. relating to the Privy Council, and to Orders of Council, shall apply to the Lord Lieutenant and Privy Council, and to Orders in Council.

78. In order to secure uniformity of action, every Order in Council and every Order of Council made under this Act shall, with all practicable speed, be communicated to the Privy Council, or to the Lord Lieutenant and Privy Council, as the case may be.

LOCAL AUTHORITIES.

79.—(1.) The local authorities shall be the boards of guardians of the several poor law unions.

(2.) The provisions of Part II. relating to the purchase of land by local authorities shall have effect as if instead of section one hundred and seventy-six of the Public Health Act, 1875, there were thereby applied section two hundred and three of the Public Health (Ireland) Act, 1878; and as if the local authority were a rural sanitary authority, and purposes of this Act were purposes for which a rural sanitary authority may acquire land.

(3.) The provisions of Part II. relating to borrowing by local authorities shall have effect as if sections two hundred and thirty-seven to two hundred and forty-six, both inclusive, of the Public Health (Ireland) Act, 1878, were thereby applied instead of the Local Loans Act, 1875, and as if the local authority were a rural sanitary authority, and purposes of this Act were purposes for which a rural sanitary authority may borrow, and as if the Commissioners of Public Works in Ireland were substituted for the Public Works Loan Commissioners.

80. The Lord Lieutenant and Privy Council may from time to time make such Orders in Council as to them seem fit,—

(1.) For defining the numbers, qualifications, and powers

inspectors and valuers, and other officers of local authorities, and the terms and conditions of their appointment, and regulating their duties:

(i) For fixing the periods for which they shall be appointed, and their remuneration and allowances.

INSPECTORS.

81.—(1.) The provisions of Part II. requiring local authorities to keep appointed veterinary inspectors shall not extend to Ireland; and the powers and duties by Part II. conferred and imposed on a veterinary inspector shall in Ireland be vested in and discharged by an inspector; but where a person appointed to be an inspector in Ireland has the qualification of a veterinary inspector under this Act, he may be styled a veterinary inspector.

(2.) The Lord Lieutenant and Privy Council may from time to time make such Orders in Council as to them seem fit for uniting two or more poor law unions into a district for the purposes of inspection, and for authorising or directing the local authorities of those unions to appoint and keep appointed a veterinary inspector for the united district, and for regulating the mode of appointing such inspector, and the amount of remuneration, and the mode in which the several unions shall contribute thereto; or the Lord Lieutenant may, if he thinks fit, appoint a veterinary inspector for the united district, on such terms and conditions with reference to contribution by the several unions towards the travelling expenses and allowances of the inspector as the Lord Lieutenant thinks fit.

(3.) An inspector appointed by the Lord Lieutenant shall have, throughout Ireland, or that part thereof for which he is appointed, all the powers by Part II. conferred on a Veterinary Inspector of the Privy Council.

EXPENSES OF LOCAL AUTHORITIES.

82. The remuneration and allowances of an inspector or valuer of a local authority, and all money payable as compensation for animals slaughtered by direction of a local authority, shall when due be paid by the treasurer of the union out of union funds.

GENERAL CATTLE DISEASES FUND.

83.—(1.) There shall be a General Cattle Diseases Fund for purposes of this Part.

(2.) Any money at the commencement of this Act standing at the Bank of Ireland to the credit of the Cattle Plague Account shall be transferred to the account of the General Cattle Diseases Fund; and that money shall in the first instance constitute that fund, as if it had been raised under this Act.

(3.) The Chief Secretary may from time to time, as and when he thinks fit, certify to the effect that a sum equivalent to a certain poundage on the net annual value of the property in all the unions is required for the purposes of this Act.

(4.) Thereupon the Local Government Board shall by order under their seal assess that sum on the several unions in proportion to the net annual value of the property therein.

(5.) They shall send copies of the order to the guardians and to the treasurer of each union.

(6.) Thereupon the treasurer of each union shall out of the union funds pay over the amount assessed on the union to the Bank of Ireland, to be placed to the General Cattle Diseases Fund.

(7.) The guardians of each union shall debit the several electoral divisions with proportions of that sum, according to the net annual value of the property therein.

(8.) No larger sum shall be levied under this Act at any one time than shall be equivalent to a poundage of one halfpenny in the pound on the net annual value of the property in all the unions; nor shall any larger sum be levied under this Act in the whole than shall be equivalent, taken with any money before the commencement of this Act carried to the cattle plague account, to a poundage of fourpence in the pound on the net annual value of the property in all the unions.

(9.) On receipt of a certificate of the Chief Secretary to the effect that any part of the sum standing to the General Cattle Diseases Fund is not required for purposes of that fund the Local Government Board shall by order under their seal assign the proportions returnable to the several unions, according to the net annual value of the property therein; and the Bank of Ireland shall, on a direction to that effect from the Chief Secretary, remit the sum so assigned to the trea-

surers of the unions; and the guardians of each union shall, on receipt of that sum, credit the several electoral divisions with proportions of that sum according to the net annual value of the property therein.

84.—(1.) The treasurer of a union, on proof to the Chief Secretary of the payment by a local authority of any money for remuneration, expenses, allowances, or compensation, in accordance with this part, shall be entitled to a certificate to that effect, and to an order by the Chief Secretary for payment from the General Cattle Diseases Fund of one half of the money so proved to have been paid, subject, in the case of compensation, to all proper deductions for money received by the local authority in respect of animals slaughtered; and the amount so ordered shall be paid to the treasurer accordingly for the union.

(2.) If in any case it is proved to the Chief Secretary that an animal in respect whereof compensation was paid by the treasurer of a union was, within seven days immediately before its slaughter, brought into that union solely for the purpose of being shipped out of Ireland from a port in that union within those seven days, or of being sold at a fair to be held in that union within those seven days, and that neither the owner nor the person in charge thereof had been guilty, in relation to it, of any offence against this Act, then the Chief Secretary shall order payment to the treasurer in manner aforesaid of the whole of the money paid in compensation in respect of that animal.

(3.) If in any case it is proved to the Chief Secretary that an animal in respect whereof compensation was paid by a local authority ought not to have been slaughtered, the Chief Secretary may, notwithstanding anything in this section, withhold his order for payment out of the General Cattle Diseases Fund of any money in respect of that animal.

(4.) All expenses incurred by or on behalf of the Lord Lieutenant and Privy Council in the execution of this part, and not otherwise provided for by this Act, shall be defrayed out of the General Cattle Diseases Fund.

GENERAL.

85.—The provision of Part II. relating to the police and to constables shall apply to the members of the Royal Irish Constabulary Force or of the Dublin Metropolitan Police Force.

86.—(1.) Proceedings for recovery of penalties for offences against this Act (other than penalties recoverable under the Customs Acts), and proceedings for recovery of expenses by this Act or an Order in Council directed to be recoverable summarily, and proceedings for obtaining summary orders under this Act or an Order in Council, may be taken in a summary manner, according to the provisions of the Summary Jurisdiction Acts, that is, as regards the police district of Dublin Metropolitan, the Acts regulating the powers and duties of justices for that district, and as regards other parts of Ireland the Petty Sessions (Ireland) Act, 1851, and any Act affecting or amending the same.

(2.) The provisions of those Summary Jurisdiction Acts relative to appeals against orders and convictions shall apply to orders and convictions under this Act.

(3.) For the purposes of this Act a court of summary jurisdiction may consist of one or more justices.

(4.) Penalties so recovered shall be applied as follows; that is to say, a part thereof not exceeding one third may be awarded to the informer, and the rest shall be awarded to the Crown, to be applied in aid of the General Cattle Diseases Fund.

87.—(1.) *The Dublin Gazette* shall be substituted for *The London Gazette*.

(2.) A copy of *The Dublin Gazette* purporting to be printed by the Queen's authority shall be conclusive evidence in all courts and legal proceedings of the date, contents, due making, and publication of any order appearing therein and purporting to be an Order in Council.

(3.) An Order in Council may also be proved by the production of an instrument purporting to be certified to be a true copy thereof by the Clerk of Her Majesty's Privy Council in Ireland, or the person for the time being acting as such; and that instrument shall be conclusive evidence in all courts and legal proceedings of the date, contents, due making, and publication of the order.

88. The Lord Lieutenant, with the approval of the

Treasury, may fix the salaries and allowances of the officers and persons acting in execution of this Act in or under the Veterinary Department of Her Majesty's Privy Council Office; and the same, and all charges and expenses incurred in the maintenance and management of that department, shall be paid out of money provided by Parliament.

THE FIRST SCHEDULE.

ENACTMENTS REPEALED.

I.—ENGLAND AND SCOTLAND.

32 & 33 Vict. c. 70. [9 August, 1869] art. The Contagious Diseases (Animals) Act, 1869: Except—
 (i.) Paragraphs 2, 3, and 4 of section 28 (local), relating to the markets of the mayor, aldermen, and commons of the City of London, with the Fifth Schedule, referred to in that section.
 (ii.) Sections 100 and 101 (transitory), relating to money borrowed by local authorities before the passing of that Act.

II.—SCOTLAND.

33 & 34 Vict. c. 75. [11 Aug., 1870]. An Act to amend the Contagious Diseases (Animals) Act, 1869.

III.—IRELAND.

11 & 12 Vict. c. 105. [4 September, 1848]. An Act to prohibit the importation of sheep, cattle, or other animals, for the purpose of preventing the introduction of contagious or infectious disorders.

1 & 12 Vict. c. 107. [4 September, 1848]. An Act to prevent, until the first day of September, one thousand eight hundred and fifty, and to the end of the then session of Parliament, the spreading of contagious or infectious disorders among sheep, cattle, and other animals.

16 & 17 Vict. c. 62. [4 Aug., 1853]. An Act to extend and continue an Act of the twelfth year of Her present Majesty, to prevent the spreading of contagious or infectious disorders among sheep, cattle, and other animals.

29 & 30 Vict. c. 4. [6 March, 1866]. The Cattle Disease Act (Ireland), 1866.

33 & 34 Vict. c. 36. [1 Aug., 1870]. The Cattle Disease (Ireland) Amendment Act, 1870.

35 & 36 Vict. c. 16. [27 June, 1872]. The Cattle Disease (Ireland) Amendment Act, 1872.

37 & 38 Vict. c. 6. [21 May, 1874]. The Cattle Disease (Ireland) Amendment Act, 1874.

39 & 40 Vict. c. 51. [11 Aug., 1876]. The Cattle Disease (Ireland) Act, 1876.

THE SECOND SCHEDULE.

LOCAL AUTHORITIES IN ENGLAND.

District.	Local Authority.	Local Rate.	Clerk of Local Authority.
I.—Counties, except within the metropolis.	The justices in general or quarter sessions assembled.	The county rate, or rate in the nature of a county rate.	The clerk of the peace.
II.—The City of London, and the liberties thereof.	The Corporation of London.	The consolidated rate.	The town clerk.
III.—The metropolis, except the City of London and the liberties thereof.	The Metropolitan Board of Works.	The metropolitan consolidated rate.	The clerk of the Metropolitan Board of Works.
IV.—Boroughs subject to the Municipal Corporation Act, 1835.	The mayor, aldermen, and burgesses acting by the Council.	The borough rate with the borough fund.	The town clerk.
V.—Other boroughs.	The commissioners or other body maintaining the police therein.	The rate applicable by the commissioners or other body to the maintenance of the police.	The clerk to the commissioners or other body.
VI.—The district of the local board of Oxford.	The local board.	The rate leviable by the local board.	The clerk of the local board.

THE THIRD SCHEDULE.

PLEURO-PNEUMONIA.

1. Cattle are not to be moved into or out of a place infected with pleuro-pneumonia, except where, as regards movement into such a place, the cattle are affected with pleuro-pneumonia, and except in such other cases as the Privy Council think fit from time to time by general Order to except.

2. In the cases so excepted by Order cattle may be moved into or out of an infected place on conditions prescribed by general or special Order of Council, and not otherwise.

3. Cattle may be moved into, in, or out of such parts of an area infected with pleuro-pneumonia as are not comprised in a place infected with pleuro-pneumonia, by license of the local authority, granted on conditions prescribed by general Order of Council, and not otherwise.

4. Nothing in this Schedule restricts movement of cattle in a place infected with pleuro-pneumonia.

THE FOURTH SCHEDULE.

FOOT-AND-MOUTH DISEASE.

1. Animals are not to be moved into or out of a place infected with foot-and-mouth disease, except where, as regards movement into such a place, the animals are affected with foot-and-mouth disease, and except in such other cases as the Privy Council think fit from time to time by general Order to except.

2. In the cases so excepted by Order animals may be moved into or out of an infected place on conditions prescribed by general or special Order of Council, and not otherwise.

3. Animals may be moved into, in, or out of such parts of an area infected with foot-and-mouth disease as are not comprised in a place infected with foot-and-mouth disease, by license of the local authority, granted on conditions prescribed by Order of Council, and not otherwise.

4. Nothing in this Schedule restricts movement of animals in a place infected with foot-and-mouth disease.

THE FIFTH SCHEDULE.

FOREIGN ANIMALS.

I.—SLAUGHTER AT PORT OF LANDING.

1. Foreign animals are to be landed only at a part of a port defined for that purpose by special Order of Council, to be called a foreign animals' wharf.

2. They are to be landed in such manner, at such times, and subject to such supervision and control as the commissioners of Customs from time to time direct.

3. They are not to be moved alive out of the wharf.

II.—QUARANTINE.

4. The foregoing provisions of this Schedule (under the head of Slaughter at Port of Landing) do not apply to animals intended for exhibition or other exceptional purposes: and in lieu thereof the subsequent provisions of this Schedule (under the head of Quarantine) apply to those animals.

5. Those animals are to be landed only at a part of a port

defined for that purpose by special Order of Council, to be called a 'foreign animals' quarantine station.

6. They are to be landed in such manner, at such times, and subject to such supervision and control as the Commissioners of Customs from time to time direct, and subject to such conditions in respect of the animals, or of the vessel from which they are landed, as the Privy Council from time to time by general Order prescribe.

7. When landed they are to be placed in sheds or other receptacles in the quarantine station, prepared by the local authority or the owners of the quarantine station, or the consignees of animals or other persons, and approved by the Privy Council.

8. Any such animal is not to be moved out of the quarantine station except on conditions prescribed by general or special Order of Council.

9. Notwithstanding anything in the foregoing provisions of this Schedule (under the head of Quarantine), the provisions of this Act relating to slaughter in case of the existence of disease, and to compensation or other payment in respect of animals so slaughtered, and to the ownership of carcasses of such animals, shall apply to animals in a foreign animals' quarantine station.

III.—CHANNEL ISLANDS AND ISLE OF MAN.

10. In relation to animals brought from the Channel Islands or the Isle of Man the Privy Council may from time to time, if they think fit, by general or special Order or by licence, alter or add to the provisions of this Schedule relating to slaughter or to quarantine, as the case may require.

IV.—OTHER FOREIGN COUNTRIES.

11. In relation to foreign animals other than those brought from the Channel Islands and the Isle of Man, if and as long as, from time to time, the Privy Council are satisfied, with respect to any foreign country, that the laws thereof relating to the importation and exportation of animals, and to the prevention of the introduction or spreading of disease, and the general sanitary condition of animals therein, are such as to afford reasonable security against the importation thereof of diseased animals, then, from time to time, the Privy Council, by general or special Order, shall allow animals, or any specified kind of animals, brought from that country, to be landed, without being subject, under the provisions of this Schedule, to slaughter, or to quarantine, and may for that purpose alter or add to those provisions, as the case may require; but every such Order shall forthwith, after the making thereof, if Parliament is then sitting, and if not, then forthwith after the next meeting of Parliament, be laid before both Houses of Parliament.

THE SIXTH SCHEDULE.

COMMITTEES OF LOCAL AUTHORITIES.

1. Each local authority shall form and keep up a committee or committees, and may appoint the number of members by whom the powers of a committee may be exercised, and may at any time add to or diminish the number of the members of a committee, or otherwise alter the constitution thereof, and fill up or provide for the filling up of vacancies therein, or revoke the appointment thereof and appoint another committee or committees, and lay down rules for the guidance of a committee, who shall act accordingly.

2. Each committee may consist wholly of members of the local authority, or partly thereof, and partly of other persons, being rated occupiers in the district of the local authority, and otherwise qualified as the local authority think fit.

3. A local authority may delegate all or any of their powers, except the power to make a rate, to a committee, with or without conditions or restrictions.

4. A local authority may revoke or alter any power given by them to a committee.

5. A local authority may, if they think fit, appoint and designate one committee as their executive committee.

6. An executive committee shall have all the powers of the local authority, except the power to make a rate, and may, if they think fit, appoint a sub-committee or sub-committees, and delegate to them all or any of the powers of the executive committee, with or without conditions or restrictions, and from

time to time revoke or alter any such delegation, and appoint the number of members by whom the powers of a sub-committee may be exercised, and add to or diminish the number of the members of a sub-committee, or otherwise alter the constitution thereof, and fill up or provide for the filling up of vacancies therein, or revoke the appointment thereof and appoint another sub-committee or other sub-committees, and lay down rules for the guidance of a sub-committee, who shall act accordingly.

7. Proceedings of a committee or sub-committee shall not be invalidated by any vacancy in the committee or sub-committee, or, in the case of a committee appointed by the local authority for a county, by the termination of the session at which they were appointed.

8. In case of the formation of two or more committees, they shall act according to rules laid down or their guidance by the local authority.

9. A committee, and a sub-committee of an executive committee, may elect a chairman of their meetings.

10. If no chairman is elected, or if the chairman so elected is not present at the time appointed for a meeting, the members then present shall choose a chairman for that meeting.

11. A committee or sub-committee may meet and adjourn as they think proper.

12. Every question at a meeting of a committee or sub-committee shall be determined by a majority of the votes of the members, including the chairman, present and voting on the question; and in case of equal division the chairman shall have a second vote.

THE SEVENTH SCHEDULE.

LOCAL AUTHORITIES IN SCOTLAND.

District.	Local Authority.	Local Rate.	Clerk of local authority.
I.—Counties, including any town or place which does not return, or contribute to return, a member to Parliament.	The persons appointed as provided in Part III.	Rate appointed to be levied in Part III.	The clerk of supply.
II.—Burghs which return, or contribute to return, a member to Parliament.	The magistrates and town council.		The town clerk.

1. In and for purposes of this Schedule and Part III. "county" does not include county of a city.

2. For purposes of Part III. the burgh of Maxwelltown is part, not of the parliamentary burgh of Dumfries, but of the stewardry of Kirkcubright.

NEMESIS.—There is current a good story (which I believe has the rare additional advantage of being true) about the *chef* and the manager of one of our great clubs. The manager is of a somewhat irascible temper, and the *chef* one day happening to bring under his notice the fact that the larder was nearly empty at a time when the servants' dinner was due, asked what he should give them for their dinner? "Give them!" said the manager, "give them sawdust if you have nothing else; but don't bother me about such things." The *chef* said nothing. Two days later the manager had a friend to lunch with him, and desired to do honour to his friend and justice to the club; accordingly he sent down instructions for a charming luncheon. On sitting down, and lifting the cover from the first dish he found it full of sawdust. Concealing his rage as much as possible, he sent the dish away, and a fresh course was brought up. On lifting the cover sawdust was again discovered underneath. Of course there was a row, and the *chef* lost his situation, but he had had his revenge.—*Moyfure*.

AGRICULTURAL SOCIETIES.

DERBYSHIRE.

MEETING AT DERBY.

The first impression we received on entering the Derby Cattle Market yard, in which the meeting was held, was that there was an ordinary market badly supplied. All the animals were tied up in the usual way as if for sale, and had it not been for the apparent absence of butchers and dealers it would have been difficult to believe that it was an Agricultural Show, although there was an appearance of a fair about it. However, under the guidance of a friend who was anxious to show the merits of this County gathering, we came to find that there were some really good farmers' horses, and some useful dairy stock straight out of work—good ordinary rank-and-file cattle—and nothing else of any interest to us except a pen or two of fairly good sheep. Of course a competition of this kind would be useful enough if the status of agricultural shows was not so very much higher, but as matters now go, there is very little that a farmer or breeder could learn by coming to see the Derby meeting. We cannot help thinking that a considerable number of these County shows would be far better done away with, and the few good things they may contain entered in the nearest meeting of a higher tone, and on a larger scale. There is too much show work of this class going on now to no useful end that we can see, whilst there are a few Societies which, with the help afforded by amalgamation, would soon reach a standard approaching to that of the Bath and West of England Society. It would, we think, be better for all parties concerned, and more conducive to the object in view.

The pure-bred Shorthorn cows were not things of beauty, and the dairy stock, though numerous, and of every age and description, was not anything out of the way or really worth showing; they would, most of them, have been better at home. The best class, probably, was that of the yearling heifers "most adapted to dairy purposes, and belonging to members being tenant farmers." There was also a very useful class for "bull and three cows, the property of one member," and a fair sprinkling of Longhorns. The agricultural mares and foals were exceedingly good farmers' horses, and a very useful class indeed, and there were some very creditable young cart horses in the various classes. The sheep were scarcely middling show animals; in fact they were, with one or two exceptions, anything but show animals. There were, however, a few good pens of Shropshires. The names of the successful exhibitors will be found in the prize list.

PRIZE LIST.

HORSES.

Brood mare and foal, for cart purposes.—First prize, W. H. Potter, Lockington Grounds; also first special prize for best foal; second, Hon. E. K. W. Coke, Derby; third, R. Ratcliffe, Newton.

Two-year-old gelding, for cart purposes.—First, second, and third prizes, and special medal; W. H. Potter, Lockington Grounds.

Two-year-old filly for cart purposes.—First and second prizes, G. Bull, Repton; third, T. Lounds, Ashbourne.

One-year-old gelding, for cart purposes.—First and third prizes, S. Wade, Mickleover; second, S. Horne, Foston.

One-year-old filly, for cart purposes.—First and second prizes, Hon. E. K. W. Coke, Longford; third, J. R. Maggs, Ingleby.

Pair of agricultural horses or mares, belonging to a tenant farmer, and bred by exhibitor.—First prize, T. Orme, Hoon, Foston; second, Mr. Hollingworth, Weston.

Pair of cart horses.—First prize, T. H. Oakes, Riddings House; second, W. Barber, Atherstone.

Brood mare, best fitted for breeding hunters, with four at foot.—First and second prizes, Earl of Londond.

Hack or roadster, exceeding 15 hands, in saddle. Period in possession from July 1st, 1878.—First prize, in 1 bridle, W. Wright, Nottingham; second, G. Wheldon, 3, Chester Road.

Hack or roadster, not exceeding 15 hands, in saddle. Period in possession from July 1st, 1878.—First prize, W. Smith, Derby; second, J. T. Martin, Corn Market.

Harness pony, not exceeding 13 hands. Period in possession from 1st of July, 1878.—First prize, W. Wright, Nottingham; second, W. Barron, Bar-wash.

Harness horse or mare, not exceeding 15 hands. Period in possession from July 1st, 1878.—First prize, C. E. Newton, Mickleover; second, J. Lovere, Derby.

Harness horse or mare, not exceeding 15 hands. Period in possession from July 1st, 1878.—First prize, G. Suril, Derby; second, R. H. H. Pearce, Castle Donington.

Gelding or filly, of the value of £50, above three and under four years of age, for hunting purposes.—First prize, W. Briggs, Melbourne; second, W. Tomlinson, Ashbourne.

LEAPING CLASS.

Leaping horse or mare. Period in possession from July 1st, 1878.—First prize, R. W. C. Pale, Ashbourne Hall; second, G. D'Arcy Clarke, Wardwick, Derby; third, A. Crossman, Barton-under-Needwood; fourth, A. H. Colville, Sutton Bay-on-the-Hill.

Horse or mare not more than three years old, for hunting or riding purposes, bred within the Society's district.—First prize, J. Audinwood, Weston-on-Trent; second, T. Robinson, Burton-on-Trent; third, W. Tomlinson, Ashtree.

Two-year-olds, for hunting purposes.—First prize, J. Newbold, Milton Barton; second, T. Robinson, Burton-on-Trent.

Yearling colt or filly.—First prize, W. K. Dick, Ticknall; second, J. H. Hawksworth, Longford.

Hunter, equal to fifteen stone. Period in possession from July 1st, 1878.—First prize, J. H. Crossman, Mickleover; second and third, Earl of Londond, Willesley Hall.

Hunter, four years old and upwards, equal to twelve stone. Period in possession from July 1st, 1878.—First prize, Earl of Londond, Willesley Hall; second, Mr. S. Robson, Melbourne; third, W. Aulton, V.S., D'wrent Street.

CATTLE.

Four cows, for dairy purposes, belonging to members being more than 20 cows; they must have been calved between the 1st January and 1st May, and be in milk at the time of exhibition.—Prize, T. H. Oakes, Riddings House.

Two cows, for dairy purposes, belonging to members; they must have calved between the 1st January and 1st May, and be in milk at the time of exhibition.—First prize, T. H. Oakes, Riddings House; second, W. T. Carrington, Croxden Abbey; third, E. Vale, Bess Hill, Derby.

A special prize, value £3 (cup or plate), for the best pair of cows in Classes 1 and 2, restricted to tenant farmers having no other source of income from trade or profession.—Prize, W. T. Carrington.

Pure-bred Shorthorned cow, having had a living calf since January 1, 1871.—First prize, Colonel Ellis, Edleston Farm; second, T. H. Oakes, Riddings House; third, C. R. P. Morewood, Alfreton.

In-calf cow, belonging to a tenant-farmer, to calve before Christmas, 1878; not to compete herself; a certificate required.—Prize, T. Briggs, Lichfield.

HEIFERS.

Pair of heifers, under three years old, in-calf; certificate required.—First and second prizes, T. H. Oakes, Riddings House; third, Earl of Harrington, Elvaston Castle.

Pair of in-calf heifers, belonging to a tenant-farmer, to calve not less than 12 cows, and bred by the exhibitor; a certificate required.—Prize, T. S. Carrington, Eaton Doveridge.

STIRKS.

Pair of stirks, under two years old, most adapted for dairy purposes, belonging to a tenant farmer. First prize, W. T. Carrington, Croxden Abbey; second, E. Vale, Derby.

Pair of stirks, under two years old, most adapted for dairy purposes, belonging to members being tenant farmers, not

raising less than 12 cows, and bred by the exhibitor.—First and second, Earl of Harrington; third, T. H. Oakes, Riddings House.

CALVES.

Two rearing cow calves, bred by the exhibitor since 1st January, 1878.—First prize, T. H. Oakes, Riddings House; second, Earl of Harrington.

LONGHORNS.

Bull of any age.—First and second prizes, R. Hall, Thulston.

Pair of dairy cows, in calf or in milk.—First and second prizes, R. Hall.

Pair of heifers, over two and under three years old, in calf or in milk.—First and second prizes, R. Hall.

Pair of heifers, over one and under two years old.—First and second prizes, R. Hall.

BULES.

Shorthorn bull, three years old and upwards.—First prize, W. C. T. Mynors, Eaton Doveridge; second, T. H. Oakes.

Shorthorn bull, two years old and not exceeding three years.—First prize, W. T. Carrington, Croxden Abbey; second, R. Tunney, Hemington; third, W. Hollingworth, Stanton Grove.

Yearling (or not exceeding two years old) bull, of the pure Shorthorn breed, most suitable for breeding purposes, and which shall be, and has been, the property of the exhibitor six months previous to the day of exhibition.—First prize, Duke of Portland, Mansfield, Notts.; second, J. Wood, Spondon; third, T. H. Oakes.

Bull calf, not exceeding twelve months old.—First prize, Colonel Ellis, Elliston Farm; second, T. Orme, Hoon, Foston; third, W. Barron, Borrowash.

Best animal in Classes 15, 16, and 17.—Extra special prize, value £10 (in plate or cup), Duke of Portland.

FAT STOCK.

Fat beast of any breed.—First prize, R. Ratcliff, Newton; second, Earl of Harrington, Elvaston Castle; third, T. H. Oakes.

Fat bullock bred and fed by a tenant farmer.—First and second prizes, R. Hall, Thulston.

Fat heifer bred and fed by a tenant farmer.—First and second prize, R. Hall, Thulston.

Bull and three cows of any age, the property of one member. Any of the cows above two years to be in milk or in calf at the time of exhibition.—First prize, T. H. Oakes, Riddings House; second, T. Briggs, Fishwick, Lichfield; third, W. White, Hutton Heath.

SHEEP.

LONG WOOLED.

Five breeding ewes, having had lambs in 1878, and suckled them up to the 1st June.—First prize, H. Newbold Milton Burton; second, T. H. Oakes, Riddings House; third, R. Johnson, Kirk Ireton.

Five long-wooled theaves.—First prize, H. Johnson, Kirk Ireton; second, R. Sybray, Ambergate; third, J. Grammer, Sawley.

Five long-wooled ewe lambs.—First prize, R. Sybray, Ambergate; second, W. J. Sketchley, Ambaston.

Long-wooled ram, of any age above a shearling, *bona fide* the property of the exhibitor at the time of entry.—First prize, R. Johnson, Kirk Ireton; second, T. H. Oakes, Riddings House; third, S. Booth, Biggin.

Shearling long-wooled ram, *bona fide* the property of the exhibitor at the time of entry.—First and second prize R. Johnson, Kirk Ireton; third, R. Lee, Wood Head, Kniveton.

Long-wooled ram lamb.—First prize, R. Johnson, Kirk Ireton; second, R. Sybray, Ambergate.

SHORT-WOOLED.

Five breeding ewes, having had lambs in 1878, and suckled them up to the 1st of June.—First prize, G. German, Normanton-le-Heath, Ashby; second and third, W. Baker, Atherstone.

Five short-wooled theaves.—First and second prizes, W. Baker, Atherstone; third, Earl of Harrington.

Five short-wooled ewe lambs.—First prize, W. Baker; second, Earl of Harrington.

Short-wooled ram, of any age above a shearling, *bona fide* the property of the exhibitor at the time of entry.—First and second prizes, W. Baker.

Shearling short-wooled ram, *bona fide* the property of the

exhibitor at the time of entry.—First and second prizes, W. Baker.

Three Shropshire ram lambs.—First and second prizes, W. Baker.

Five fat short-wooled wether sheep, not exceeding 22 months old.—First prize, G. German, Normanton-le-Heath; second, R. Briggs, Elvaston.

Five fat long-wooled wether sheep.—Prize, J. Grammer, Sawley.

PIGS.

Boar of any age, best adapted for general use.—First prize, Duke of Portland, Mansfield; second, —Cooper, Normanton; third, H. Haynes, Derby.

Sow of any age.—First prize, J. Wood, Spondon; second, R. Hall, Thulston; J. Langley, Micklöver.

Three breeding pigs of one litter, not exceeding eight months old.—First and second prizes, R. Hall, Thulston; third, C. E. Andrews, Woolaton.

Pig, the property of an agricultural labourer.—First prize, J. Booth, Aston-on-Trent; second, R. Hunt, Kedleston; third, S. Kerry, Elvaston.

Fat pig.—First prize, T. H. Oakes; second, J. Smith, Derby; third, W. R. Dick, Ticknall.

ROYAL MANCHESTER AND LIVERPOOL AND NORTH LANCASHIRE.

MEETING AT LANCASTER.

Although the number of entries on this occasion was not equal to that of Preston in 1875 or Southport in 1876, the general quality of the exhibits was very good indeed; and the site was an excellent one, and the skidding most extensive and commodious, the show had the appearance of being of far greater magnitude than it really was. The prizes offered by the Society were about £1,500, which, with £500 contributed by the local committee, brought the prize list up to £2,000 or thereabouts. The weather proving fine after rain about the time of opening, the meeting was well attended, and the arrangements being altogether excellent a visit to the show was truly enjoyable.

The cattle classes were, on the whole, tolerably well filled, but many of the entries in the pure-bred Shorthorn division were not in their places. Nevertheless, the prizes for pure Shorthorns being for open competition, several well-known animals put in an appearance. For the best Shorthorn bull above 3 years old eight animals competed, including the Earl of Ellesmere's Attractive Lord, the Marquis of Exeter's Telemachus 6th, Mr. Atkinson's Sergeant Irwin, Mr. Handley's Royal Irwin, Mr. Willis's Rear Admiral, and Mr. Brierley's Oxford Duke 10th. The natural impression amongst on-lookers was that the question lay between Telemachus 6th and Attractive Lord, but it evidently did not, for Telemachus 6th, who was first at Bath and second at Liverpool in 1876, was here thrown out entirely, not receiving so much as a commendation. Some said he was too fat, but if fat is a disqualification there is scarcely a Shorthorn, or indeed any other, "plater" who could stand the test. A horsey-looking individual, examining him afterwards in his stall, remarked that he had a "capped neck," and added, knowingly, "depend upon it that's wot done it!" However, something did it, and the grand old bull went out of the ring in disgrace. The first honours fell to Attractive Lord, which award, even in the presence of Telemachus 6th, might not have been a mistake, although open to fair differences of opinion; but the second and third prizes being given to Sergeant Irwin and Oxford Duke 10th respectively, a high commendation to Rear Admiral, and a commendation to Royal Irwin, led one to suppose that Telemachus 6th had for some reason, not apparent to outsiders, been disqualified. If so, the decision would have been intelligible, but as no placard to that effect was nailed up we confess not to be able to

understand it. Sergeant Irwin is a flat-ribbed, uneven, coin-coated bull, with his tail badly set on, and a soft but not a good bull's hide on him; he was not noticed at Bristol, though third at Liverpool the year before. Oxford Duke 10th, commended at Oxford and fourth prize-taker at Bristol, is a good handling bull, with a soft mellow hide, and should, we think, have been placed one degree higher. Rear Admiral, a bull we have no liking for, despite his successes at Oxford this year and at Liverpool last year, was relegated to a place more in accordance with his merits at Lancaster. Royal Irwin, reserve number and highly commended at Bristol, is a good handling bull of nice quality, but is hollow behind his shoulders, leggy, and has very little coat; he was about in his right place, with a plain commendation, although he has had carls of various colours nailed up in his stall on former occasions. The next class was also well filled with Shorthorn celebrities: Mr. Tennant's Kalamazoo, Mr. Elwell's Baines Windsor, Mr. Wills's Vice Admiral, the Stand Company's Favourite, and five others. This being the class for bulls above two but under three years old, Vice Admiral entered the list, having now attained his majority. Whilst a minor he has been very successful, taking first in the yearling class both at Oxford and at Bristol this year, and now, at Lancaster, he walked away with the first honours—in an older class—over the head of Kalamazoo. We have on former occasion, as at the Bath and West and at the Royal this year, had occasions to remark of this animal that he is not of a character which we altogether admire, being long on his legs and wanting in masculine appearance; yet he is excellently well ribbed, and carries a great thickness of flesh in the right places. He grows very fast and looks remarkably well. Yet we cannot support the verdict of the judges in putting him above Kalamazoo, which is altogether a different, and, we think, a better animal, and a better type of Shorthorn. However, he will be looked for in the show-yards next year with considerable interest. The other awards were Kalamazoo second, Bright Duke third, and Baines Windsor highly commended. Kalamazoo is an animal of fine masculine character (sire Sir Arthur Ingram) very stylish, of great depth and thickness, wealthy in flesh, and of the finest quality. Bright Duke, bred by Messrs. Dudding and exhibited by Mr. Rolph, is a very plain mediocre animal. Baines Windsor is, to our mind, a long way the better animal of the two, and although a little light in front of his shoulders is very thick, of good character and quality, with a good mellow bull's hide on him and a good coat. He was sufficiently good to take third prize at the Royal and second at the Bath and West this year, and first at the Northumberland meeting over the head of Kalamazoo, yet he was passed over entirely at Northampton, of which his owner very justly complains; but it is of no use complaining, for these anomalies are no disgrace to the animals—only to the judges. However, it was, we think, a mistake to put him before Kalamazoo, and something akin to, shall we say defective vision or their want of judgment? to, pass him over altogether. At all events he is quite deserving the high commendation he obtained at Lancaster. Favourite, the fourth prize-taker at the Royal, who has not much to recommend him but his good handling, was not noticed here, and if the judges had had a spare commendation to afford we think it would not have been misplaced, although we don't consider that much, if anything, else is really due to him. Mr. St. John Ackers showed a plain bull, Sir Roland, badly ribbed, and narrow behind, in this class, and there were one or two completely out of the hunt. For yearling bulls there were only three competitors out of eight entries, Mr. Handley's Lord St. Vincent (re-

serve and highly commended at the Royal) was a very easy winner here; rather flat-sided but of good style and quality, he is a very taking white bull. Mr. Benjamin Bee's Valentine's Duke of Claro was second. This is a rather obsolete-looking, but very stylish, long, and level animal, tail set on rather high, very little hair, and rather harsh to the touch. Mr. Wm. Robinson's Prince Waterloo took third prize but has very little style and no character. The bulls of calves, of which there were six, took some time to judge, apparently from the difficulty of finding one good enough to take third prize, which at last fell to Mr. St. John Ackers for a rather nice quality calf, Sir John Carew, which is very weak in the ribs and narrow in the chine. Mr. Handley's Master Harbinger was placed first, and Mr. Woodhouse's F. and Duke 1th, a calf with a good chine, rib and back, with an excellent coat and soft mellow hide, was second. This will likely make a good bull. Shorthorn cows were headed by the Marquis of Exeter's Telemachus, too well known to need description; then came Mr. T. H. Miller with a Ringlet, and Mr. Fawcett's Maggie Middle (bred by the Messrs. Dudding) was third. Mr. St. John Ackers's two cows, Princess Georgie and Wedding Day, were unnoticed. They are plain but fat cows of nice quality, the former second at Oxford and highly commended at Bristol. Mr. Atkinson obtained a high commendation for Mornshine, second at the Royal, and a handsome animal. The Stand Stud Company obtained no notice of their Blooming Bride, bred by Mr. N. Dudding. Amongst the heifers was the Earl of Ellesmere's Lady, second at Oxford and at Bristol, who was sent out of the ring without any notice. This animal is now so well known that no description is needed, but she now has an unsightly development of fat on one leg. Perhaps that was fatal to her chance, yet we have seen many an animal win with unsightly globes of fat in undesirable places, especially Shorthorn cows, which generally have some such unevenness. However, out she went, and the first honour was given to Blooming Bridesmaid, also belonging to the Earl of Ellesmere, and a very handsome and deserving heifer she is. Then came a mediocre cow, Patience, exhibited by Mr. J. Nels n, and Mr. St. John Ackers' Lady Carew 2nd. (reserve number at Oxford) obtained the third place. For yearling heifers Mr. St. John Ackers was fortunate enough to take first place with Lady Cuesw 3rd, the Marquis of Exeter taking second and third with two very thick and deep heifers with plenty of good hair, scions of Telemachus 6th. Mr. Miller's Ringlet 7th was highly commended, and deserved it. There was a very nice heifer exhibited by Mr. R. C. Merton, very level, very thick-fleshed and stylish, with an excellent coat, which, though passed over entirely, was in our opinion better than the first and third prizes, and quite as good as the second. The judges are reported to have said that they had pleased themselves, which is a highly satisfactory thing to know; but it is difficult to understand their decisions, or to form an idea of what they "went for" when making some of their awards. If they had a plan or code of rules for the occasion it must have been exceedingly occult. The class for cows with not less than two of their offspring, all bred by the exhibitor, was good and interesting, and a silver cup was awarded to the Marquis of Exeter for the best five animals in ten classes, one male and four females, and this was the only honour which fell to the lot of Telemachus 6th, and in itself the honour is greater than a first prize in his own class. Mr. St. John Ackers, too, takes with his bull Clovis, a very mediocre, patchy, and uneven animal, the silver medal offered by the Society for the best bull being the property of a landlord who allows him to serve the cows of his tenants gratis. In this case the honour is to the owner and not to the animal.

The sheep classes were tolerably well filled, the chief

prize-takers being Mr. Byrd and Mr. Bowdage in the Shrop-shires, Messrs. Keen amongst the Leicesters, and Mr. Savage and Mr. Sedgwick amongst the Lincolns, Border Leicesters, and Cotswolds. There was also a fair show of pigs.

There were a large number of dairy cattle of various degrees of excellence, and a few Channel Islands, Ayrshire, and Welsh cattle, which do not require special notice. The show of horses was not large, but some very useful agricultural horses were there. Amongst the implement stands were to be noticed some of the most noted makers. For further information we must refer our readers to the appended prize list.

PRIZE LIST.

CATTLE.

All prizes marked * are given by the Lancaster Local Committee.

Best bull.—Prize, B. St. John Ackers, Prinknash Park, Painswick.

HORNEE CATTLE.

Bull above three years old.—First prize, the Earl of Ellesmere, Manchester; second, T. Atkinson, Unsworth; third,* C. W. Brierley, Drinkwater Park, Errestwich.

Bull, above two years but under three.—First prize, T. Willis, juv., Bedale; second, W. Tennant, Selby; third,* J. Ralph, Shap.

Bull above one but under two years old.—First prize, W. Handley, Green Lead; second, P. Bee, Gossnargh, Preston; third,* W. Robinson, Ulverston.

Bull calf, above six but under twelve months old.—First prize, W. Handley; second, J. Woodhouse, Lancaster; third,* B. St. J. Ackers.

Cow, above three years old, in milk or calf.—First prize, Marquis of Exeter; second, T. H. Miller, Singleton Park; third,* H. Fawcett.

Heifer, two years old but under three.—First prize, the Earl of Ellesmere, Worsley Hall; second, J. Nelson, Preston; third,* B. St. John Ackers.

Heifer, above one but under two years old.—First prize, B. St. J. Ackers; second and third,* Marquis of Exeter.

Heifer calf, above six and under twelve months old.—First prize, T. Atkinson; second, J. Poole, Ulverston; third,* W. Robinson.

Cow and not less than two of her offspring, all bred by exhibitor.—First prize, H. Fawcett, Otley; second, J. J. Sharp, Kettering; third, G. Ashburner, Low Hall.

Channel Islands bull, above one year old.—Silver Medal T. H. Miller, Poulton-le-Pyld.

Channel Islands cow or heifer, of any age, in milk or in calf.—First prize, T. H. Miller; second, J. Ashcroft, Oakhill Park, Liverpool.

Ayrshire cow or heifer, of any age, in milk or in calf.—First prize, Stand Stud Company; second, T. Atkinson.

Welsh cow or heifer, of any age, in milk or in calf.—First prize, G. Jones, Mold.

SHORTHORN.

Bull, above two years old.—First prize T. Atkinson; second, R. Thomson, Blackpool; third,* T. Airey, Grange-over-Sands.

Bull, above one but under two years old.—First prize, P. Bee; second, J. Taylor, Grange-over-Sands; third,* R. Ashburner, Ulverston.

Bull calf, above six but under twelve months old.—First prize, J. Woodhouse, Scale Hall; second, J. Ashburner, Low Hall.

Cow above three years old, in milk or in calf.—First prize, T. Atkinson; second and third, J. Dickinson, Wigton.

Heifer, two but not exceeding three years old, in milk or in calf.—First prize, J. Nelson, Higher Brookholes; second, T. Atkinson; third, T. Airey.

Heifer, one but under two years old.—First prize, T. Atkinson; second and third,* J. Dickinson.

Single heifer calf, above six but under twelve months old.—First prize, P. Atkinson; second, R. Thompson; third,* G. Ashburner.

Cow and not less than two of her offspring, both the latter to be bred by exhibitor.—First and second prize, G. Ashburner; third,* J. Cottam, Scotforth.

Best five animals exhibited in Classes 15 to 22 (one male and four females) of any age, the females to be bred by the exhibitor.—Prize, J. Dickinson.

FOR DAIRY PURPOSES.

Collection of three cows in milk or in calf.—First prize, W. Nelson, Preston; second, R. Sandham, Lancaster; third,* J. Cottam.

Cow above three years old, in milk or calf.—First prize, W. Nelson; second, T. Atkinson, Unsworth; third,* R. Sandham.

Heifer, above two but under three years old.—First prize, T. Atkinson; second, R. Sandham; third,* E. Newhouse, Lancaster.

Heifer, above one but under two years old.—First prize, E. Whalley, Warrington; second, T. Atkinson; third,* R. Thompson, Mythop Lodge.

Fair of heifer calves, above six but under twelve months old.—First prize, T. Atkinson; second, J. Woodhouse, Scale Hall.

HORSES.

Open for competition to the United Kingdom.

LIGHT HORSES.

Stallions, thoroughbred.—First prize, Fyde Horse Breeding Improvement Company, Singleton, Kirkham; second, W. Pennington, Preston; third,* P. Fort and Sons, Kighley.

Stallions, for getting roadsters.—First prize, J. F. Crowther, Knowl Grove, Mirfield; second, W. Edwards, The Brewery, Rathin.

Brood mares, for breeding hunters, with foal sucking.—First prize, G. F. Statter, Whitefield; second, J. W. Simpson, Lancaster; third,* B. Lee, Gossnargh.

Best foals in Class 30.—First prize, G. F. Statter, Whitefield; second, R. Eowling, Scotforth; third,* J. W. Simpson, Bolton-le-Sands.

Brood mares, for breeding roadsters, with foal sucking.—First prize, T. H. Miller, Singleton Park; second, J. Jackson, Garstang; third,* Stand Stud Company, Whitefield.

Best foals in Class 32.—First prize, Stand Stud Company; second, J. Jackson, Oakeuclooughy; third,* T. H. Miller, Singleton Park.

Hunters, five years old or upwards.—First prize, J. Fielden, Caton; second, G. F. Statter, Park House; third,* R. Burrows, Kirby Lonsdale.

Young horses, four-year-olds, likely to make hunters.—First prize, J. Logan, Windermerre; second, T. Wilson, Silverdale; third,* W. Mason, Oughterwaite, Cark-in-Carnel.

Young horses, 3 years old, likely to make good hunters.—First prize, J. Atkinson, Windermerre; second, W. Mason; third,* T. Dixon, Burton.

Hunters, heavy weight, any age, up to 14 stone. Best leapers over hurdles and water in any previous Classes.—First prize, J. Cossins, Northwich; second, C. W. Wilson, Kendal.

Saddle horses, roadsters, 14.2 to 15.2 hands high.—First prize, J. Robinson, Hult; second, C. W. Wilson, Kendal; third,* W. Hird, Burton.

Saddle horses, roadsters, 13.3 to 14.2 hands high.—First prize, A. Woodhead, Cheshire; second, C. W. Wilson, Kendal; third,* F. Crowther, Mirfield.

Harness horses, 15 hands high and upwards, to be exhibited and driven in harness.—First prize, Stand Stud Company; second, Dr. W. Wingate Saul, Lancaster; third,* R. Wright, Salford.

Harness horses, 13.3 to 15 hands high, to be exhibited and driven in harness.—First prize, W. Askew, Aruside; second, J. B. Booth, Widues.

CART HORSES.

Open for competition to the United Kingdom.

Stallions for getting draught horses.—First prize, J. Forshaw, Workop; second, Fyde Horse Breeding Improvement Company; third, Stand Stud Company.

Stallion colts, foaled in 1876.—First prize, J. Porshaw, Blythe; second, W. Lawrenson, Preatall, Fleetwood; third, J. Knowles, Over Darwen.

Mares for breeding cart horses, with foal sucking.—First prize, J. Jackson, Stalmine; second, W. Robinson, Ulverston; third,* Fenton and Co, Lancaster.

Best foals in Class 53.—First prize, J. Jackson, Stalmine;

second, Fenton and Co., Lancaster; third, * W. Robinson, Ulverston.

Pairs of draught horses, five years old and upwards.—First and second prizes, C. W. Brierley, Frestwich.

Single draught horse, five years old or upwards.—First prize, W. A. Meadows, Rumlili, Preseat; second, W. R. and T. Thornton, Garstang; third, * J. Smith, Lancaster.

Young horse for draught, four years old.—First prize, P. Blandell, Weeton, Kirkham.

Young horses for draught, three years old.—First prize, J. Singleton, Wimmarleigh; second and third, * T. Wilkinson G. Hall.

Young horses for draught, two years old.—First prize, H. Shaw, Preston; second, R. Thompson, Blackpool; third, T. H. Hurst, Fleetwood.

Young horses for draught, one year old.—First prize, J. Miner, T. Sales, Kirkham; second, W. R. and T. Thornton, Primrose Hill, Garstang.

Draught horses, pairs, to be exhibited in cart, in shaft, and chain gear.—First prize, G. F. Slatter, Whitefield; second, T. G. Thompson, Lancaster.

Brood mare, and two of her off-spring (both the latter to be from one up to three years old), and to have been bred by exhibitor.—Second prize, J. Singleton, Wimmarleigh.

SHEEP.

Open for competition to the United Kingdom.

SOUTH-DOWNS OR SHROPSHIRE.

Shearling ram.—First prize, C. Byrd, Salford; second, T. W. Bowdage, Teadyn-y-Gwyn.

Ram of any other age.—First prize, C. Byrd; second, T. H. Miller, Singleton Park.

Ram lamb.—First prize, C. Byrd; second, T. W. Bowdage.

Three shearling ewes.—First and second prizes, C. Byrd.

Three ewes having reared lambs this year.—First prize, C. Byrd; second, T. W. Bowdage.

Three ewe lambs.—First prize, C. Byrd; second, T. H. Miller.

PURE LEICESTERS.

Shearling ram.—First and second prizes, J. Keen and Son, Silsden.

Ram of any other age.—First prize, B. Dobson, Bedale; second, J. Cook, Burton.

Ram lamb.—First and second prizes, J. Keen and Son.

Three shearling ewes.—First and second prizes, J. Keen and Son.

Three ewes having reared lambs this year.—First prize, J. Keen and Son; second, J. Cook.

Three ewe lambs.—First and second prizes, J. Keen and Son.

BORDER LEICESTERS, LINCOLNS, OR COTSWOLDS.

Shearling ram.—First prize, J. Sedgwick, Kendal; second, W. Savage, Hanging Bank.

Ram of any age.—First prize, J. Sedgwick; second, W. Savage.

Ram lamb.—First prize, J. Sedgwick; second, W. Savage.

Three shearling ewes.—First prize, J. Sedgwick; second, W. Savage.

Three ewes having reared lambs this year.—First prize, J. Sedgwick; second, W. Savage.

Three ewe lambs.—First prize, * J. Sedgwick; second, W. Savage.

BLACK FACED MOUNTAIN SHEEP.

Ram of any age.—First prize, * W. H. Hodson, Westmoreland; second, J. Peel, Catheroe.

Three shearling ewes.—First prize, J. Keen and Son, Silsden; second, J. Ingleby, Anstwick.

Three ewes having reared lambs this year.—First and second prizes, J. Keen and Son.

SPECIAL PRIZES OF £10 AND £5.

To the best and second best collection of 10 horned black-faced fell or mountain sheep, to consist of 1 ram, 3 ewes (to have suckled lambs in 1875), 3 shearling ewes and 3 ewe lambs, the whoe of them to have been bred and reared on any of the fells in Lancashire, extending from Longridge, near Preston, to Wray near Lancaster.—First prize, R. Kay, Stouehurst; second, E. Thompson, Scorton, near Garstang.

PIGS.

Open for competition to the United Kingdom.

Boar of large white breed, above one year old.—First prize, the Earl of Ellesmere, Worsley Hall.

Breeding sow, of large white breed, above one year old.—First prize, the Earl of Ellesmere, Worsley Hall; second, Alfred Crowther, Star Inn, Bridge Street, Bury.

Boar pig, of large white breed, under one year old.—First prize, P. Eden; second, the Earl of Ellesmere.

Pair of sow pigs, of large white breed, under one year old.—First prize, S. Spencer, Holywell, St. Ives; second, the Earl of Ellesmere.

Boar of small white breed, above one year old.—First prize, the Earl of Ellesmere; second, S. Spencer, St. Ives.

Breeding sow, of small white breed, above one year old.—First prize, A. Crowther, Bury; second, S. Spencer, Holywell.

Pair of sow pigs, white breed, under one year old.—First prize, the Earl of Ellesmere; second, S. Spencer.

Boar of the middle breed, above one year old.—First prize, P. Eden, Salford; second, J. Nuttall, Heywood.

Breeding sow of middle age, above one year old.—Earl of Ellesmere; second, P. Eden.

Boar pig of the middle breed, under one year old.—First prize, P. Eden; second, A. Crowther.

Pair of sow pigs of the middle breed, under one year old.—First prize, the Earl of Ellesmere; second, A. Crowther.

Boar of the Berkshire breed, above one year old.—First and second prizes, C. E. Duckering, Kirtlington, Oxford.

Breeding sow of the Berkshire breed, above one year old.—First prize, W. J. Challinor, Bolton; second, D. Ashcroft, Preston.

Boar pig of the Berks' ire breed, under one year old.—First prize, H. S. Woodcock, Wigau; second, C. E. Duckering, Kirtlington.

Pair of sow pigs of the Berkshire breed, under one year old.—First prize, C. E. Duckering; second, D. Ashcroft, Preston.

Boar of the improved Essex breed, above one year old.—First prize, W. Wheeler, Long Compton.

Sow of the improved Essex breed, above one year old.—First prize, C. E. Duckering; second, W. Wheeler.

HALIFAX AND CALDER VALLE.

The fortieth annual exhibition of the Halifax and Calder Vale Agricultural Association was held on August 31st in Craven Lodge Grounds, Halifax. Unfortunately the day was showery, and at times the rain was so heavy that it interfered with the labours of the judges, who had to seek shelter until it ceased. As a consequence of the rain the ground was very soft and disagreeable. Notwithstanding this drawback, however, there was a large attendance of visitors. The entries showed an increase of 221 on last year, the total number being 1,245 against 1,024. Cattle numbered 39 against 31 last year; horses, 255 against 258; pigs, 71 against 83; wool, 115 against 80; poultry, 242 against 189; pig-cans, 293 against 82; eggs, 9 against 11; roots, 25 against 34; butter, 5 against 3; implements, 130 against 214. It will be noticed that there was an increase in the entries of cattle, horses, and wool; a large increase in the poultry and pig-can departments; and a great decrease in the show of implements. Last year 18 harriers were exhibited, but on this occasion the competition in this section was not repeated. The prizes last year amounted to £650, including the value of 47 cups. This year, including 54 cups, the prizes amounted to £500. The greater number of the cups were contributed by the President (Sir Henry Edwards, Bart.) and the Vice-Presidents, who numbered 43.

There were 24 classes of cattle, and in most of them the entries were small. In the open section the three classes of bulls, although few, were exceedingly good. There was no competition in the class of Alderney or Guernsey bulls, there being only one entry, to which the first prize was given. The three-year-old or aged Shorthorn cows were a very fine lot. The dairy cows (pure-bred Shorthorns excepted) were another class deserving of special mention. In the classes open to tenant-farmers and persons principally dependent on farming for a livelihood the two classes of bulls were very inferior, and not what might be expected at such a show as Halifax. As a contrast to bulls, the three-year-old and aged Shorthorn cows formed one of the best classes in the show. The dairy

cows (except pure-bred Shorthorns) were a very useful lot. The silver cup for the best was gained by Mr. S. Ford, Todmorden.

Horses proved to be the great attraction of the day. The thoroughbred stallions were considered a moderate lot. The roadster stallions were an excellent class. The draught or agricultural horses were well represented, and formed a splendid show. A silver cup for the best stallion was gained by the Stand S and Company, who showed Young Champion. Mr. J. F. Crowther, Murfield, was second with Clyde Boy. The same gentleman also showed Honest Tom. He has been first in this class for five years in succession, but did not on this occasion bring forward his best animals. There was a splendid show of wool, and in some cases whole classes were commended.—*Leeds Mercury.*

WEST CUMBERLAND.

The annual show of this Society took place on August 27 at Whitehaven. The entries numbered 350, exclusive of a very large display of implements. With fine weather, there was a large assemblage of onlookers. The show of Shorthorns was very fine; that of horses also good; and some rare sheep were penned.

PRIZE LIST.

HORSES.

Draught mare.—First and second prizes, T. Hodgson, Broughton Hall.
 Colt foal by a cart stallion.—First prize, W. Crears, Nether-ton; second, T. Hodgson.
 Filly foal as last.—First prize, Mr. T. Hodgson; second, M. Dawson, Frizington Park.
 Draught mare in foal.—First prize, W. Threlfell, St. Helens; second, R. Blair, Stamford Hill.
 One-year cart gelding.—First prize, J. Brown, Chapel House; second, W. Turner, Crakepace Hall.
 One-year filly.—First prize, R. Jefferson, Preston Hows; second, W. Fox, St. Bees Abbey.
 Two-year gelding.—First prize, Jonathan Harker, Millom; second, Wilson Hewitt, Moresby.
 Two-year filly.—First prize, T. Hodgson; second, J. Iredale, Thackthwaite.
 Three-year gelding.—First prize, W. Stalker, Dem-sue road, R. Jefferson.
 Three-year filly.—First prize, T. Dawson, Woodend; second, J. Carter, Rottington Hall.
 Draught mare or gelding above four years.—First prize, W. Threlfall; second, R. Blair.
 Pair of draught horses.—T. Hodgson.

Mare in foal for field or road.—First prize, H. A. Clarke, Aspatria; second, W. H. Briggs, Tallentire.

Foal by a thoroughbred stallion.—First prize, H. M. McKenzie; second, H. A. Clarke.

Filly, as above.—First prize, R. Blair; second, J. Fearon, Corkickle.

Year colt or filly for field, road, or harness.—First prize, H. A. Clarke; second, Rev. J. M. Lowther.

Two-year colt or filly, as above.—First prize, S. N. Hartley, New Hall; second, J. R. Bain, Harrington.

Three-year colt or filly, as above.—Prize, J. Todhunter, Jericho.

Mare or gelding under five years old for field or road, bred in Cumberland and open to the county.—Prize, S. N. Hartley, Hackneys.—First prize, J. Collins, Loughbrigg; second, J. H. McKenzie.

Gelding or mare for driving.—First prize, W. Fletcher, Cartgate; second, J. Fearon.

Ponies.—First prize, J. Moore; second, J. H. Robinson.

Jumpers.—First prize, Mr. H. Crankie, Woolhouse second, W. B. Turner, Sella Park.

CATTLE.

SHORTHORNS.

Aged bulls.—First prize, Messrs. I. and J. Gaitsgill; second, W. Fox, St. Bees.

One-year bull.—First prize, R. Jefferson; second, R. Cousins.

Bull calf.—First prize, R. Jefferson; second, R. H. Dizzell
 Cows in calf or milk.—First prize, R. Ellwood; second, I. and J. Gaitsgill.

Two-year heifer.—First and second prizes, T. Nelson.

One-year heifer.—First prize, A. Thompson, The Cross; second, R. Ellwood.

Heifer calf.—First prize, R. Ellwood; second, J. Moore.

Dairy cows.—R. Cousins.

Shorthorn bred by Mr. Jefferson, bought from him, or got by a bull in his possession or of his breeding.—W. Fox, St. Bees Abbey.

Three Shorthorns, one bull and two females.—Messrs. I. and J. Gaitsgill.

Three cows.—Messrs. I. and J. Gaitsgill.

SHEEP.

In the sheep classes the chief prizes went to R. Jefferson, T. Nelson, Catgill Park; E. Nelson, Gatesgarth; T. Briidle, Seacote.

PIGS.

Boars.—First prize, Sharpe and Roberts, Santon Bridge; second, W. Leathes.

Sows.—First prize, S. Sherwen; second, J. Goffal.

BUTTER.

Mrs. Barwise, Netherend.

THE SHOTLEY HALL SALE.

A long-anticipated event has come and gone, nor of it can be written, as of the pet hound buried in the Delamere Forest:—

Bluecap's dead, and here she lies,
 Nobody laughs and nobody cries,
 How she fares and how she shares,
 Nobody knows and nobody cares.

Their late owner in this case is left lamenting his pets, whilst other lucky buyers are hugging their good fortune. It was a sale to which wealthy purchasers of the fashionable tribes were attracted by the presence of some Winsons, as the Holker branch of the Wild Eyes family is termed. "Wild Eyes," "Softer Eyes," "Roguish Eyes," "Bright Eyes," &c.—haven't they always done and won't they always do all the mischief in the world? But there was also great interest attached, on this occasion, to the old Cumberland family of the Cowslips, of which there was a large number entered for sale—a family of which the herd once mainly consisted. "It was full of the best old Collingblood" the catalogue description sets forth, and the whole surrounding district was replete with

associations of the early Shorthorn pioneers. The sale was altogether wonderfully got up; much money and thought must have been spent by the acting manager, Mr. Jacob Wilson. The different families were sorted into, and separately railed off within, different paddocks; and the Cowslips we find, in one, a large collection, over their flocks in grass. At once there was apparent a defect pervading the whole lot, with the exception of a few individuals, and that was a decided sinking of the loins, which threw the plate of the tail high. There is no doubt that this defect had a decided influence upon the prices given. Had all these Cowslip females been even, as Lots 9, 18 and 45 were, their average must have been undoubtedly higher. It would have been a thoroughly sound reason for a venture, for were they not full of the best Colling blood?" But it was all to no purpose. I am reminded of the fact that this conveys no very definite meaning. A question the shrewd public asks before it can be induced to part with its cash is—"Who compounded the mixture?" The elements may be excellent, either partly or wholly so, but we must have

some reason for our faith in a matter so serious as this. Hence it is that a "Mason cow," a "Bates' cow," a "Richard Booth cow," an "S. E. Golden cow," a "Wetherell cow," a "Towneley cow," &c., (names of the day for obvious reasons I avoid, although there are some to which the mind will at once revert), has its special value in consideration of the artist who produced the conglomerate. As good a diamond might possibly be found in the Edgware Road, but it would not sell as the same gem would in Harry Emmanuel's hands. Clever as you may be, it is doubtful whether you could produce a painting such as any one of Edwin Landseer's execution, even had you the loan of his colour-box, his pencils and his canvas. Nay more, I grant you also his idea, and you may even, if you please, have him over your shoulder directing the progress of your work. You could never do it, you know, for he had, beyond you, the instinct of an incomparable genius to give the requisite truth and animation to his picture. You would have a better chance if you had a half-finished sketch of his to work upon. You might, by help of the pattern, then produce a tolerable imitation; or to take the more homely illustration of kitchen practice—don't we all know that its little use providing the cook with some *recherché* receipt we have found at a distance? Won't she pestilently go throwing in handfuls in defiance of measure, and when the result is condemned, you are met with the ready retort that she "made it according to the directions." Which simply she didn't do. She had certainly the proper material, but the dish didn't answer because of her slovenly manufacture. There was defect in the compounding, and so it is that all is not Colling's which is of Colling's. If these Cowslips could have been warranted to be of Charles or Robert Colling's own compounding, at least for a few generations at root, there is little doubt they would have made a far higher average, despite the really serious defect in their loins. As it was, however, a remarkably good judge selected a number of them for a friend who is beginning. The Waterloos had unhappily very dark round horns; a sweet flat or open horn would have sold them pounds higher. The first lot, Cowslip 12th, ten years old, having capital horns as regards both colour and shape, and a fine frame, had recently turned upon the bull and so was bought cheap by Mr. J. Fair. Second lot, Duchess of Waterloo, had a great wider and good side character, but was narrow in loin. She went for 74 guineas to Captain Gundy. Then a handsome Cowslip is picked up by Rev. O. James, who proves himself a spirited purchaser of this sort and to whom we wish heartily good luck. Then comes Miss Beverley 16th, the first of a very noble but limited family, celebrated for their grazing aptitude. She was, however, a doubtful breeder and could not be lifted over 26 guineas, which was less than butchers' price. Some excellent youngsters of this family were sold at the Underley bull sale. Next comes a Winsom; and Mr. Foster springs wisely to the breach. The battle has scarcely warmed yet and so his quick firing secures her at the comparatively cheap figure of 320 guineas. "Well he's got a good one," observes a Royal judge at my side. Then Miss Beverley, 17th a very grand fronted cow, but unsuccessful in the show-yard, owing to the unevenness of her meat, it is remarked, fetches only 52 guineas. Lady Villiers, of the J tribe, was a rather ordinary cow. Then in Miss Beverley 18th, Lord Bective, ever discriminative and decided, obtains a bargain. Such a grand, fleshy, handsome cow, with fine bone, too, and more evenly padded than her relatives, she was. We shall hear of her produce again. Then the best Cowslip, even and tubular as could be, is bought for Lord Lonsdale. Then another Cowslip, and O.B.'s Justice, a fine roan of the Towneley Roan Duchess sort, for which Mr. Wilson gave over five hundred guineas.

It was stated, Mr. McCulloch bought cheap for Australia, where they have the good taste to approve the Royal Butterfly cross, for 150 guineas. She only wanted a little carving out in front. This gentleman next appropriates for 195 guineas Wild Eyebright, whose colour and length of leg did not suit the more tasteful owners of this tribe; but her barrel was very good. Mr. McCulloch's judgment was established, however, by the fact that her daughter was bought for 500 gs. later on. She was also dam of Wild Oxonian, the bull that stood so well at Bristol in the judges' eyes—better, in fact, than he does upon his hind legs. Then another Cowslip goes to Exeter, and next Lord Skelmersdale buys a massive, thick-fleshed, and yet refined good heifer in Winsome 18th by his pet Baron Oxford 1th. This cow is dam of Lord Cockburn, the young bull used in the herd. Then Peeress 7th, of a capital old Northumberland sort, with sixteen crosses, full of "good old blood," fell for 45 guineas only, to the bid of Mr. C. Bruce—for the simple reason, I believe, which I have alluded above, that although the materials are there, no special cook of celebrity is accountable for the mixture. Would any gentleman kindly give his ideas on this subject? as gushing editors are so apt to ask of their confident readers, upon subjects which they do not themselves quite understand. Then next but one Sir Fred Smythe buys cheap, the daughter of the Roan Duchess cow, a fine animal, in consideration, possibly, of her having a Booth cross a-top. This is just the line, however, they take at Acton Burnell, although it is reported not to suit Australia in her present mood.

Next Lord Bective adds Cowslip 26th to Lord Lonsdale's string, a level, white, thick heifer, daughter of our favourite, Lot 9. Then Mr. McCulloch, who evidently has an idea of variety, buys another thick one, Jemin, of the J tribe, and then Lord Lonsdale has another Cowslip, whereupon our plucky friend Foster takes one at 64 guineas. There is every likelihood of this tribe being brought out now by dint of least of upper crosses, though they take an age to accumulate. That most excellent bull at the root of their pedigree, Rob Roy (557), is an element of undoubted value. He was the marrow of the Barmpton Roscs—a noble sort, that used to fetch their three hundred apiece when the "outside Bates families" were worth little over meat price. A broad-backed J to Mr. Robertson, a Cowslip to Mr. Fair—whose father originated the breed—a wonderfully good Cowslip (the 30th), "given away," as a bystander observed to Mr. Singleton for 57 guineas, and then, after a severe skirmish, Lord Bective wrests out Winsome Colleen at 715 guineas for Lonsdale. The daughter of Mr. Foster's cow, she has a capital back, is very thick, substantial, and yet full of quality. A "leetle" front carving might be done with advantage. Waterloo Belle has capital form. Blanche Violante, a roan Duchess again, somewhat Klieby-coloured, but of excellent frame, Sir F. Smythe obtains, and then Lord Skelmersdale takes another daughter: Lord Lonsdale had the last) of that beautiful bull Duke of Connaught, who has emerged with a new splendour from the cloud with which some specimens of his offspring once half threatened to obscure him, Wild Erin, the daughter of Mr. McCulloch's cow. This heifer is heavy-fleshed, and of stylish form; her neck, perhaps, is an inch or two short, when we are saucy; and Rev. O. James gets another Cowslip, and another, and another pass into new, eager, hands—may they succeed there as they have, undoubtedly at Shotley! Soon a Waterloo springs the rate to 110, a Miss Beverley intervenes, and then Winsome Isis, another slip off Mr. Foster's stem, draws 585 guineas from Sir John Sainsburne. Another Cowslip yearling at 40 (this pays) and next Lord Morpton secures at last what he has longed for a ming at, Winsome, in the shape of Winsome 19th.

van, commended at the Bristol Show, a thick, mellow, level, square calf. Then Rev. O. James is in again for several lots, and finally Mr. McCulloch decides to have his choice on this pasture, Cowslip 41, granddaughter of Lot 9 and daughter of Lot 18, a very stylish, well-fleshed roan, doing justice to her sire, the Blaker bred Duke of Oxford 31st; the remaining honours are divided between Rev. O. James, Captain Gandy and Mr. Fair. The old and Duke of Oxford 31st comes on parade as gentle as can be. He is thick-fleshed and full of grandeur as they all are, and has a very good front. Put up at a hundred Mr. McCulloch finally secures him for Australia at 435 guineas. Lord Cockburn's horns are rather "cowy." He has been used perchance too early and hard, for this will produce this effect. He was level and even. Wild Oson an, who showed so well at Bristol, is a good roan; he has suffered in his hind legs from high keep or travel, or the two combined. Coarwood, a Cowslip bull, out of the beautiful Lot 9, was passed ailing, another Cowslip brought 37 guineas, a Miss Beverley 31, and last though not least, the Winsome Lord Cranbrook, born the very end of April, added 65 guineas to the sale's exchequer. So ended a really satisfactory performance, and such as must give encouragement to the young breeder, while at the same time it sets before him the manifest expediency of using the best bulls he can afford to purchase.

On Thursday came Mr. Angus's sale at Broomley. This name of itself were enough, one had supposed, to have kept all the visitors of Wednesday. It was not so, however; most of the blue blood Bates's contingent took their journey southwards in anticipation of Lord Feversham's on Friday. The cattle set forth at Broomley were of a short-legged, thick, old-fashioned type. The Old Moss Rose tribe formed the main part of the herd, for a three-year-old cow of which Gaiety 3rd by the Royal winner Ben Brace Mr. Jacob Wilson gave 255 guineas. Her daughter, calved last May, brought 80 guineas. This is encouraging to those who own good old-fashioned cows, and a confirmation of the above remark respecting the expediency of using the best bulls. There was a marked difference in the style and money value of the public verdict of the females of this tribe, according to the bull which had been used. Lot 3, Gaiety, ten years old, by Merry Monarch, was a very nice specimen of a short-legged cow, and brought 90 guineas. Then Prince Charles gets at once drifted back both in appearance and price. Then Ben Brace restored the tribe's beauty. These general remarks assuredly confirm the doctrine that there are only two modes of selecting males for use in the case of composite animals like the Shorthorn, which may go to pieces through the slightest imprudence, and that is if you own several of one tribe, send the best cows in turn to the best bulls you can, if fashionable blood, according to the school you belong to, and use the male produce on your herd. This is the *safest* way to preserve a type without losing size, or suffering the evils of excessive in-breeding. Or make up your mind what line you will twine with your own, and use a succession of bulls of that sort pure. Thus Bates did and R. Booth. If you go buying a bull here, and a bull there, you will soon have sad disappointment. It is difficult to maintain a type even by the plan I have mentioned. There is no doubt that upon this occasion had either system been adopted, so as to have secured thorough uniformity of character, there would have been a high average throughout, for they know the value of good old blood in the county North. As it was, fifty-one cows and heifers averaged £44 16s. Ben Brace was cheaply bought for 88 gs.

COWS AND HEIFERS.

Cowslip 12th, roan, calved Nov. 24, 1868.—Mr. Jacob Fair, Aberland, 62 gs.

Duchess of Waterloo, red, Jan. 15, 1869.—Capt. Gandy, Alnwick, 74 gs.

Cowslip 14th, red, Feb. 4, 1869.—Rev. O. James, Carghyll, 43 gs.

Miss Beverley 16th, red, March 30, 1869.—Mr. Jas. Hedley, Newcastle, 26 gs.

Winsome 9th, red, Dec. 17, 1869.—Mr. S. P. Forster, Killbow, 320 gs.

Miss Beverley 17th, roan, Feb. 25, 1870.—Colonel Hutton, Gate Burton, Lincoln, 52 gs.

Lady Villiers, red, Feb. 1, 1871.—Mr. J. Singleton, Porkington, 45 gs.

Miss Beverley 18th, red and little white, June 25, 1871.—Lord Beehive, Underley, 50 gs.

Cowslip 21st, roan, Nov. 2, 1871.—Earl of Lonsdale, Lowther Castle, 50 gs.

Cowslip 20th, white, April 8, 1872.—Mr. Hy. Richardson, Backworth, 35 gs.

O. B.'s Justicia, roan, July 24, 1872.—Mr. McCulloch, Australia, 150 gs.

Wild Beebright, roan, Sept. 10, 1872.—Mr. McCulloch, Australia, 195 gs.

Cowslip 22nd, red, Jan. 24, 1873.—Earl of Lonsdale, 71 gs.

Winsome 18th, roan, Nov. 14, 1873.—Lord Skelmersdale, 750 gs.

Peeress 7th, roan, Jan. 18, 1874.—Mr. C. Bruce, Newcastle, 45 gs.

Cowslip 25th, roan, Aug. 21, 1874.—Mr. R. Botterill, Wauldry, Brugh, 40 gs.

Princess Soekburn, roan, Sept. 28, 1874.—Sir F. C. Smythe, Acon Burnell, Salop, 48 gs.

Cowslip 26th, white, Feb. 28, 1875.—Earl of Lonsdale, 52 gs.

Jasmine, roan, March 7, 1875.—Mr. McCulloch, 66 gs.

Cowslip 27th, roan, Aug. 20, 1875.—Earl of Lonsdale, 48 gs.

Cowslip 28th, red and white, Dec. 2, 1875.—Mr. S. P. Forster, 64 gs.

Jessy, red and little white, Feb. 1, 1876.—Mr. John Robson, Byrness, 76 gs.

Cowslip 29th, red, March 28, 1876.—Mr. Jacob Fair, 51 gs.

Cowslip 30th, white, April 1, 1876.—Mr. Singleton, 57 gs.

Winsome Colleen, roan, April 10, 1876.—Earl of Lonsdale, 715 gs.

Miss Beverley 21st, roan, April 10, 1876.—Sir J. Swinburne, Capheaton, 58 gs.

Waterloo Belle, red, April 28, 1876.—Lord Beehive, 160 gs.

Blanche Violante, red and white, May 22, 1876.—Sir F. C. Smythe, 78 gs.

Wild Erin, roan, May 28, 1876.—Earl of Skelmersdale, 500 gs.

Cowslip 31st, red, Sept. 9, 1876.—Rev. O. James, 50 gs.

Blanche Justicia, white, Oct. 8, 1876.—Mr. R. Botterill, 52 gs.

Cowslip 33rd, red and little white, Nov. 12, 1876.—Mr. John Singleton, 35 gs.

Cowslip 34th, white, Nov. 29, 1876.—Mr. Geo. Hedley, Barnhospide, 40 gs.

Cowslip 35th, red and little white, Dec. 11, 1876.—Rev. O. James, 31 gs.

Cowslip 36th, roan, Feb. 21, 1877.—Mr. Clay, Kerchesters, Kelso, 44 gs.

Waterloo Rose, red, March 9, 1877.—Captain Gandy, Alnwick, 110 gs.

Miss Beverley 22nd, roan, March 24, 1877.—Sir J. Swinburne, 51 gs.

Winsome Isis, roan, March 26, 1877.—Sir J. Swinburne, 585 gs.

Cowslip 37th, roan, May 14, 1877.—Col. Hutton, 40 gs.

Winsome Oxonia, roan, Oct. 21, 1877.—Lord Moreton, 505 gs.

Cowslip 38th, white, Oct. 26, 1877.—Rev. O. James, 29 gs.

Peeress 8th, roan, Dec. 1, 1877.—Mr. Searth, Raby, 20 gs.

Miss Beverley 23rd, white, Dec. 6, 1877.—Rev. O. James, 26 gs.

Cowslip 40th, roan, Dec. 6, 1877.—Rev. O. James, 16 gs.

Cowslip 41st, roan, Dec. 7, 1877.—Mr. McCulloch, 43 gs.

Waterloo Maid, red, Jan. 17, 1878.—Capt. Gandy, 70 gs.

Judith, roan, Feb. 20, 1878.—Mr. J. Singleton, 27 gs.

Cowslip 42nd, red and little white, Feb. 21, 1878.—Mr. J. Fair, 31 gs.

Blanche Shirley, roan, March 17, 1878.—Rev. O. James, 22 gs.

Cowslip 43rd, white, June 10, 1878.—Rev. O. James, 40 gs.

BULLS.

Duke of Oxford 31st, roan, July 26, 1874.—Mr. McCulloch, 435 gs.
 Lord Cockburn, roan, July 23, 1876.—Mr. J. Singleton, 75 gs.
 Wild Oxonion, roan, July 7, 1877.—Lord A. Cecil, Orchard Muns, 86 gs.
 Camperdown, roan, Jan. 14, 1878.—Mr. Clay, 27 gs.
 Baron Blagdon, roan, March 21, 1878.—Mr. Borthwick, Kilham, 31 gs.
 Lord Cranbrook, roan, April 30, 1878.—Lord Stourton, 85 gs.
 Bull calf, July 22, 1878.—Rev. O. James, 49 gs.

The following are the prices and averages of the various families:—

COWS AND HEIFERS.			
Name of Family.	No.	Total amount.	Average.
Cowslip	22	£964 9 0	£43 16 9
Waterloo	4	4 14 0	108 13 6
Beverley	6	276 3 0	46 0 6
Winsome	5	3013 15 0	602 15 0
Wild Eyes	2	729 15 0	364 17 6
J.	4	224 14 0	56 3 6
Ferress	2	68 15 0	34 7 6
Bianche	5	367 10 0	73 10 0
	50	£6079 15 0	£121 10 10

BULLS.

Cowslip	1	£25 7 0	£25 7 0
Beverley	1	32 11 0	32 11 0
Winsome	3	237 6 0	79 2 0
Oxford	1	456 15 0	456 15 0
Wild Eyes	1	51 9 0	51 9 0
	7	£806 8 0	£115 4 0

The cows, 35 in number, made £4,462 10s., or an average of £127 10s. each. The four heifers made £834 15s., or an average of £208 13s. 9d. The heifer calves, 11 in number, made £538 19s., or an average of £476 5s. 4d. The three aged bulls made £625 16s., or an average of £208 12s. The four bull calves made £180 12s., or an average of £45 3s.—*Figil.*

SALE OF EARL FEVERSHAM'S SHORTHORNS.

At Duncombe Park, Helmsley, on Sept. 6 Mr. Stratford, of London, offered by auction a selection of Shorthorns from the old established and valuable herd of the Earl of Feversham. There was a large attendance of Shorthorn breeders, and some of the most fashionable stock realised good prices. Forty-two grand animals, representing the well-known *Blanche*, *Wild Eyes*, *Waterloo*, *Kirklevington*, *Charmer*, and *Surprise* tribes of the purest blood, with good specimens of the old *Duncombe* and *Ryedale* sorts were offered, and there was capital competition for some of the animals. The four specimens of the good old *Wild Eyes* sort brought no less than 1,070 gs. Lord *Lonsdale* paid 455 gs. for *Wild Winsome 3rd*, the belle of the lot, a splendid yearling, by the Duke of *Underley*, dam *Winsome 11th*, one of Earl *Feversham's* own breeding. The Duke of *Devonshire* paid 240 gs. for another *Wild Eyes*, a likely breeding cow, with grand frame, got by *General Napier*. *Winsome Wina*, another of the *Wild Eyes*, dam, *Winsome Eye 3rd*, one of the best cows going, went very cheap, to *Colonel Gunter*, for 200 gs. A fair *Kirklevington* calf, four months, not by *Fuglent*, the only one in the list, was sold to *Lord Moreton* for 275 gs. This was a very ripe calf, out of *Wiklvington Princess 111*, which at *Mr. Parker's* sale brought £490, when only a calf. *Waterloo XXX11*, a grand rich cow, with a wealth of *Duchess* blood, was secured for *Sir Harcourt Johnstone* for 170 gs. The fashionable representatives of the *Surprise* family also sold well—a gem, *Secrety*, by the £,000 guinea bull, *Duke of Waverley*, going to *Lord Lonsdale* for 135 guineas. The *Blanches* and *Rye-*

dales did not bring large figures, but the average of the females all round was close upon £100, a good result in these days of Shorthorn competition. A dozen bulls were offered, amongst them *Twentie 6 Duke of Oxford (28432)*, one of the purest bred Oxfores from red bulls in England. He was calved in October, 1879, and he has seen some durable service, but he is yet in grand form, and is a deep-framed, massive, bull, with good quarters and of a fine quality: he went very cheap to *Mr. Beaver*, of *Ross*, *Heredford*, for 105 gs. Some of the bull calves met a good competition, especially the representatives of the *Bright Eyes* and *Surprise* tribes. The total proceeds of the sale were £3,566 17s. The sale was preceded by a luncheon, over which the *Earl of Feversham* presided.

COWS.

Lot	Buyer	Price
1.	Major Worsley, Hovingham	33
2.	Lord Bective, Underley	53
3.	Duke of Devonshire	230
4.	Sir Harcourt Johnstone	170
5.	Mr. Shelton Beales, Warwick	50
6.	Mr. Crabback, Hertford	55
7.	Mr. J. R. Singleton, Givendale	60
8.	Lord Lonsdale	135
9.	Lord Bective	44
10.	Mr. Boyes, Wombletton	35
11.	Mr. Burchard, Sussex	0
12.	Colonel Gunter, Wetherby	50
13.	Mr. T. P. Frank, Kirby Moorside	43
14.	Lord Moreton	67
15.	Major Worsley	52
16.	Lord Lonsdale	155
17.	Mr. John Singleton, Pocklington	70
18.	Mr. Graham, Middleham	45
19.	Lord Bective	175
20.	Col. Gunter	49
21.	Mr. Riston, Selby	50
22.	Mr. L. Hodgson, Highborn	34
23.	Lord Bective	67
24.	Lord Lonsdale	455
25.	Mr. Pease, Darlington	26
26.	Mr. Walker, Brompton	42
27.	Mr. F. K. Kirby	28
28.	Col. Gunter	200
29.	Mr. Burchard, Sussex	35
30.	Lord Moreton	275

BULLS.

Lot	Buyer	Price
1.	Mr. Beaver, Ross, Hereford	105
2.	Mr. Graham, Middleham	85
3.	Sir Harcourt Johnstone	34
4.	J. R. Singleton, Givendale	57
5.	Mr. Robinson, Nafferton	37
6.	Mr. Horner	17
7.	Mr. Coates, Easingwold	43
8.	Mr. John Maskill, Braddaby	32
9.	Mr. Pease, Darlington	30
10.	Mr. H. Barton, Burton House	22
11.	Mr. Richardson, Apleforth	40
12.	Mr. T. P. Frank, Kaseby	43

The total made by the twelve bulls was £574 7s., or an average of £47 17s. each; whilst the females made £2,999 10s. for the 30, or an average of £99 15s. 6d. each, a very fair result on the whole. The total proceeds of the sale were £3,566 17s.—*Leeds Mercury.*

A PERMANENT ELEMENT.—There died recently at Tenbury Wells, on the borders of Worcestershire, an old woman of the name of Elizabeth Element, who at the time of her death had attained the remarkable age of 103 years and 38 days. She was to the last in full possession of all her faculties, and was able to walk about to within a few days of her death.

RAILWAY LUXURIES.—Excursionist: "I say—er! This water's full o' crumb!" Aquarist: "That isn't crumb! That's only the sawdust off the Rice!"—*Punch.*

THE AGRICULTURE OF PERSIA.

Consul Churchill thinks it may be interesting to those who know little of the idiosyncrasy of the people of Persia, and who yet take some interest in it, to learn something concerning the tenure of land in Ghilan, and the condition of the lower classes in this part of the country. It is the general belief that the inhabitants of Persia are oppressed by their rulers and kept down in the scale of civilisation, to the extent that they may well be styled barbarians by the more favoured nations of Europe, but such is not the case. Public instruction in every town in Persia is strictly attended to, although its aims may not come up to the mark of our notions of education. Almost every child, male or female, in this country is sent to school to learn to read and write, or at least to learn to repeat certain favoured passages of the Koran, and the natural intelligence of these children is so vastly superior to that of their brethren in Europe, the development of their intellectual faculties at an early age is so astounding, that small children will hold their own with grown-up persons, and talk on subjects that would make our little folks of the same age stare with wonder. But owing mainly to the fact that every book in Persian is a manuscript, and consequently inaccessible to the lower classes on account of its high price, and to the consequence of this circumstance—namely, that few books are ever read by the people—the Persians as a nation are what they were five hundred years ago, and what we, perhaps, were before the introduction of the printing press in England.

The Persians, altogether a clever and industrious people, capable of imitating almost everything that is produced in Europe, will talk even to this day of the four elements believed in, in the days of Plato—namely, fire, water, air, and earth, and will not be convinced that all such notions have long since been superseded and proved to be groundless by scientific discoveries. They still cling to the notion that the sun and all the stars revolve around the earth, which they believe to be motionless. With such antiquated ideas, the Shah and his brilliant suite may visit Europe, not once, but half-a-dozen times, without reaping any benefit therefrom. Sa'ady and Nizami, Hafiz and Ferdoussi, may be very praiseworthy philosophers and poets, but they give very little insight into the best mode of governing and improving the country. Yet, as already observed, the lower classes are far from being miserable. The peasantry are free to till the soil, which in general belongs to the middle and upper classes, and they get an ample portion of the produce of the land for their pains. The middle and upper classes may have become landed proprietors either by purchase or by inheritance, but they are alone responsible to Government for the revenue. The Princes and Khans of the empire are appointed by the Shah, as the satraps of olden days, to govern the outlying provinces in his name.

In Ghilan, one of the richest and most produc-

tive districts of Persia, where, on account of its rich vegetation, almost every plant or tree will grow, the lower classes have no reason to be unhappy. Few of them, it is true, possess land, but the arrangements they make with the landowners are all to their advantage. If they engage to clear a piece of jungle, they divide the produce of the land with the owner of the ground. If mulberry trees are planted, the seedlings are purchased by the landowners, and, when after a few years silk is produced, the peasant rears the worms and gets a third of the produce for his trouble, one-half of the remainder going to the landowner and the other half to the speculator who furnishes the silkworm eggs. As little supervision can be at all times exercised over the villager, he naturally contrives to secure for himself a good portion of the crop. The advantages the peasant derives from his agricultural vocation are not inconsiderable. He can cut down wood in the jungle—that is, the neglected part of his landowner's estates—and sell it on his own account. His cows and sheep can browse freely in those parts that are not under cultivation; he can make charcoal without let or hindrance; he can produce vegetables around his hut, and reap all the benefits arising therefrom; he can rear poultry and sell it on his own account; and last, but not least, he can dispose of the fruit which grows in abundance on the estate without consulting the owner of the land. The principal profits of the latter are his portion of the silk crop, the value of the mulberry leaf when sold, and his share of the rice produced on the estate. He also gets, out of courtesy, the first fruits of the land brought to him as an offering by his tenants. When the silk crop fails, the burthen falls principally on the landowner, who has to pay the land-tax assessed years ago, irrespective of what the land may now produce. The peasantry and speculator, together with the landowner, lose their profits.

The taxes are not farmed out in Persia as they are in the Ottoman Empire, and the officers employed by Government in collecting the revenues are not, as a rule, exacting. Here and there cases do occur in which complaints are made to the superior authorities, but they do not constitute a system of oppression. As a matter of course in collecting the *maliat* (taxes), the collectors contrive to extract from the taxpayers some 10 or 20 per cent. more than they are entitled to, but so long as they do not exceed these limits everybody feels satisfied. When the tax-gatherer grows rich he is pounced upon by the governor, who makes him disgorge. In his turn the governor is called upon by the Shah either to pay large presents on his appointment, or heavy fines for reported malversations. The revenue in Ghilan is collected one-half towards the end of August, by which time the silk crop, which constitutes the principal produce of the district, has been brought to maturity; the other half is collected towards the end of the financial year.

In India it has been calculated that the income of the native peasantry is, on an average, £2 a year. In Ghilan it is equal to from £5 to £9. The principal food of the peasantry is rice, of which they produce an abundance of a very fair quality, and at a very low price. The women are mostly employed in the cultivation of this grain. Meat is cheap, 3d. being paid per pound for mutton, and 1½d. for beef. The clothing of the villager in summer is scanty, consisting in dyed cotton wares and no shoe leather; in winter he wears a home-spun woollen cloth of a very coarse but substantial quality. His wants are few, he is sober, and in most cases industrious.

Towards the beginning of winter the natives of Khal Khal, a mountainous region near Ardabil, in the province of Azerbaijan, have from time immemorial been in the habit of quitting their lofty plateau to come down into the plains of Ghilan to seek employment as well as shelter from the inclemency of the cold season. Their rendezvous is the town of Resht, where they are engaged by contract to till the surrounding country. Some of them thus find their way to the confines of Mazenderan. In some years 15,000, in others as many as 25,000, individuals are thus employed. In coming down from the mountains they carry all they possess in a bundle, which they suspend at the end of a stick. In the towns they collect in the numerous *tékkeh*s erected by the wealthy portion of the population for the performance of their religious theatricals in the mouth of Mohurran. There is very little skilled labour to be met with among them; the utmost they profess to do is to turn up the soil, to dig trenches, and to saw down trees. Their wages are, on an average, 3d. a day, but they are entitled to rations and

other advantages which, in money value, make up an income of 6l. per day. After four or five months' labour on these conditions they return to their homes, when the snow has melted and the soil is fit for cultivation. Their savings do not amount to much; from 10s. to 20s. is the utmost that they can put by, and this is usually invested in the purchase of cotton wares for the use of their wives and children, but they have enjoyed a mild winter compared with their own, whereas at home they would have been exposed to all the miseries attending intense cold, and that without occupation.

The peasant is far superior in courage to the townsman, who, it must be owned, has gained the reputation of pusillanimity. In summer you often see the villagers wrestling among themselves, while in winter they hunt the wild boar with dogs, and no other weapon than a short spear. It is remarkable what little crime there is in this part of Persia; seldom does one hear of murder or robbery. A traveller may go from one end of the province to the other without any danger of being robbed. The doors of a house may remain open all night with impunity. Infanticide is a thing unknown in the country. Consul Churchill attributes virtues to the mildness of the climate, which necessitates little exertion to procure a sufficiency of shelter, food, and covering. A single day's labour is sufficient for all the wants of an individual during a whole week. Mendicity is little known, and with the exception of cripples and blind very few mendicants are to be seen in the towns, and their lot does not appear to be a very hard one, as they receive ample charity from the inhabitants.

L I V E S T O C K N O T E S .

Curiously enough, in the American *Live Stock Journal*, the August number, I find an article upon the prevention of "Bots," in which they are stated to be *highly injurious to the horse*. The passage is worth reproducing: "In the case of animals that have been exposed in the fields, in summer the evil effects are seen for the entire year in a poor condition, which cannot be corrected by the greatest care, in a soft flabbiness of the muscles, in an indisposition to exertion, in perspiration and fatigue under slight efforts, in swelling of the legs when standing still, in occasional irregularities of the bowels—diarrhoea, alternating with constipation—in colic violent indigestion or inflammation, chronic cough, &c." Well of course if such be really the terrible effects of the attention of that persistent fly more than ever should we devise some plan to defeat her performance. Since the legs, I suggested. Oil them, the American advises, to prevent the adhesion of the eggs, and when eggs are attached wash them at once with warm water, which will burst them and leave only the shells behind. They suggest further that it would be well to imbue the oil with some scent to disgust and keep off the parent fly: "A drachm of camphor, carbolic acid, oil of turpentine, or assafoetida, mixed with a quart of sweet oil, will serve this purpose." I expect the horses in the Peninsula escaped the bots, then, for at one time they were fed almost wholly on brown sugar, into which there had been put an infusion of assafoetida, to pre-

vent the soldiers appropriating it for home use. There is much in a smell, as the youngsters knew who ran a herring trail down the shrubbery walk for the cat that consumed their young rabbits, the perfume ending in a trap. Then a line of worsted dipped in paradisa will keep rabbits off a flower-bed. At Berkeley Castle they have the palings well and freshly tarred, against which the cows are ever working their horns, whether for mischief or delight, with the further satisfactory consequence of disgusting and banishing the fly. For my idea that the bots do little harm within the horse I refer to my authorities, Youatt and White. When you do notice a horse to continue persistently thin, at once examine his teeth. I saw a pet cart-mare thus pulled up by her owner lately, and on examination her tongue was found all lacerated by a tooth which had worn away faster on the one side than the other, so as to have an edge keen-cutting as any knife. This sharpness removed with a file, she put rapidly on fat again. In my own sheds I remember a shapely young ox who kept continually thin, although the others fattened round him. The idea occurred to me. His lip was raised, when a couple of loose teeth were visible just dangling by a thread of flesh, and yet that thread was misery. The teeth extracted with the merest touch of the ballif's pincers, the animal at once began to thrive—and this brings me to another animal infliction. A pet white setter gambolling along I noticed to have his head shorn thickly with

what I took to be pepper grains or such like, but which turned out to be a board school of fleas on "the hills," as they say at Winchester, for pasture. The foud parents and instructors were within doors, beneath the neck and thereabouts for enjoyment, under shelter as a Glasgow potentate over whisky on the Sabbath. I consulted as to their removal an intelligent all-round sort of farm labourer, who is busy under orders with some sheep. "Snuff" he advises, not I hope on the principle of the Lincashire air salesman, who disposed of a large burden of a patent manufacture in packets at a penny each on condition that he should not reveal the mode of administering it until he had sold the lot. It was—he then explained—to catch each individual offender, to hold him high before your eyes with a sort of artistic manipulation by the hind legs, to fillip him gently under the chin, and then administer a measured dose with a tiny spoon. Of course if all this had to be done I felt that I at least should never have the time to carry out the directions; or by preference, he said, I might "wash her with tobacco water." Tuanks, but my "bucey" is better worth. Or draw a line of some greasy decoction which he specified along each side of the spine. "The fleas never thrives if they can't cross the back, sir; they falls off just a skin and nothing more." "What," I cogitate, "have they the necessity that a family has in India of periodically visiting the hills for their health's sake?" How funny! But funnier still, he assures me that "no animal, not even a babby, has it's health sound but it will break out in these sorts of vermin sometimes." Hereupon we adjourn, ordering a dressing of Keating's Persian powder to begin with, and a bed of larch twigs, or turpentine tree shavings at least, underneath their straw, for such fragrauce offends and banishes these animalcules, as cedar shavings do the moth tribe.

To change the subject I have often in these columns enlarged upon the improvements which both Southdown sheep and Berkshire pigs are as a rule capable of in the setting on of the tail. I have lately seen at Kingscote a flock which excels in this respect, and has quite the "croup" if I may use an equine term, of the Cheviot sheep. It is an old Southdown flock, and is larger grown than the Sussex sheep. A native breeder argued that if you obtain this excellence you will forfeit fulness of leg at a lower point. Why should you, any more than in the case of the improved small breed pig, which has both points in perfection? There is great increasing talk of the Northern sales. At Mr. Wilson's, of Shotley Hall, people expect size and quality combined. Then at Broomley the next day, September 5th, the late Mr. Angus's herd includes no less than 38 out of 51 females of one family only, a sight in itself worth seeing. It has its root back in the past century, and includes a good deal of C. Colliugs's blood. The ultimate product, as the manipulation standing under the famous name of Angus, we shall be curious to behold.

I was much struck the other day with what is nothing when it has once occurred to you, but a very useful idea after all, and that is the practice of a friend who rears his colts in fields adjoining a railway, so that they get early used to the noises of the station, and go steadily past engines on the road. It would be well if some such plan could be adopted to familiarise them to bicycles as well. It does not do to retard civilisation in such advanced machinery. Bridges in the future must be built strong enough to sustain traction engines, and bicycles will prove as bread-winning for the needy home as the employment of girls in the several public departments, office and otherwise, to which they have been introduced with such thorough success.

The question of bicycles brings me to the consideration of

one of the best implements yet made, Howards' three-furrow plough. Its construction is roughly this: Imagine the triangular iron frame of a scarifier turned towards you, and suspended on a crank shaped axle, to either end of which two strong wheels are attached, the left hand or land one bigger than the other. There is a third wheel at the right-hand corner of the frame fixed so as to run down the furrow, as the inside wheel of the ordinary plough does. Along the right-hand side of the triangular frame before you three ploughs are attached, and the whole frame can be lifted out of the ground by dint of a lever and the crank shape of the axle. It is a wonderful implement, very simple and very strongly built. It was brought for exhibition on my farm ten days since, with a double-furrow plough. It looked so cumbersome that it narrowly escaped getting sent away without trial. But the agent begged. So four horses were sent for, but only three attached. Away it went at once doing beautiful work, and without distressing the team at all. It has been at work ever since, two ploughmen having been employed in turn. They delight in the rapid thorough performance of the implement. There is only one turning on the headland for three furrows they point out, and there is no constant hammering and altering (the bailiff suggests) which happens so perversely with the single wheel plough. Only fancy how one is getting over work! Three horses and one man doing excellently three furrows! What a grand saving, and not sooner than we poor farmers needed it. If machinists can introduce a few other as wonderful implements the farmer may hold up his head as hopefully as of yore. The soil is an ordinary loam. To be appreciated it requires to be seen at work. Not a farmer or labourer yet, and numbers have come to see it, but has acknowledged the excellence of the work. A huge steamer has been employed on adjoining land, and the general remark was that six good horses and two such ploughs would have answered better, except to space. Six furrows done by six horses and two men! "I cannot believe it," a friend kept continually remarking when he had left the field. Nor indeed could I myself, but there was the fact to be seen. What a saving of horseflesh and labour this will induce! VIGIL, Sept. 2.

TYT FOR TAT.—A correspondent writes to *The World*:—The same trick that was played on your friend was played upon me many years ago by one of those rascally Thames fishermen. I know them well. When I remonstrated he laughed at my nose, and the cad in the punt laughed too. I went away quietly, a being of dark imaginings thirsting for vengeance, and quit of day's sport and worms. Is your friend vengeful? I hope so. Then let him listen to me. I went to my own rascally fisherman—they all love each other—and he put me up to as pretty a dodge as I ever heard of. In the late evening when I found the "pitch" vacant, I executed my sweet vendetta. The next evening, feigning a benevolent expression of countenance and a good-humoured tone, I sauntered down to the spot and accosted my friends: "Well, had good sport?" "No," grunted Mr. T. F.; "not a bite." "I wonder at that," quoth I; "for, thinking you had done with it, I baited the pitch again last night—cast two bucketsful in, at least." "Gammon!" said T. F.; "what worrums?" "No!" shrieked I, with the yell of a fiend—"grains!" the while I executed a wild *pas* of delight on shore to the accompaniment of melodious oaths. "And you, you tallow-moogering old skunk!" (he was the eminent chandler of—) but no my wrath has subsided—and the cad in the boat, the next time you come out fishing, don't steal other people's worms, but bring your own greaves; otherwise, I'll bring my own grains again!" Except, I believe, in fishponds where they are said to be a good bait for carp, grains will drive away all fish within smell. And moreover they may be weeks before they return. And this experience *di pescatore ignobile* I recommend to the notice of your friends.

FREE TRADE IN LAND.

No. X.

Mr. Kay continues his series of letters to *The Manchester Examiner* :—

In my last letter, published by you on the 9th day of August, 1878, I tried to show how the French system of land laws, which divides a great part of a father's estate upon his death among his children, has operated in France, even spite of the ignorance of the peasantry. I stated as clearly as I could that I thought that the system of forced subdivision was wrong; but I wished to show that even this system, with all its faults, promotes the prosperity, moral well-being, and happiness of the yeoman farmers and peasants better than our system of huge estates and long settlements. I said that I did this because the instance of France was always being brought forward by ignorant opponents of free trade in land as if it were an unanswerable argument against any reform of our feudal land laws, and as if no other system were possible. I reminded your readers that many of the best and most richly cultivated parts of Europe were cultivated under the French system of laws. I now propose to show what the highest and ablest authorities say of the effects of the French land laws in France, spite of the great drawback of the want of education.

And first, let me cite some sentences from an extremely able and interesting letter on this subject, written by our great economist, Mr. Cobden, and published by his great ally, Mr. Bright, in *The Times*, on the 7th January, 1878. Mr. Cobden says, "Nobody has, I believe, proposed that we should adopt in England the French law of succession, but it pleases those who are the advocates of the land laws of this country to bring forward the peasant proprietor of France as a sort of 'Old Bogy' to frighten us into the love of our own feudal system. This compels those who desire any amelioration of the present system to meet them on their own ground. . . . Two questions are presented to us in connection with this subject. What are the moral and what are the economical effects produced by the division of the land of a country among its whole people? In France, Switzerland, Norway, Germany, Belgium, the Channel Islands, and in the United States, the land is, as a rule, the property of those who cultivate it. The same state of things prevails more or less, or is being rapidly developed, in Italy, Spain, Russia, Hungary, and other countries. England is the only great country where feudalism still rules the destinies of the land, and where the owners of the soil are constantly diminishing in number. . . . Now, looking at the moral aspect of the question alone, no one will deny the advantages which the possession of landed property must confer upon a man, or a body of men—that it imparts a higher sense of independence and security, greater self-respect, and supplies stronger motives for industry, frugality, and forethought than any other kind of property. The question really is between owning land or possessing nothing; for in proclaiming that the whole class of agricultural labourers must for ever abandon the hope or ambition of becoming landowners they are virtually told that they can never emerge from the condition of weekly labourers; for the tillers of the earth can, as a class, rise to wealth only by sharing in the possession of the soil."

Mr. Cobden then proceeds to show that these remarks apply to more than 1,000,000 farm labourers and their families in England and Wales alone, and he might also have added that they apply with nearly equal force to the dependent class of small farmers without leases, without any security for their outlay, and without the stimulus to industry and self-denial which ownership almost invariably supplies.

Think what an incentive to saving, to frugality, to temperance, to self-denial, it must be to the French peasant to feel that if he will only work, save, and celer his marriage, he may hope to buy at least a kitchen garden, or a field, or an orchard, whereby to eke out the maintenance of his family!

Mr. Cobden continues, "Upon the moral aspect of the question, there cannot be two opinions, and therefore it does not admit of controversy. On the Continent, the verdict on this

view of the question is unanimously in favour of small landed properties; and unless we in England are insincere in the arguments we address to the working classes to induce them to become depositors in savings banks, or to enter the ranks of distributors and producers by means of 'co-operation,' we shall also admit that to become a small freeholder would elevate the labouring man in the scale of society."

Mr. Cobden then goes on to state, what is certainly remarkably true, that the views in favour of the French system of land laws have been gaining ground in France during the last half century, until they have almost ceased to be a subject of controversy. And then he proceeds, "and surely, if any one circumstance be more calculated than another to impose a modest diffidence on even the most conservative of British critics, it is the high social and intellectual position of those Frenchmen who are the advocates of the system of peasant' (and he might have added of yeomen) 'properties.' This task is not left to the Red Republicans or to the ultra-Democrats. Men of exalted rank and birth, who might be excused for feeling some repugnance to a social organisation which has to a large extent been erected upon the ruins of their class—the descendants of those whose families were scattered or who perished on the scaffold during the Revolution—have been among the most able and earnest champions of the present order of things. Thus M. de Toppeville, writing in the confidence of private friendship, from the chateau in Normandy bearing his name, and surrounded by a body of peasant' (and yeomen) 'proprietors, occupying the greater part of the ancestral domain of his family, yet speaks with hearty commendation of the changes. And the present state of things finds a defender in a venerable French nobleman, who is widely known and honoured in England for the purity of his character and his high intellectual endowments—the head of the ducal house of De Broglie' (an ancestor of the present advocate of *coups d'Etat* and electoral corruption). Mr. Cobden then forcibly points to the terrible causes which have during the last 70 years retarded the progress of French agriculture and made that progress so much less than it otherwise would have been—the millions of able-bodied labourers who have perished on the battle fields; the ruinous invasions of the country by foreign armies; the sudden way in which the great revolution threw the vast masses of lands which had belonged to the Church, the nobles, and the corporations into the hands of an uneducated peasantry, who knew little or nothing of agriculture, and who had neither capital, nor manual labour, nor intelligence wherewith to cultivate their new possessions; and the enormous pecuniary exactions wrung from time to time by the foreign invaders from that wonderfully industrious, ingenious, and artistic people.

Let us remember that all these years our own country never saw the face of an invader.

"What wonder, then," asks Mr. Cobden, "if under such favourable circumstances England has outstripped her neighbour in the path of progress? Ought it not rather to excite our astonishment that in less than a century the peasantry of France could bear any comparison with our own in the enjoyment of the necessities and comforts of life? Yet so great were the recuperative forces in the rural population of France—arising, as is maintained by her highest authorities, from the general diffusion of landed property—that in less than a quarter of a century after the peace of 1815, the English pedestrian, Inglis, was enabled to pen this declaration: 'With a tolerably intimate knowledge and distinct recollection of the lower orders in France, I assert that, upon the whole, the peasantry of France are the happiest peasantry of any country in Europe. The result of a general study of all the best authorities is to show that there is a unanimity of opinion in favour of the French system, on moral grounds, as tending to elevate the character, promote the intellect, and stimulate the industry of the peasantry. There is scarcely less agreement on the economical view expressed by M. Passy, that small properties, 'after deducting the cost of production, yield, from a given surface and on equal conditions, the greatest net produce.' These 'equal conditions' can of course

only be found by comparing corresponding specimens of the two systems. The advocates of the *petite culture*, while admitting that the average production of England exceeds that of France, contend that in Flanders, "the very birthplace of scientific farming," on the Rhine, in Guernsey, Switzerland, the North of France, and other parts, farms of fifteen or twenty acres may be found cultivated by their proprietors, which yield a greater net produce than the same extent of surface on the best farms in England or Scotland. M. de Lavergne says that the proprietors of fifteen acres "enjoy sometimes a real affluence." This is more than the average size of the separate farming properties in Guernsey and Jersey, where the populations are renowned for their comparative prosperity and happiness. As a proof that this division of property promotes the accumulation of wealth, without tending to the deterioration of the soil, it may be stated that farming land is worth nearly twice as much when let or sold in Guernsey as in England. It is contended, moreover, that at the present moment the peasant (and yeoman) proprietors are making more rapid progress in improvement than the ordinary renting farmer without a lease, owing to the greater stimulus imparted by what Arthur Young designated the "magic of property."

So far our great free-trade leader and political economist; and to Mr. Cobden's remarks on this subject may be added this observation: Go where you will through France, or through any of the countries where either the French land laws or free trade in land is in force, you universally notice the wonderful way in which every square yard of land is made use of. Instead of the tens of thousands of acres which are occupied by wide hedges and ditches in Great Britain and Ireland, you scarcely ever see a hedge or ditch in foreign countries, but all these tens of thousands of acres are levelled and under rich cultivation, like the rest of the land. Instead of the sides of the road being marked out as with us by ditches, briars, thorns, and useless trees for thousands of miles in many parts of these countries, where property is so deeply respected, the roads are like great avenues, marked out on each side by some of the finest fruit trees in the world, the property of those on whose land they stand. Instead of the liquid manures of the homestead and farmyard being allowed to run to waste, as is almost universally the case with us, and is the case even in the rich country where I dwell, in those countries every portion of both liquid and solid manure both from the farmyard and homestead is preserved with the utmost care, and returned at stated times to all the different divisions of the farm. And lastly, instead of every spare hour of the working man or small farmer being spent in the ale-house, as is too commonly the case with us, in these countries every spare hour of the yeoman farmer, the peasant farmer, or the labourer who owns a mere garden, is spent on the land, which is his own, developing its fertility, tending its vegetables and fruits, and studying how to increase the value of its produce. In fact, the difference between the position and character of the hopeless, landless labourer in our islands and the labourers who possess a little land, and who know that it depends on the exertions of themselves and their families whether they shall possess more or not, is so different that it is hopeless to expect that those who have not studied the subject should believe or in any way realise it.

Let us now turn to the evidence of another most important witness on the effects of these French land laws, which ere this were to have turned that fair, rich country into "the greatest pauper warren in Europe." M. Passy was a peer of France under Louis Philippe, and afterwards filled the important position of Minister of Finance. He was also a "Membre de l'Institut," a distinction testifying to his countrymen high opinion of his merits. Thirty years after Mr. McCulloch's prophecy, M. Passy published a well-considered second edition of his celebrated work on the "Systems of Cultivation in France and their influence on Social Economy." He was also a considerable landed proprietor, and ranked as one of the most distinguished political economists in France.

As Mr. Cobden says in his able letter, "It would be difficult to find a person combining higher qualifications for his task, and the result of his investigations is a decided preference, on economical, social, and moral grounds, of the French system to that of this country. He shows, as indeed, all the accredited French authorities show, that the evils of

the subdivision of land, as it is practically carried out in France, are much exaggerated, and indeed caricatured, by its opponents; that the enforced division of the property of a deceased parent among his children does not necessarily involve the partition of the land; that arrangements are often made by which one of the family takes the estate, paying to the co-heirs a compensation in money, or the whole is sold and the proceeds are divided, and thus, as the Government statistics prove, the separate landed properties of France are not increasing in number in proportion to the increase of the population—in short, that experience shows, as common sense might have foreseen, that as men do not cut up their cloth or leather to waste, so neither will they, as a rule, subdivide that which is far more precious (the land) into useless fragments.

"M. Passy gives us the following deductions as the result of his investigations: 1. That in the present state of agricultural knowledge and practice it is the small farms (*la petite culture*)"—i.e., small farms owned by the farmers—"which, after deducting the cost of production, yield, from a given surface and on equal conditions, the greatest net produce; and 2, that the same system of cultivation, by maintaining a larger rural population, not only thereby adds to the strength of a State, but affords a better market for those commodities, the production and exchange of which stimulate the prosperity of the manufacturing districts."

In stating the arguments in favour of the small yeoman and peasant proprietors, M. Passy says (see page 86, 2nd edition): "They carry into the least details of their undertaking an attention and care which are productive of the most important advantages. There is not a corner of their land of which they do not know all the special qualities and capabilities, and to which they do not know how to give the peculiar treatment and care that it requires." He compares the English counties of York, Durham, Cumberland, Lincoln, Northumberland, and Lancaster with the departments of Pas-de-Calais, La Somme, l'Oise, La Seine, l'Érieure, and a part of l'Aisne and l'Eure and some cantons of Seine-et-Oise, and he states the net produce of the yeoman and peasant farms of the parts of France which I have mentioned is greater than the net produce of the farms in the English counties I have mentioned.

And when comparing the relative merits of great and small farms worked by their owners, he says (see page 131): "As to the idea so often put forward that the great farms contribute more than the small ones to the happiness of the population who cultivate them, it hardly merits attention. The only difference between the two systems is, that in the one there are few masters and many day labourers, while in the other there are more masters and fewer day labourers." And writing in 1852, M. Passy says (see page 201): "No doubt there is no European country in which, during the last thirty years, industry, favoured by the long duration of peace, has not developed itself in various ways; but no country has so much as France extended, perfected, or diversified the forms of its productive activity. If all the other countries have seen riches accumulating, France has seen her wealth accumulating still more. And it is easy to comprehend that such progress could not have been accomplished if agriculture had not lent her aid by a better and more fruitful employment of her resources."

Another great French writer ought not to be forgotten or passed over in reference to this subject. I refer to M. Gustave de Beaumont. He is an author of European reputation, and widely known for his liberal and truly philosophic views on subjects connected with political economy. In 1835 and 1837 he visited Ireland for the purpose of examining minutely into the condition of the Irish people and the causes of that condition. He was there during the time when my wife's father, Thomas Drummond, was endeavouring to introduce his great measures of reform. It is needless to say that M. de Beaumont received all possible assistance in his researches. The result of his labours was that he published a work entitled "L'Irlande Sociale, Politique, et Religieuse," the fifth edition of which now lies before me, which laid bare to the eye of the world all the festering sores of Ireland's condition as with the knife of an anatomist, and which made a great sensation, not only in our own country, but also in Europe and America. M. de Beaumont had, up to the time of his last visit in 1837, and afterwards up to the publication of his 5th

dition in 1847, observed and become intimately acquainted with the working of the French system of land laws and with the effects of the subdivision of the land in France. And although at that time the beneficial effects of such subdivision were not nearly so manifest as they are now, yet, let me ask, what was one of the chief remedies which he pronounced in his judgment to be essential for the regeneration of Ireland—that miserably misgoverned country? “He reported,” as Mr. O’Hagan, Q.C., most truly says in his evidence before the Select Committee on the Irish Land Act, 1870 (see page 111), “in the strongest way in favour of the creation of peasant (and yeoman) proprietors as the real remedy for the evils of Ireland, and as the chief means of rendering the Irish a contented people. . . . He was of opinion that before that could be effected the land laws, namely the laws of primogeniture and the laws permitting entails, should necessarily be repealed, and he advised the repeal of these laws as regards Ireland. He also advised that the Church lands should be sold to the tenants in fee.”

“Hasten,” says M. de Beaumont, “to render the land free to commerce; divide, subdivide the land among several owners of it as much as you can; the only means of raising the lower classes of the Irish is by overturning an aristocracy which ought to fall; the only means of reformation is to bring the land within the reach of the people; it is necessary, above all things, that the people of Ireland should become proprietors.” (See “L’Etat Social,” &c. tome deuxième, p. 200).

Now, why do I cite these remarkable passages from this celebrated work? I do it for this reason. It would have been impossible for M. de Beaumont to have expressed such opinions, or to have come to such conclusions, unless he had, after his intimate knowledge of his own country and of the working of the French land laws, come to the conviction that those laws were, by creating a vast class of yeoman and peasant farmers, working out the regeneration and vast prosperity of his own native land. He found poor Ireland “a pauper wren” without the influence of those laws, and he knew that his own country was rising far above such a miserable and degraded state of things as McCulloch prophesied by the influence of those laws. But the most recent, and at the same time the highest, French testimony remains to be cited. It is that of M. de Lavergne. He is well known, as Mr. Cobden said, “as one of the most accomplished, laborious, and conscientious writers on agriculture of the present age.” He also is a Membre de l’Institut. He has published several justly-celebrated works on the agricultural and rural economy of Great Britain and Ireland and France. A fourth edition of his well-known work on the “Economie Rurale de la France since 1789” was published in 1877. In all his works he is the consistent, able, but discriminating advocate of the division of land as it exists in France, and as contrasted with the system which prevails in Great Britain and Ireland. He says (see “Economie Rurale,” 4th edition, page 49): “The small proprietors of land, who, according to M. Rabichon, were about three millions and a half in 1815, are at this day much more numerous; they have gained ground, and one cannot but rejoice at it, for they have won it by their industry.” And in a letter to Mr. Leslie on the 6th November, 1869 (see Mr. Leslie’s article in “Systems of Land Tenure in Various Countries,” p. 292), M. de Lavergne says: “The best cultivation in France, on the whole, is that of the peasant proprietors, and the subdivision of the soil makes continual progress. Progress in both respects was, indeed, retarded for a succession of years after 1818 by political causes, but it has brilliantly resumed its course of late years. All round the town in which I write to you (Toulouse) it is again a profitable operation to buy land in order to resell it in small lots. . . . I have just spent a fortnight near Boziers. You could not believe what wealth the cultivation of the vine has spread through that country, and the peasantry have got no small share of it. *The market price of land has quadrupled in ten years.* But for the duty on property changing hands, and the still heavier burden of the conscription, the prosperity of the rural population of France would be great. It advances in spite of everything, in consequence of the high prices of agricultural produce.”

Mr. Leslie shows that, whilst subdivision progresses, a movement is also always going on in the land market towards the enlargement of small properties, the consolidation of small parcels, and even in some places towards the acquisition of what in France are considered as large estates. The con-

tinuous acquisitions of land by purchase by the French yeomen, peasant, and labouring classes is in itself one of the best proofs of their social and moral well-being and of the admirable effects of the division of the land upon them.

In another celebrated work, “The Rural Economy of Great Britain,” M. de Lavergne says (I quote now from Mr. Leslie’s essay, page 293): “The extent of farms, besides, is determined by other causes, such as the nature of the soil, the climate, and the kind of crops prevailing. Almost everywhere the soil of France may be made to respond to the labour of man, and almost everywhere it is by the advantage of the community that manual labour should be actively bestowed upon it. Let us suppose ourselves in the rich plains of Flanders, or on the banks of the Rhone, the Garonne, or the Charente. We there meet with the *potée culture*, but it is rich and productive. Every method for increasing the fruitfulness of the soil and making the most of labour is there known and practised, even amongst the smallest farmers. Notwithstanding the active properties of the soil, the people are constantly renewing and adding to its fertility by means of quantities of manure, collected at great cost; the breed of animals is superior, and the harvests magnificent. In one district we find maize and wheat; in another, tobacco, flax, rape, and madder; then again, the vine, olive, plum, and mulberry, which to yield their abundant treasures require a people of laborious habits. Is it not also to small farming that we owe most of the market garden produce raised at such great expenditure round Paris?”

And then, writing of the cottages of the small peasant farmers, he says (I shall quote from Mr. Leslie): “There is nothing so delightful as the interior of these humble cottages; so clean and orderly, the very air about them breathes peace, industry, and happiness; and it is pleasing to think that they are not likely to be done away with,” or, as M. de Lavergne might have added, that any great landlord could evict the tenants, as the cottages as well as the farm belong to the inhabitants.

And speaking of the interior of the houses of the small peasant farmers Mr. Hamerton in his most interesting work “Round My House,” page 235, says: “In the furniture of houses the peasant are equally regulated by fixed usages. The cabinetmaker’s work is always of walnut, and nearly of the same design. The bed, the linen press, and the clock are the three items to which most care is given. Sometimes you will find two beds, two linen presses, and two clocks in the same room, one set belonging to the parents, the other to a married son. The women are proud of their linen presses, which are prettily panelled, and they rub the panels till they shine.”

The amount of debt on the peasant properties of France has been enormously exaggerated. M. de Lavergne estimated it at five per cent on an average of their total value; and Mr. Leslie, in his essay, page 298, says: “The marked improvement in the food, clothing, lodging, and appearance of the whole rural population is of itself unmistakable evidence that they are not an impoverished class, but on the contrary, are rapidly rising in the economic and social scale.”

That this must be so is shown still more clearly by the statistics published by M. de Lavergne. He estimates the increase in the yield of wheat in the twenty-five years preceding 1851 at 7,000,000 quarters. In 1850 he says the gross money yield would reach £44,000,000; in 1876, £58,000,000. He says that in 1850, the produce of wine was less than 900,000,000 gallons and the price only 51. per gallon, and that the produce is now (that is in 1876) over 1,000,000,000 gals, and the price is 104. per gal. He says that milk has increased in about the same proportion as wine; and that butter is also made more largely, and that beetroot has progressed with enormous strides. He says, finally, that taking agricultural progress as a whole, the £200,000,000 of twenty-five years ago is now £300,000,000, in spite of the loss of Alsace and Lorraine, but that much of this increase is due to the opening of new railways and improved means of transport. (See Richardson’s “Corn and Cattle Producing Districts of France,” page 522).

But still it must be borne in mind that the very opening of these new modes of communication, especially after the fearful disasters and losses of France and the tremendous taxation, is a marvellous proof of the rapidly growing wealth and resources of that country, and a wonderful refutation of McCulloch’s dismal prophecy.

THE BEER QUESTION.

A LAST WORD BY MR. MECHI.

Our agricultural labourers in Essex are not compelled to drink beer; they have usually the option of taking (for the month's harvest) its value in money, about 30s. or in malt and hops, and so brew their own, or purchase it. My bailiff has observed that those who have to resort to publicans' beer more frequently break down in harvest than those who have home-brewed. It is only at harvest or hay time that beer is found, except small beer (1 bush. of malt to the hogshead), to which my men have always free access. Some farmers object to the trouble of finding beer, and prefer giving money or malt and hops.

There are several "abstaining farmers" hereabout, but I cannot bear that more than one man has taken and kept the pledge, and he was a confirmed drunkard. Statistics prove that a vast majority of the population high and low use wine, spirits, and beer—can they all be wrong in their judgment or appreciation? I cannot see why because one foolish person among 20 or 30 over-indulges the rest should be deprived of what they consider to be a reasonable utilisation. We have Scriptural authority for the cultivation of the vine and the enjoyment of its products, and that great agricultural and chemical philosopher Liebig commends highly the use of Rhenish wines. I have a splendid spring of pure water from a drain which I made, and which has discharged 25 gallons per minute for the last 35 years, but my labourers rarely drink any quantity of it, because it makes them feel faint when at laborious work. There is a great loss of substance (especially carbon) during severe labour, which must be made good by renewed supplies of materials. The deep and frequent action of respiration when labouring demands a large supply of carbon to mix with the oxygen—and that supply is preferred in a liquid form, when solid food would not be so acceptable or digestible. Beer supplies both carbon and moisture, and so would tea with plenty of sugar and milk. As a rule labourers prefer farmhouse beer brewed in March and kept in a cold cellar until haytime or harvest. They have no home convenience for brewing or keeping it. How is it that agricultural labourers are so prominently paraded in the matter of drink, for, except in harvest and haytime, they have only the weakest of small beer? How is it that our great railway contractors, builders, and manufacturers are so silent on this matter? I hear that some brewers allow their carmen and labourers an unlimited quantity, provided they do not get drunk, and a young man from a London brewery told me in the harvest field, in reply to my question, that he was allowed 5 pints of beer daily (by far too much) all the year round. His labour was easy compared with most of his mowing companions whom he was visiting in the harvest field, and and who only get their beer during six weeks of the year. The development or sustenance of muscular power under severe labour is dependent on the quality and quantity of the food (solid and liquid) consumed physically. A man and a horse are as one in the matter of severe labour. The hunting horse must be got up by stimulating and nutritive food and exercise, although his labour is only occasional.

One of my labourers, used to hard work, went as railway navvy; he assured me that for the first three weeks he went to bed as stiff and exhausted as though he had never been used to labour, having to fill and wheel as much earth as his companions. It was only after the abundant use of beef, beer, and general good living that his muscular power was equal to keeping pace up to the task-work performed by his brother navvies. So well is this matter of condition understood that a butcher told

me that he sold so much more beef than mutton to the navvies on the railway work because the beef "stuck by them so much longer than mutton." When eggs were a halfpenny each they used to eat four to their breakfast. As a rule our South Country labourers are poorly fed compared with our well-to-do classes of society. It is only justice to them to say that, so far as my experience goes, they are (in percentage) quite as sober and well conducted as their betters. The noisy frequenter of the public or beerhouse, is not the average labourer, but the exception, which can be found in almost every class of society.

I have reason to believe that in our declining years and diminishing powers of digestion, certain stimulants are imperatively needed to prolong life. A temperate friend of mine, aged 94 next month, an old brother sportsman of 50 years, was subject to faint feelings which alarmed his friends. His medical man insisted on his taking brandy in his tea, morning and evening, which he now always does, and he carries a flask in his pocket, as directed by his doctor. The machine was nearly worn out and wanted help. I know that this is the opinion of very many of our best practitioners—although doctors do not always agree. Our City aldermen are good living men, but temperate, and their minds are generally fully and variously occupied.

During my aldermanship not one of our 26 had the gout, except friend Hale, who was a most abstemious man, but I believe that he inherited it. Many of them have served the office from 15 to 34 years, and as a body their ages are, I am told, above the average.

The hard-riden hunting horse must and does have intermediate days of rest, which is not so with the severely labouring harvest man, who, at harvest, must day after day keep up with his leader. He therefore requires extraneous sustenance and stimulus. The reaping machine has much lightened his task. When I have, in my earlier days, slaved on the moors, or in the stables for my own gratification, carrying a heavy gun and ammunition with much excitement, I had to replace the moisture and carbon which I was so abundantly losing by rapid respiration. All this is explained in Liebig's admirable *Letters on Chemistry*. At p. 353 he says: "Respiration is the falling weight, the bent spring which keeps the clock in motion; the inspirations and expirations are the stroke of the pendulum which regulate it." Drinking for mere drinking sake is a folly, almost a curse.

J. J. MECHI.

FOREIGN TRADE OF THE UNITED KINGDOM.—

In the year 1877 the imports of merchandise into the United Kingdom were of the value of £304,419,682—namely, from foreign countries £304,865,684, and from British possessions £49,553,998. The total is equal to £11 15s. 10d. per head of the population of the United Kingdom. The exports of British and Irish produce and manufactures in the year were of the value of £198,893,065, equal to £5 18s. 11d. per head of population; £128,969,715 being the value of these exports to foreign countries, and £69,923,350 to British possessions. To this is to be added £53,452,955, the value of foreign and colonial produce exported hence, making our total export of merchandise £252,346,020. The total value, therefore, of imports and exports was £646,765,702 equal to £19 6s. 9d. per head of population of the United Kingdom. It exceeded £20 per head in each of the four years 1873-1875. This does not include £12 18s. 2d., the value of the foreign merchandise transhipped at ports in the United Kingdom. The imports of gold and silver bullion are stated in the Custom House accounts at £37,152,799, and the exports at £39,810,619. These make our entire imports in the year £131,672,481, and our entire exports £292,156,639. Including the transshipment trade the grand total is £735,911,361.—*Times*.

ENGLAND'S SOURCES OF SUPPLY.

We have at hand revised official data of wheat importations into the United Kingdom, from which we are enabled to make exact comparisons showing the proportions supplied by the several grain-producing countries for a series of years past.

The years selected for this comparison are those which are most important as exhibiting the relative position of the United States and Russia as England's sources of supply for the bulk of foreign wheat imported, and of the United States and Turkey and her provinces as sources of supply for foreign maize. The following tables show the importation of wheat into the United Kingdom during the years specified:—

IMPORTS OF WHEAT INTO THE UNITED KINGDOM.

From	1856.	1866.
	cwts.	cwts.
Russia.....	3299889	8997199
United States.....	5542983	6352799
Egypt.....	2316613	3668668
Germany.....	1871535	6260979
British North America.....	484519	8789
Turkey, Wallachia and Moldavia.....	1185994	528133
Chili.....	4181	308810
France.....	43364	3187130
Spain.....	215419	572035
Denmark.....	769936	506236
Holland.....	121892	82802
Sweden.....	46401	29558
Austrian Territories.....	375414	1322529
Other countries.....	1881242	452768
Totals.....	18150943	23453366

From	1875.	1876.
	cwts.	cwts.
Russia.....	5725461	8780628
United States.....	2322357	1932354
Egypt.....	2197589	2223238
Germany.....	5612536	2324148
British North America.....	3629075	2426183
Turkey, Wallachia, and Moldavia.....	1395806	1241963
Chili.....	881235	982376
France.....	1297813	292950
Spain.....	148761	247744
Denmark.....	493019	263205
Holland.....	39551	80711
Sweden.....	99530	5841
Austrian Territories.....	18564	4556
Other countries.....	2717746	6213927
Totals.....	51876517	44154657

From	1877.
	cwts.
U. S., Atlantic Ports.....	21808667
Russia.....	10838000
British India.....	6101940
Germany.....	5455763
British North America.....	2912178
Egypt.....	2147709
France.....	1494783
Turkey, Wallachia and Moldavia.....	1253018
Chili.....	736911
Australia.....	425697
Denmark.....	73812
Other countries.....	1112310
Total.....	54162855

During the year 1856 it will be seen the United States proportion of the entire importation was about thirty-one and three-eighths per cent, and Russia's about eighteen and one-quarter. From this year until 1859 there was a continued decrease in the quantity received from the United States.

The largest importation was in 1869, when the total footed up 57,695,823 cwts., of which the United States furnished 13,181,507; Russia, 10,953,617, and Germany, 6,043,362. As between the United States and Russia the movement for the past three years is most important, showing the increase of percentage largely in favour of the United States.

Turning now to the movement of maize, we find the follow-

ing statement of importations into the United Kingdom for the years mentioned, the figures of 1877 not being given in detail:—

IMPORT OF MAIZE INTO THE UNITED KINGDOM.

	1864.	1869.
	cwts.	cwts.
From		
United States.....	201423	1374894
Turkey.....	598356	994781
Wallachia and Moldavia.....	629210	1971826
Russia.....	1177373	597443
Austrian Territories.....	3237	314189
Egypt.....	9235	16846
France.....	167229	166342
Other countries.....	24933	149333
Totals.....	6255958	17664113
	1874.	1876.
From		
United States.....	1297154	2765049
Turkey.....	180665	697872
Wallachia and Moldavia.....	75792	234713
Russia.....	504115	829095
Austrian Territories.....	118577	65749
Egypt.....	6399	13979
France.....	24849	787
Other countries.....	194646	2579416
Totals.....	2913819	5965569

The total imports of maize for 1877 were 39,155,681 cwts. The bulk of maize imported into the United Kingdom is drawn from the United States.—*London Mail & Express Journal.*

THE HUNGARIAN GRAIN AND FLOUR TRADE.

The *Pester Lloyd* publishes the following report from a Mannheim correspondent upon the prospects of the Hungarian corn trade, which, it says, will have some erroneous impressions that have been current:—The grain markets which have been lately held at Vienna and Baras-Pesch confirm the opinion which had been already expressed here—that Hungary is scarcely in a position this year to exceed its mercantile operations into South-Western Germany, and still less into France. In order that Hungarian wheat should get as far as the Rhine, or should be able to cross that river, it would be necessary for the price to come down about 75 kettars the quintal (about 11d. per bushel), and there does not seem to be any prospect of such a reduction. About 75 per cent greater portion of this year's crop of Hungary wheat is of inferior quality, and there is scope for the price to be set at a level of deceit upon purchasers; and already the necessity of entering into any transaction about it. The mercantile arrangements of the Hungarian mills are now so modified that it will be more advantageous to turn over the wheat to flour; and we are now confirmed in the opinion that the prospects of both be ore and during the harvest — the corn and flour export trade is coming more into the hands of the foreign merchants. The satisfactory increase in the export of flour during the last month appears to strengthen this view, for the reasons mentioned above the attention of the principal grain merchants here has been directed towards the countries on the Lower Danube, especially Roumania and Bulgaria. It is also to be expected that a brisk trade will be resumed with Galicia, Volhynia, and Padolia, the effect of which ought to make itself felt by the middle of September. The trade is likely to receive a beneficial impulse from a modification of the corn duties as between Germany, France, and Roumania, which report says is under the sanction of the Government of the respective Governments. It is also hoped that there will not be the same complaints of delay in the carriage of goods this year as last, when the war and the great disturbance of the ordinary modes of communication caused by it interfered very much with the course of trade and inflicted very serious losses. It may be remarked that the passage of Russian and Roumanian goods through Vienna is steadily on the increase. The reason seems to be that facilities for transit may always be reckoned upon there in all directions and under all circumstances; and, thanks to the excellent arrangements of the depôts for goods in transit, the storage is effected in the manner most suitable for the nature of the goods, and most convenient for the purpose of further transport.

W H E A T A N D " C H E A T . "

We are indebted to the courtesy of Professor Hilgard, of the University of California, for a specimen of *Bromus secalinus* (smooth rye brome grass), and another of *Lolium temulentum* (darnel), the former being the "cheat" of the United States corn fields, and the latter the "cheat" which is equally the plague of corn-growers in California. It will be remembered that on several recent occasions allusion has been made in our columns to the controversy which has for some time past been going on through the medium of the United States and Californian Press, in respect to the possibility of this "cheat" or "chess" being degenerated wheat.

By a large number of American farmers it is contended that wheat will "turn into" "cheat." This possibility has been stoutly denied by Professor Hilgard, and it is an idea that would not be entertained for a moment by any one possessing even a rudimentary knowledge of botany. But the corn growers of the United States and California who sow wheat and reap "cheat" do not appear to be able to see farther than the plain facts, and refuse to put any other construction on them than that which they think most simple, quite overlooking the far more simple truth that certain conditions of soil, temperature, and climate have, in such cases, favoured the healthy growth of "cheat" and hindered the growth of wheat, and, further, that the strong plant has crowded out the weaker one. They probably sow sufficient "cheat" with their seed wheat to effect this result under given circumstances; but, even if that were not so, the soil is certain to contain the seeds of "cheat" to an extent which would enable that plant to overpower the wheat plant if the conditions of growth were favourable to the one and unfavourable to the other. The seeds of *Bromus secalinus* are known to retain their vitality for years' when buried in the soil beyond the influences of light, heat, and air, as is also the case with the seeds of *Avena fatua*, or wild oat, and many other plants. This is so obviously the true interpretation of the facts that comment or discussion should be absolutely needless.

However, the absurdity of the idea that wheat will "turn into" a brome grass, or into a ryegrass (darnel), is fully equalled by a similar notion obtaining on this side of the Atlantic that oats will "turn into" barley. In this case the facts appear to be simply that if a mixture of oats and barley be sown—whether the mixture is intentional or not—and the produce repeatedly cut down before the seed stems are thrown up, the oats die out, and the barley survives. It is precisely the "cheat" question over again, certain conditions of life facilitating the growth of one plant and at the same time checking or destroying that of another. Professor Hilgard has shown the physical impossibility of the genus *Triticum* (wheat), changing into the genus *Lolium* (ryegrass), on account of structural differences which it is not necessary to describe here. It may be taken for granted that each of our cereals has had a wild

prototype, but, as pointed out by Mr. Darwin, botanists are not agreed on the aboriginal form of any one cereal plant. But a well established derivative form of each of them was cultivated at immensely remote pre-historic periods, wheat and barley being known in the Stone Age, rye and oats appearing later in what is known as the Age of Bronze. In all these cases the grain was smaller, and the ears were generally shorter and narrower, than the varieties now under cultivation, from which may naturally be inferred that a process of selection has gradually been carried out which has resulted in their improvement. Trifling variations which have arisen amongst the cultivated wheat plants have been taken advantage of and reproduced, and, becoming inherited, have led to the perpetuation of a great number of varieties and sub-varieties; yet few of them present any conspicuous distinctiveness. Soil and climate will influence the plants in many ways, and not only in the colour, size, hardness, &c., of the grain; but Mr. Darwin says, in respect of this variation, that there is no reason to believe that even a sub-variety ever becomes changed into another and distinct sub-variety, and that, with respect to the natural crossing of distinct varieties the evidence is conflicting, but preponderates against its frequent occurrence. What, then, can be urged in support of the theory that one genus may be changed into another genus—that wheat will become brome grass or darnel, and oats be converted into barley? It is an impossibility.

It is perfectly well known and admitted that all cultivated plants have a tendency to degenerate when left to their own resources, and this degeneration often takes the form of a reversion to the original or earlier type; in other words, some lost character is regained which was formerly possessed by an ancestor or progenitor. These parent forms of the wheat plant, or of the more distinct varieties of the wheat plant, are mostly either unknown or extinct. Spelt wheat, for example, is supposed to be a cultivated form of *Ægilops*, a grass of the Mediterranean regions, and of the west of Asia. This grass is said to lose the awns of its palea, and the lateral ribs of its glumes, under cultivation, and rapidly to assume the characters of the wheat plant. M. Fabre cultivated one of these grasses—*Ægilops ovata*—and is stated to have obtained wheat from it after eight years of careful selection; but Mr. Darwin points out that M. Godron "has shown by careful experiments that the first step in the series—namely, *Ægilops triticoides*—is a hybrid between wheat and *Ægilops ovata*." Professor Buckman has experimented with this grass, and also with the wild oat (*Avena fatua*), which, he states, "can be converted by a few years of careful cultivation and selection into forms almost identical with two very distinct cultivated races." But facts relating to the modification of plants by cultivation and selection are outside our subject, except in so far as hybridisation may be considered to form part of it. And, inasmuch as the grasses are chiefly self-fertilised, or,

at most, wind-fertilised—that is to say, the pollen from the stamens of one floret is deposited on the pistil of the same floret, or carried to the pistil of another floret in the same spike, or to an adjacent one—hybridisation seldom occurs, and the varieties are proportionately constant; whereas, in the Brassica or cabbage family, which is fertilised through the agency of insects, varieties are very inconstant, as is well-known to growers of turnip seed, &c. If, however, it could be proved that all the families or genera into which the order Gramineæ is divided—including the group which we commonly call cereals—were descended from one parent form which existed in the extinct flora of a very far distant geological epoch, there would be no lineal connection between existing families. Thus, the wheat family could not revert or degenerate into the home grass or the ryegrass family, nor the oat family into the barley family. If these families are branches of one stem having a common root, they are distinct in themselves, incapable of changing into each other, and cannot be represented by the consecutive links of a chain. When viewed in this light the futility of these wheat-cheat, oat-barley argu-

ments—or rather empirical statements—is sufficiently apparent.

It is worthy of remark, in respect of the specimens sent us by Professor Hilgard, that the *Bromus scallians* is not of such stout habit of growth as specimens we have seen growing amongst oats in a cold wet clay field in Kent during the past season. And this circumstance is confirmative of Mr. Darwin's observation to the effect that these two grasses, *Bromus scallians* and *Lolium temulentum*, have been unintentionally exposed to cultivation from their habit of growing amongst our cereal crops. The former is not very common in well cultivated land in this country, but the latter is more so. No doubt the extra care now taken to clean seed-corn has greatly checked both these weeds. The ancients supposed, as do some of the moderns, that wheat changes into barley and the grain of the *L. tem.* was given in this position, that the plant *emimæ corruptis Triticis et Lolium scallians*. But the ancients were wrong; and it is probable that no barleys had ceased to put their faith in such old wives' fables.

THE HARVEST IN SOUTHERN RUSSIA.

In the southern provinces of Russia, during the past year, the harvest appears to have been unusually plentiful, and everything would have conduced to agricultural prosperity had not war, the great enemy of commerce, closed the principal source from which the country draws its wealth—namely, the export of cereals. The incidental circumstances attending upon this exceptional period, happily no longer existing, are described in the accounts of the Consular authorities stationed at the several ports of importance.

At Berdiansk, for instance, we are informed that the main outlet for the produce having been closed, the export and import trade remained at a standstill, causing much inconvenience and loss. No employment could be found for the numerous craft engaged in carrying the grain to the roadstead, and this in its turn threw out of employment all the sailors and labourers engaged by them. A very abundant harvest, however, came to the rescue, and remunerative work was obtainable for all hands willing to use the scythe. Vice-Consul Lowe mentions that during the summer it was very satisfactory to see the large demand for machinery, showing that farmers are gradually seeing the necessity of adopting other than the primitive customs of the country for general farming operations. The progress, however, is yet very slight, and as the small Russian farmer is of the most unintelligent kind, great difficulties have to be contended against in supplying his wants, each machine having to be put up on the farm, explained and worked, and then only accepted. In many cases even after this trouble accidents occur from want of proper attention, the farmer becomes dissatisfied with his purchase and again returns to all the old customs. The German colonists are the principal buyers of machinery in the district above named, and are always well satisfied with their purchases, from which they obtain much valuable assistance.

At Nicolaiëff, in consequence of the blockade

and the absence of any outlet for the most abundant crop of 1877, it was natural that there would be a great demand for warehouses. As there was no vent for commercial enterprise, speculation ran rife in the hiring and re-letting of granaries, and large sums of money changed hands in this insignificant business. Owners of property, seeing the demand for granaries, hurried for a haul, and their dilapidated old stores, even several dwelling houses were turned into granaries, and these were also eagerly sought after by buyers of stock. In some instances old stables and cow-sheds, or any covered buildings, were rented to receive the inferior sorts of cereals, such as oats and barley; but it is expected merchants will regret having hired these cheap places. The rainy weather in the spring, and the rats, will damage and destroy a large percentage of the grain thus stored. It was calculated there would be about 75,000,000 pood only for export by the time the Bosphorus became navigable. The most of this produce is from Kherson, brought by barges from the Dnieper or by carts from places within a radius of 60 miles of Nicolaiëff. In Kharkoff-Nicolaiëff and Pustof-Zuameuka railways have done little in transporting produce, as their whole efforts were devoted to the requirements of the Government.

Notwithstanding the closing of the ports of the Black Sea and the Sea of Azoff for seven months in 1877, Russia was able, besides sending grain to other countries, to supply 20 per cent. of the demand in the British corn market. The United States took the lead by supplying 10 per cent. This increasing competition of America makes the fact become more apparent that Russia is yearly losing its importance as the granary of Europe. The gigantic strides made in many departments after the Crimean war led merchants to hope that similar results will happen when peace with all its blessings are restored to the Empire. Commerce can no longer be allowed to stagnate in the hands of a few

by entirely dependent on private enterprise, as at the present time. The Imperial Government must come to its aid by opening up the country with roads and railways, facilitating the shipment of produce, constructing safe harbours, improving the navigation by the removal of bars and deepening of ports, revising the tariff, and abolishing the present vexatious and complicated custom-house formalities. Vice-Consul Wagstaff anticipates, upon the event of the opening of the South Russian ports to commerce, that there would be about 6,000,000 quarters shipped to foreign markets in the space of two months, and a large proportion of this would be sent to England.

Besides the misfortunes mentioned, the country was visited by Cattle Plague, and the mortality amongst the oxen in the interior was very great. Beasts of burden were principally attacked, while the young cattle and cows were nearly exempt

from illness. At Taganrog this destructive disease prevailed with like intensity, and no effective remedy appears to have been discovered to stay this disorder otherwise than by complete separation of healthy from affected animals.

The unprovided state of the Southern provinces in draught cattle, so essential for agricultural purposes, transport of produce, &c., renders eradication of Cattle Plague of the utmost importance, but extremely difficult to accomplish, the evil effects of the contagion being very partially understood by the population at large. Statistical information is unobtainable concerning the course or ramifications of the disease, which has now gained footing in some of the Northern provinces, as likewise to the South of the Azoff, in the Tchernomorie, and borders of the Ruban, thus threatening to become a permanent scourge throughout the Empire.

FREE TRADE IN LAND.

No. XI.

Mr. Kay continues his series of letters to *The Manchester Examiner*, as follows:—

In my letters No. IX and No. X, published by you on the 6th and 21st of August, 1878, I have endeavoured to explain, as simply as I could, what the French system of land laws is, and what effect this system is producing in France upon the yeomen and peasant farmers of that country. I am most anxious that it should not be supposed for a moment that I am arguing in favour of our adopting the French system of compulsory subdivision; but so many absurd statements have been made in this country about the ruinous effects of that system, for the purpose of throwing obstacles in the way of the reform of our own feudal land laws—as if there were no intermediate system of land laws between the French and our own—that I wish to prove by the highest authorities that even the French system, instead of promoting the ruin or impoverishment of the countries in which it prevails, and spite of the ignorance of the French yeomen and peasant farmers, is rapidly increasing the wealth of the country, promoting the moral and economical prosperity and happiness of the farming and rural classes, and, by establishing the contentment of these classes, is at the same time increasing the stability of the Government.

I have, in my last letter, shown what are the opinions of the highest French authorities upon this subject. If I can satisfy my readers that even the French system of compulsory subdivision works well they will be the better disposed to believe that a system of perfect free trade in land, such as that which prevails in a great part of Germany, and which leaves the owner an unlimited power of disposing of his property by will, but deprives him of all power of tying it up, so that it cannot be sold for a long series of years, would be still more certain to promote the prosperity of the small farmer and peasant classes. This is the reason why I return in this letter to the consideration of the opinions of eminent men upon this most important part of my subject. The elevated character and eminent position of the French advocates of the French system seem to have had their effect on the conservative and philosophical mind of Dr. Chalmers, who visited France in 1838, imbued with McCulloch's predilections against the division of landed property. "Dr. Chalmers records in his diary" (see Mr. Cobden's letters), "which has been published since his death, the conversations he had on this subject with men of the highest social and political position, whom he described as 'intelligent and truly Conservative.' One of them Francois Delessert, member of the Chamber of Deputies, a Parisian merchant, tells him that he apprehends no harm from the subdivision of property, speaks of the checks to it, says that it is greatly overrated, and that family arrangements often prevent it." Dr. Chalmers also says that the then Duke de Broglie made a very able defence of French land law.

A few years after 1838 the agricultural districts of France

were visited by Mr. Coleman, Professor of Agriculture in Massachusetts. He was sent by that State on a special mission to report on the condition of agriculture in Europe. He was therefore eminently qualified to form a sound and valuable opinion on this subject. It would be difficult to find a witness more deserving of attention on this subject. He says—I quote from Mr. Cobden's most able letter:—

"At first I thought I should find nothing in French agriculture worthy of much attention, but my opinion has undergone a change, and I began to think their agriculture not only good, but advanced. They do not grow the same productions as in England; their work is not executed in so neat a manner; their implements are primitive and somewhat rude; their neat stock is less improved, and indeed the whole system is different; but I am disposed to believe that their farming is more economical, and that, taken as a whole, the condition of the labouring classes is superior to that of the English. . . . I have never seen a more civil, clean, well-dressed, happy set of people than the French peasantry, with scarcely an exception, and they contrast most strongly in this respect with the English and Scotch. I seldom went among a field of labourers in England or Scotland, especially if they were women, without some coarse joke or indecent leer. It is the reverse in France. The address even of the poorest (I do not at all exaggerate) is as polite as that of the best people you find in a city; so far from soliciting money, they have refused it in reported instances when, for some little service, I have offered some compensation. Count de Conroy told me again and again that even the most humble of them would consider it an offence to have it offered them. I do not believe there ever was a happier peasantry than the French, and they are pre-eminent for their industry and economy."

Is it possible to offer much higher praise than this of the effects of the French system, and is it possible to find a witness more thoroughly competent and trustworthy to give it? It must be remembered that Mr. Coleman was writing about 1842. Since that time the yeomen and peasant farmers of the Continent have vastly improved their modes of culture, their knowledge of agriculture, and the amount of produce they win from the soil. And since he wrote in 1842 of the primitive and somewhat rude implements of the small proprietors, they have been learning gradually, over the whole of these countries, how to avail themselves, by co-operation and association, of expensive machines and mechanical contrivances similar to those employed in England and Scotland by the great leasehold farmers. With respect to this, Mr. Cliffe Leslie, who has studied the French system and who is personally acquainted with France, gives some very interesting and valuable evidence in his essay on France published in "Systems of Land Tenure in Various Countries," p. 302. The passage is well worthy perusal and study for many reasons, as the reader will perceive.

He says: "In the departments immediately surrounding Paris, large farming is to be seen in the highest perfection, of which the reader, who has not visited them, will find a description in M. de Lavenue's 'Economie Rurale de la France.' Yet, after noticing several magnificent examples, he adds—'While *la grande culture* (i.e., farming on a great scale) marches here in the steps of English cultivation, *la petite* (i.e., farming on a small scale by the owners themselves) develops itself by its side and surpasses it in results.' The truth is, as we have said, that the large and the small farming (i.e., by the owner of the farm) compete on fair terms in France, which they are not allowed to do in England, and the latter has, to begin with, a large and ever increasing domain, within which it can defy the competition of the former. The large farmer's steam engine cannot enter the vineyard, the orchard, or the garden. The steep mountain side is inaccessible to him, while the small farmer can clothe it with vineyards; and the deep glen is too circumscribed for him. In the fertile alluvial valley, like that of the Loire, the garden of France, his cultivation is not sufficiently minute to make the most of such precious ground, and the little cultivator outbids him, and drives him from the garden; while on the other hand, he is ruined by attempts to reel in intractable wastes, which his small rival converts into land of superior quality. Even where mechanical art seems to summon the most potent forces of nature to the large farmer's assistance, the peasant contrives in the end to procure the same allies by association; or individual enterprise finds it profitable to come to his aid. It is a striking instance of the tenacity of *la petite culture* to avail itself of mechanical power, that the latest agricultural statistics show a larger number of reaping and mowing machines in the Bas Rhin, where *la petite culture* is carried to the utmost, than in any other department. Explorers of the rural districts of France cannot fail to have remarked that *la petite culture* has created in recent years two new subsidiary industries, in the machine maker on the one hand and the entrepreneur on the other, who hires out the machine; and one is now constantly met, even in small towns and villages, old-fashioned and stagnant-looking in other respects, with the apparition and noise of machines of which the large farmer has not long been possessed."

Another charge is brought against the French system of compulsory subdivision, viz.—that it necessarily forces the division of the farms to such an extent that it becomes impossible to farm the small divided plots with any advantage. That this is the case in some instances I do not deny, where the proprietors are wanting in intelligence, or where family disputes occur; but what I do deny is that this is the necessary or usual consequence of these laws.

In many parts of Switzerland the small landowner farmer, with his 10, 20, or 30 acres, has a roomy, substantial, comfortable Swiss cottage built on his land, generally surrounded with his kitchen garden, where he raises his fruits, vegetables, and a few flowers. About 100 yards from his cottage stands the cow and goat shed, a thoroughly substantial building, constructed of pine logs fitted together in the ingenious and strong Swiss style. The interior of this has a boarded floor, slanting from each side towards the middle, where there is a wooden drain or channel, by which every drop of liquid manure is conveyed away to the receiving tank. Above the shed there is a large loft, where the hay and dried leaves are stowed for the winter provision of the cows and goats. I have constantly taken shelter in these sheds, and admired their cleanliness and their comfortable accommodation for the small farmers' cattle. Now the farm, with this house and farmstead, does not really divide among the children, spite of all that law may say. The children make their own arrangements, one paying off the other, either at once or by degrees, and the others going to service, to the towns, or to other pursuits. But the Swiss, be it remembered, have long been well educated, and are thoroughly intelligent.

Let us, however, turn to another set of intelligent and educated class of small yeoman farmers, owning their own farms, and subject to the French system of land laws; I mean the so-called "bonders" of Norway. And here I quote from Mr. Thorntou's admirable work, "A Plea for Peasant Proprietors," second edition, p. 82. He says: "The bonders of Norway, for instance, have from time immemorial been owners of their respective farms, which, moreover, have always been legally liable to division among all the children of a deceased pro-

prietor; yet the division of land has made so little progress in the course of many centuries, that very few estates are under forty acres, and very many are above three hundred acres, independently of an extensive tract of mountain pasture belonging to every farm. Some idea of the condition of the farmers may be formed from the following particulars respecting the farm servants. These, if unmarried, are lodged in an outhouse adjoining their master's dwelling, which it resembles in appearance, neatness, and comfort; they are allowed four meals a day, consisting of oat or beam meal, rye bread, potatoes, fresh river and salt fish, cheese, butter, and milk; and once or twice a week they have meat, sometimes fresh, but more frequently in the shape of salt beef, or black puddings. At one of their meals they have also beer, or a glass of potato spirits. Their money wages, in addition to all this, are about 4*l.* a day. A married labourer lives on the outskirts of the farm in a cottage of his own, generally a good loghouse of four rooms, with glass windows, which is held on lease for the lives of himself and his wife, together with a piece of land large enough for the keep of two cows or a corresponding number of sheep and goats, and for the sowing of six bushels of corn and three quarters of potatoes. . . . It need scarcely be said that a houseman, as a married labourer of this kind is called, is in a very comfortable situation; in fact, he wants few if any of the comforts which his master possesses; his house, though smaller, is as well built; his food and dress are of the same materials. The peasant proprietors, like their servants, are satisfied with articles of home growth, and are little desirous of foreign luxuries. They build their own houses, make their own chairs, tables, ploughs, carts, and harness. Their wives spin their own flax and wool, and weave their own linen and woollen cloth; almost everything they use is the produce of their own farms, except glass, pottery, ironware, sugar, coffee, spices, and tobacco." After showing that if the Norwegian farmer's family did not employ them, lives through their long winters in making the articles mentioned, a great part of their time would be wasted, instead of being, as now, most profitably employed, Mr. Thornton continues: "Although the mode of life of the Norwegian country people may be somewhat rude, it would be difficult to find a happier race; they enjoy plenty and are content; they care little for outward show, and are exempt from the painful desire to outvie their neighbours, which makes many wretched in the midst of wealth."

But the fact which I am most desirous of impressing on my readers' attention in this interesting passage is that the Norwegian farms, although subject to the same laws as those of France, do not subdivide in any extreme or impetuous manner. And it is probable that this will also be the case in France as education advances among the peasant classes of that highly-gifted people. But be one passing away from the objection if at the French system of compulsory subdivision or the death of an owner necessarily leads to excessive subdivision and to inconveniently small properties, it is necessary to bear in mind a fact to which I have already alluded, but which cannot be too earnestly impressed on the attention of my readers. It is this:—The average size of the actual farms, properly so called, cultivated and farmed by their owners, is lessened and unfairly represented in many of the calculations published on this subject, by adding to the number of these actual farms the little kitchen garden, the small orchards, the little fields for the keep of a cow or a donkey, which belong to peasants, who do not pretend to be farmers, but who are in reality only day labourers or operatives, who live in their own cottages, and who have purchased their gardens, orchards, or fields to add to the comfort and maintenance of their families, and then calculating the average size of the real farms on the total number of the actual owners of farms, and also on the owners of the gardens, orchards and fields. In all these countries it is a common thing in many actual districts for a mechanic, or an operative, or a mere day labourer to own a good kitchen garden or a good orchard, in which he works and employs himself in the evenings. These are the freeholds of these men, purchased by themselves, cultivated by themselves, and adding to the comforts of their families and to their own happiness. And need I say that many a man is by this possession of property of his own often kept from drink and the drinking shop, because he wants to invest all he can spare in the improvement of his own garden or orchard? It would have far less interest in their prospects

if they belonged to a landlord, who might resume them any day. It is ridiculous to reckon these classes of owners among the agricultural owners.

I have written so far from my own personal knowledge and observations in these countries; but let me confirm my evidence by an interesting passage from Mr. Thornton's "Plea for Peasant Proprietors," second edition, p. 85. He says, speaking of the Swiss, who have almost universally the French system of land laws: "The peasantry, although almost universally landed proprietors, may be divided into two classes—those who are principally or exclusively agriculturists, and those who gain a livelihood chiefly by manufacturing industry. The farms of the former, except in the cantons of Berne and Tessin and a few other districts, seldom exceed forty or fifty acres, but they are as rarely of less size than ten acres, and the poorest farmers, having rights of pasturage on the common lands belonging to every parish" (or, as he might have said, on the often very extensive and rich mountain pasturages which belong to most parishes) "can afford to keep two or three cows. Members of this class are always in the enjoyment of competence, and many of them possess considerable wealth. Besides these, however, there is a more numerous body of smaller proprietors, whose territorial possessions consist only of a field or two, altogether not larger than an ordinary garden, and much too small for the maintenance of the family to which they belong. . . . The owners of these patches are almost invariably manufacturers rather than husbandmen. . . . In England the makers of these articles" (the manufacturers of Switzerland) "would have been pent up in towns, and compelled to pass their days in close dismal factories; but in Switzerland a happy combination of circumstances permits them to practise their business without feeling the want of fresh air or the other advantages of a country life. . . . They gain their living principally as manufacturers; and land is valued by them as affording a means not so much of employment as of amusement" (and, as Mr. Thornton might have added, of adding to the comforts of their families), "and they require no more of it than will suffice to occupy their leisure. . . . In the outskirts of one or two English towns patches of garden ground are rented by a few operatives. . . . The difference between such operatives and those of Switzerland is that the latter, besides possessing more land, and besides being owners instead of mere renters, are not confined to towns, but are spread over the whole country, and have their fields, gardens" (and orchards) "adjoining their dwellings. They are manufacturers, deriving from land a small addition to their principal occupation. . . . 'I am acquainted,' says Dr. Bowring, 'with no country in which prosperity has descended so far, and spread so widely as among the laborious classes of the Swiss manufacturing districts. I was surprised to find vast large proportions of them had by their savings acquired landed property; how many of them dwell in houses and cultivated fields and gardens, which their industry had made their own. . . . Everywhere, indeed, where the operatives are settled I found in their habitations a mass of enjoyment such as are possessed by few of similar station in other countries?' (See Bowring's 'Report on Commerce and Manufactures of Switzerland,' pp. 3-6.) 'A weaver in Argovia' (one of the Swiss Cantons), says Mr. Symonds, 'is almost universally the proprietor of the soil of a proprietor of land, and few houses are there in the whole canton who do not keep a pig and generally a few sheep. Their cottages are strewn over the hill and vale, and exhibit in the interior every degree of comfort and ease. . . . The cottages of St. Gall and Appenzel (two Swiss cantons) are scattered separately over the vales and hills, each standing in the midst of its little estate with the goats or sheep, with their melodious bells around their necks grazing on the land, which is generally pasture. The interiors of the cottages, which are built of wood, are equally beyond description, and are well furnished with every article of cottage comfort' (see his 'Report on Swiss Handloom Weavers,' p. 157.)" So far Mr. Thornton. I quote him to show how absurd it is to reckon this class of small landowners with the agricultural farming landowners in order to reduce the general average or the size of farms properly so called, and which are cultivated by the owners themselves. I cannot leave the notice of Switzerland which this part of my subject has forced upon me without quoting a sentence from Mr. Laing's "Notes of a Traveller," p. 354, and all the more so because

he is the cold and very cautious critic of the French system of land laws which prevails in Switzerland. He says: "The peculiar feature in the condition of the Swiss population—the great charm of Switzerland, next to its natural scenery—is the air of well-being, the neatness, the sense of property imparted on the people, their dwellings, and their plots of land. The spirit of the proprietor is not to be mistaken in all that one sees."

The above remarks I well know, from my own personal observations during many visits to that country since 1843, are singularly true. I was living in 1876 for six weeks among a community of these Swiss proprietors and farmers, on a rich slope of the mountains above the Lake of Thun. On the vast slopes of these mountains, within six miles of where I was residing, there were three communes or parishes, composed of many homesteads and many farms. Each parish had its excellent school and its trained and certificated teacher. Each of these parishes had vast tracts of common pasture grounds on the higher parts of the mountains. On these common pastures, at different heights up the mountains, as far as the pastures extend, large wooden cowsheds are built. As the snow melts, the cattle of the whole parish are driven by a certain number of experienced herdsmen up the mountains, first to one great cowshed and its pastures, and then later on, as the snow melts, to another still higher, until they attain an altitude of some 6,000 feet above the sea. Each evening the herdsmen bring them to the shed, milk them, churn the butter, make cheese, carefully collect the solid and liquid manure, and then men employed for the purpose from time to time carry down the produce and sell it in the valleys below. In October, when the cattle have returned to the homestead, driven down by degrees by the snow from one pasture ground to another, the produce of the season is divided among the farmers of the parish, according to the amount of their land and the number of their cattle. After this has been done each farmer puts his cows into their winter quarters, and the manure is carefully brought down from the cowsheds to the parish and its farms. This is effected by carrying it in large wooden tubs or cases, slung on the backs of porters. I have myself seen all these operations. But what I particularly want to observe is that in this beautiful land (which ought to be a "pauper warren" according to the English prophet, as it is governed by the French law) the parishes, with their rich meadows, from which, by means of manure, two crops of hay are annually obtained, with their fruit-trees, their picturesque cottages surrounded by their kitchen gardens, their picturesque winter cowsheds, and the general look of well-being and comfort which prevailed, formed one of the most prosperous, happy, and beautiful scenes imaginable.

But travellers go and see the men and women working in their everyday, carefully and decently patched, and mended workday clothes; the travellers are there in the summer months, when the children are not in the schools, but helping in little ways in the fields, in old patched workday clothes, and often without shoes and stockings, their tidy garments being put away for Sundays and schooltime, when they must appear clean and neat; and these intelligent travellers return home with the most pitious accounts of pauperism and misery which they had observed in Switzerland, not troubling to notice the same people on Sundays, when you may meet the whole family in neat, unpatched clothes, often made out of an excellent home-spun material, with clean and comfortable linen, and the women with their silver chains or cantonal costumes. I have often stopped to chat with them, and said to myself, "What a contrast to an English labourer's family on the same good day of rest! Are these the people who are being ruined by the French system of compulsory subdivision?"

I shall conclude this too long letter by a passage I shall quote from Mr. Thornton's "Plea, &c.," p. 147, second edition. He says:—"Taking a comprehensive view of France, we have seen that the number of landed proprietors has long remained nearly stationary; that cultivators deriving a livelihood from their own fields have in general landed enough for their own maintenance in comfort; and that the condition of the peasantry and labouring classes has for many years been steadily improving."

In my next letter I hope to describe how the same or nearly the same laws as the French have operated in Jersey and Guernsey.

L I V E S T O C K N O T E S .

Two great sales of Shorthorn cattle, the Holker and Mr. Brogden's, have by this time passed away, which circumstances prevented my attending. Awaiting the announcement of their prices I sit down in reflection. Of course in these bad times owners and breeders of the old "blue blood" feel anxious as to their investments. It should be with them, however, as with the builders. Go on raising solid and beautiful edifices, and with the returning tide of national prosperity your finances shall float profitably again. Now especially is the time *to thin out and improve*, and when the market rebounds there will be a superior collection of wares on sale. "Who knows what may be wanted in the future?" a spirited buyer of high-priced cattle remarked to me lately. It is a time to disregard "cuckoo cries." "Bates upon Booth" was "all the go" once. You heard of nothing else. It was just subsequent to Mr. S. E. Bulden's great success in the production of the Grand Dukes. Nowadays three crosses of Booth upon a Bates cow are absolutely famous in the public eye. Men have undoubtedly reason for their decision in the fact that, whereas the earlier experiments were an absolute success, the later imitation, especially in the hands of the novice, clashes altogether with our notion of a good animal. "Either Bates or Booth," we impatiently cry, but not this awkward mixture. That cow is a nondescript. You may recover in her offspring the type of the one sort, by crowding on pure sires of the school, be it Bates or Booth, and it may be the stronger for the infusion of the new blood; but in this ungainly guise of "neither the one thing nor the other" shrewd buyers see no safety were they tempted to purchase. Where grand animals do come out, and that continuously, of such a venturesome compound, men are *bound* to admire and buy, as has happened in the case of American cattle. Then "Bates upon Knightly" was a rather specific for the production of a good herd which does not always answer, and is then neglected, but which in skilful hands has been brought to a point of excellence that commands already good, and in the future must command yet higher prices. But what has puzzled one lately is the fact of really well-crossed cows going dirt cheap. At the Messrs. Horswell's sale a number of Vaquishes were sold, thickly veneered with good Bates blood, for an absolute song, and dispersed in many directions. Violet, a calf of this breed, was sold at Lord Ducie's sale just twenty-five years ago for forty-eight guineas, and her descendants were grand animals. What can men be thinking of? Is it that they will have nothing at a price except such tribes as can be traced back to the possession of the Messrs. Collings, or the manipulation of Messrs. Bates and Booth? Their behaviour can be accounted for in no other way. Remember, remember, before it be too late, and these families, now occasionally for sale, get thoroughly dispersed and "swale away," that of good bulls there is likely to be a cheap abundance for years to come; but the females to pair them with where are you to buy? This is well worth considering in these cheap times, for, in the fact of Canada's prosperous consolidation, and the suggestion of Stanley's to open up the interior of Africa by tramways, there is a note of keen encouragement to the "blue-blood" breeder of whatever animals. The best bred will always be wanted, and there are vast tracts of country yet to be populated. It is a question how long the struggle between the cattle "ring" of Australia—backed up as it is by the Merino sheep-breeders—and the more

enterprising colonists may last; but, when the day comes for the opening of their ports, we have the best of reason to think that there will be a run on such kine as combine at once good looks and ancient lineage. One curious requirement of the Australian market is that they "don't want good milkers," because as the cows breed on the open plains, in case a calf does not take all her milk, it is impossible to strip her, and so bad udders ensue. Surely this is a narrow view of this subject. It must be false that breeders in this Old Country should be expected to curtail a special excellence of the cows. Rather let the colonist contrive better. Those wild cows could be driven and caught between gates, as the Chillingham cattle are, I am informed, though I have never seen the place or the performance.

Never has the difficulty of keeping up the type in a composite breed been better exhibited than in the case of the Shropshire sheep. It is astonishing how various they become, and that soon in the hands of the most ambitious buyer. In order to succeed it is essential to know the *elements and the method* of the flock from which you purchase. Experiments on an extensive scale with the *crossed seed* of that beautiful composite flower Pelargonium resulted almost universally, in my hands, in going back to the original stock, common things that you could see years since in any old woman's window. No wonder, then, that a single plant of a new Pelargonium, such as "Charles Turner," for instance, is worth forty guineas at least! In one experiment of mine the young plant threw out two arms, the one arm flowering as the one parent, an almost pure white, the other a rich red as the other parent—a Booth quarter and a Bates head! The Grand Duke 3rd *valley* of the diverse characteristics was wanting. It is annoying to find now too dark a face, now too strong a profile, now too smooth an ear, now too tinged a tail, keep cropping up to spoil uniformity and alter sample. Still, if they bred as regular as foxes or pea hens there would be no excitement or emulation for the breeder, no alternation of prices in the market.

Many people were greatly troubled by the abortion of calves during the past year, which some attributed to fright on part of the dams, caused by storms and thunder, others to the accumulation of ergot on the old grass. The existing flush of grass may next winter lead to the same thing again if this fungoid growth was really the cause of the frequent disaster one read and heard of. An American paper, however, quotes a German statement to the effect that cows are apt to slip their calves if milked for more than about six months after they get in calf. The weight of the *fetus* weakens the system. The writer feels his cows whilst in full milk on the best and richest of food, corn, cake, &c., but slackens off both food and service when the term of six months has been attained. The exact words, however, are "My cows that are giving milk have, besides hay and straw, 5 to 7 lb. of stronger food, consisting of crushed peas, rape cake, palm meal, and malt dust, whilst those that are not being milked get 30 lb. of beet with additional hay, whereby their digestion is kept in good order, and the danger of milk fever almost always avoided." Milking a cow beyond the six months he considers to be the frequent cause of consumption, tuberculosis, and sterility. Young cows with second calf in them should be dried not later than the end of the fourth month of pregnancy.—*Venue*, Sept. 22.

SALE OF SHORTHORNS AT STONE CROSS, ULVERSTON.

On September 19 Mr. John Thornton held two sales of Shorthorn cattle, at Stone Cross, Ulverston, Lancashire, the one of animals belonging to Mr. Alexander Brogden, M.P., of Holme Island, Grange-over-Sands, and the other of the animals belonging to Mr. Myles Kennedy, of Stone Cross, and to Mr. John Martin, of Bardsea. The Holme Island herd were small in number, only seventeen lots, but of exceeding choice quality, and had been selected from some of the most leading herds in the kingdom, and was composed principally of animals of the most fashionable Bates' strains. Foremost amongst them was the celebrated cow, Grand Duchess of Oxford 12th (lot 1), purchased at Holker in 1873; she has produced Lightburne's Duke of Oxford (36895), sold in Yorkshire for 650 guineas; Lightburne's Duke of Oxford 2nd (38564), lot 16; a handsome young bull by the Fifth Duke of Wetherby (31033), now in use in Holker, and this year, a beautiful roan heifer calf, Lightburne's Duchess of Oxford, lot 13. Two bulls bred from her at Holker were each sold for 1,000 guineas. Five animals of the Princess tribe were amongst the purest of this favourite family. They were bred from Princess 2nd, purchased at Killbow sale 1868, for 300 guineas, and by Third Duke of Thornhale, the sire of the Duke of Devonshire's celebrated cow, Lady Oxford 5th, the dam of those extraordinary prize bulls the Barons of Oxford. Amongst them were also some particularly handsome animals by the first class Duchess sires Second Duke of Gloucester (28332), and Grand Duke 10th (21848). Lightburne Kirklevington, lot 9, was also by Second Duke of Gloucester, roan, Kirklevington 25th, sold at the Comishead sale, 1875, for 510 guineas. Two lots were of the well-known Waterloo tribe, which has recently attracted much attention; and Cherry Duchess 14th (lot 2) was one of the finest and most costly; animals of Lord Penryhn's sale, 1873. Primrose (lot 5) and her yearling heifer, and Lady Florence 4th (lot 8) and her heifer calf, were admirable specimens of the Bates and Knightly blood: the former, very purely bred, represents the Primrose tribe, the latter the high priced Ruby family.

The Kennedy-Martin sale comprised the entire herd belonging to Mr. Kennedy and the bulk of Mr. Martin's herd. The former was composed principally of two families, the Blanches and the Cressidas; the former was obtained by the purchase of that beautiful cow, Blanche 3rd, at the Duke of Devonshire's sale, 1871. She has been a regular breeder and great milker, and some capital animals have come from her and her offspring by first-class Bates bulls, several being by Mr. W. Ashburner's Second Duke of Gloucester (28332), a son of the celebrated sire Seventh Duke of York, Grand Duke of Oxford (28764), Duke of Oxford 23rd (31001), and Duke of Oxford 34 (36529). The Cressidas have been bred from Maceo (lot 4), bred by the late Mr. W. F. D. Dickinson, and Good Cressida (lot 5), a fine large cow by Mr. Torr's Good Fitz, from the well-known cow Ilcuba by Florian. To these, bulls of both blood have been used, and several of the lots were by Knight of Windsor (31573), bred by Mr. Bracewell, by Sir Windsor Broughton, from Maid Molly, sold at the Ribchester sale for 225 gs. and Mr. Robinson's well-known prize bull Prince Alfred (29593), bred by Mr. Ahner, of the Calomet tribe, to whom several of the cows are still in calf. There were also two animals descended from Mr. Bruere's Rose family, Rowena Gwynne (lot 18), of the favourite Gwynne tribe (lot 11), descended from Cyp, a well-known cow years ago at Holker, and Fierine (lot 12), bred from a branch of the Mantalini family. Mr. Martin's herd was

originally started with the purchase of Jessy 31st from Mr. Gelderd, of a family full of the Colling blood which came into Northumberland and has been well known in Cumberland for upwards of forty years, particularly for its dairy properties. Four valuable tribes were afterwards added; these were the Gazelle, the Gwynne, the Wild Eyes, and the Sweetheart. Gazelle 3rd (lot 2), by Seventh Duke of York, was purchased from Mr. Bowly, of Siddington; and two cows of this family were sold at Mr. Larking's sale last May for 425 and 455 gs. each. The Gwynnes comprise a lineal descendant of Mr. C. Howard's Fannina Gwynne, of Mr. Caddy's Dolly Gwynne, and Minstrel Princess (lot 36), of the valuable Minstrel branch of this tribe. Sweetheart 2nd (lot 3) was bred by Mr. Stye, and is a daughter of Mr. Adkin's Saurise; and the Wild Eyes are descended from Mr. Housman's Wild Eyes 27th, by Gainford 5th, whose dam was bred by Mr. Bates, at Kirklevington. The sires have been of the fashionable Bates blood. Baron Barrington 7th (33009) was purchased from Holker; and 6th Duke of Kirklevington (30982) came from Mr. Pavia Davies, and were sold at a high price, to go to America. The young stock, which were particularly handsome and in good condition, were by that excellent sire 34th Duke of Oxford (36529), bred by the Duke of Devonshire, at Holker.

COWS AND HEIFERS.

The property of Mr. Alex. Brogden.

	Gns.
Grand Duchess of Oxford 12th, roan, Feb. 28, 1863; sire Second Duke of Wetherby, dam Grand Duchess of Oxford; served July 12, 1878, by Seventh Duke of Gloucester—Mr. Evan Bailey, Devonshire	510
Princess 4th, roan, Oct. 30, 1868; sire Royal Cambridge, dam Princess 2nd; served July 27, 1878, by Lightburne's Duke of Oxford 2nd—Lord Beattie	300
Primrose, roan, Feb. 11, 1871; sire Sir Charles Knightley, dam Pip-dee; served Aug. 3, 1878, by Lightburne's Duke of Oxford 2nd—Mr. Evans Bitley	55
Water Lass 4th, roan, Feb. 8, 1872; sire Ninth Duke of Geneva, dam Water Lass; served May 11, 1878, by Lightburne's Duke of Oxford 2nd—Lord Beattie.....	300
Third Tuberoso of Fairview, red and white, September 20th, 1875; sire Second Duke of Oneid, dam First Tuberoso of Brattleborough; served April 27, 1878, by Lightburne's Duke of Oxford 2nd—Lord Beattie.....	780
Prim Maiden, roan, March 21, 1878; sire Lightburne's Duke of Oxford, dam Primrose—Mr. Evans Bitley ...	53
Lightburne's Duchess of Oxford, roan, May 7, 1878; sire Duke of Oxford 34th, dam Grand Duchess of Oxford 12th—Mr. Lloyd, Letchingly, Sarrey.....	955
Princess of Lightburne 3rd, red and white, June 14, 1878; sire Lightburne's Duke of Oxford 2nd, dam Princess 4th—Lord Beattie.....	590

The following were the principal lots:—

BULLS.

Lightburne's Duke of Oxford 2nd, red and white, April 22, 1876; sire Fifth Duke of Wetherby, dam Grand Duchess of Oxford 12th—Mr. John Hetherling, Brampton	330
Prince Gloucester, roan, March 8, 1871; sire Second Duke of Gloucester, dam Grand Princess of Lightburne—Mr. Fitz-Herbert	50

COWS AND HEIFERS.

The property of Mr. Myles Kennedy, and John Martin. Gazelle 3rd, Mr. Martin's, white, December 31st, 1865; sire Seventh Duke of York, dam British Lass; served March 30, 1878, by Second Duke of Gloucester—Lord Beattie	72
Wild Eyes 42nd, Mr. Martin's, red, February 21, 1872; sire Falstaff, dam Wild Eyes 30th, served December 30, 1877, by Duke of Oxford 34th—Mr. Munro, Australia.	56
Gazelle 5th, Mr. Martin's, roan, Dec. 23, 1873; sire Sixth Duke of Kirklevington, dam Gazelle 3rd; served Jan. 24, 1878, by Duke of Oxford—Mr. Wm. Ashburner.....	24

Gizelle 8th, Mr. Martin's roan, April 16, 1876; sire Baron Barrington 7th, dam Gizelle 5th; served January 6, 1878, by Duke of Oxford 34th—Mr. Wm. Ashburner.....	100
Lady Blanche, Mr. Kennedy's, red, May 12, 1876; sire Second Duke of Gloucester, dam Carte Blanche—Mr. Brommitt, Lancaster.....	50
Sweetheart 5th, Mr. Martin's, roan, October 30, 1876; sire Grand Duke of Kirklevington, dam Sweetheart 2nd; served July 20, 1878, by Duke of Oxford 34th—Mr. Lodge.....	50
Flora Gwynne, Mr. Martin's, light roan, July 17, 1877; sire Duke of Oxford 34th, dam Flossy Gwynne 3rd—Lord Beattie.....	275
Minstrel Princess, Mr. Martin's, red and little white, Sept. 14, 1877; sire Duke of Oxford 34th, dam Minstrel 6th—Mr. Lodge.....	125
Jersey 42nd, Mr. Martin's, red and white, July 5, 1877; sire Duke of Oxford 34th, dam Jersey 37th—Lord Beattie.....	105

COWS AND HEIFERS.

The property of Mr. Albert Crane, of Durham Park, Kansas, U.S.A., and Messrs. Avery and Murphy, Port Huron, Michigan, U.S.A.

Kirklevington Duchess, 15th, roan, October 25, 1873; bred by Mr. J. Fowcett, Scaleby Castle, Carlisle; sire Second Duke of Gloucester, dam Kirklevington Duchess 5th, calved August 20, 1878, red B.C., by Sixth Duke of Kirklevington—Mr. Lloyd.....	330
Grand Duchess of Kirklevington, red, August 18, 1877; bred by Mr. A. Crane, Durham Park, Kansas, U.S.A., sire Royal Lancaster, dam Kirklevington Duchess 5th—Mr. Lloyd.....	360
Dainty Darling; white, Sept. 22, 1877; bred by Mr. A. Crane, Durham Park, Kansas, U.S.A.; sire Royal Lancaster, dam Delight—Mr. Lloyd.....	63

BULLS.

Twenty-seventh Duke of Ardrrie, roan, Dec. 15, 1875; bred by Mr. A. J. Alexander, Woodburn, Kentucky, U.S.A.; sire Fourteenth Duke of Thorndale, dam 9th Duchess of Ardrrie—Mr. Lloyd.....	505
Fourth Forham Duke of Oxford, red, August 4, 1874; bred by Col. L. G. Morris, Mount Fordham, New York, U.S.A.; sire Beau of Oxford, dam 3rd Countess of Oxford—Mr. R. Bothwell.....	105

The sale realised about £10,000—*Newcastle Courant*.

THE HOLKER SHORTHORNS.

The Duke of Devonshire is known as being the owner of one of the most valuable herds of Shorthorn cattle in the world, made so by skilful breeding at his place on the shore of Morecambe Bay, and not the result of collections at a vast expenditure of wealth from miscellaneous sources by which most other herds of fashionable reputation have been formed. From Oxford 15th, which was bought for 200 guineas at Tortworth a quarter of a century ago, have descended a large number of Grand Duchesses, and these passed under Mr. Strafford's *balon* on Wednesday at Holker. There was an immense concourse of agriculturists present.

One of the grand objects of interest inspected before luncheon was the parade of the bulls at twelve o'clock, included with whom was the seven-year-old Duchess sire, 5th Duke of Wetherby, who during the past three or four years has been monarch of the yard at Holker. He is now deposited by the more youthful 7th Duke of Gloucester, bred by Mr. Cheney, and of the Ardrrie Duchess line, the former being parted with for not the slightest fault; a more massive, magnificent animal in form and grand masculine character, by common confession, has seldom if ever been known, and he is all the more valuable by the alliance with which he transmits his rich, capital flesh to progeny. Mr. Drewry, however, makes it a part of his policy to employ no bull, however good, too long. The first principle in his creed would appear to be a frequent change of blood—not, however, obtained from any but the very best sources or from strains not homogeneously brought into affinity beforehand with the Oxford lineage. But a review of the means he has resorted to in welding his splendid materials displays this principle fully. Lord Oxford, Grand Duke 10th, Baron Oxford 4th, 5th Duke of

Wetherby, and now 7th Duke of Gloucester have all imparted in turn a little fresh blood which was not in possession before. As the animals must all conform in form, appearance, and character to a high ideal to be at all eligible for employment in the herd, the conclusion may safely be formed that the last selected lord of the loom must be something remarkably good. He is certainly a handsome fellow, rich in colour and flesh, but devoid as yet of the fine masculine character of the deposited sire. Being, however, only two years old, he will improve vastly in this respect.

The sale ring presented a sight seldom seen. Many of the company located themselves in two large covered stages erected fronting each other, while others lined the ring three or four deep, and behind those standing round the ring enclosure were the carriages of the local nobility and gentry, with many ladies. The first cow, although remarkably good, being old, and of the Lily, not a very fashionable tribe, realised only 61 guineas, purchased by Colonel Kingscote; but a Barrington next appeared, which Mr. Ashburner purchased at 155 guineas. Then came the first of the Grand Duchesses of Oxford, which was put up at £500. A though of beautiful character, biddings were not quick, the company apparently not being sufficiently warmed to the work. Major Chaffery took her at £855, and she was termed by the auctioneer a great bargain. After an Oxford Rose had been booked to Lord Danmore, Lady Bright Eyes Thurl, put up at £200, male £352, bought by Lord Skelmersdale; then another Grand Duchess of Oxford appeared. Being own sister to a cow which had been sold for £2,000, biddings rose rapidly from £500 to £1,200, not slackening much until £1,550 was reached. Lord Penrhyn was the purchaser. Grand Duchess of Oxford Twenty-Second took general fancy; £2,000 was reached in no time, and Mr. McCallloch bought her for Australia at £2,100. Countess Barrington Seventh, remarkably well bred, and having grand character, went to Lord Danmore at £505, and another of the Oxford Rose family, which is not so fashionable as the genuine Oxford, was bought by him at £350. Next came the animal which topped the sale in price, Baroness Oxford Fifth, not originally in the catalogue. Mr. Strdford said that Mr. Drewry at first stated not one of the family would be parted with on any account, but to prevent public disappointment he had conceded this one. Mr. McCallloch pluckily bid £2,000 at once, but she was ran up to £660 more, at which Mr. McIntosh bought her. The Countess Barrington Ninth made £360, sold to Mr. Ashburner, and Winsome Twentieth, seemingly pretty enough for any price, went to Lord Beattie for £895. Then came the Grand Duchesses of Oxford Thirtieth and Fortieth; the former sold to Sir John Swinourne for £1,450, the latter to Mr. Foster for £1,600. Eighteen of the Duke's females were sold, and they made the splendid average of £797 6s. The bulls sold at variable figures. Fifth Duke of Wetherby made £705, to Lord Louisaie; Duke of Oxford XLIV. made £1,650, to Mr. Brasse; Duke of Oxford XLV. to Lord Erzharding, for £1,500; Duke of Oxford XLVI. realised £660, to Lord Ellesmere. The rest were chiefly Barringtons, and they fetched much lower sums; still the average for the twelve bulls, forming the total number, amounted to £458 7s. 9d. The total amount realised for thirty animals was £19,923.—*Times*.

AWKWARD TO DIVIDE.—A man and his wife who had been married ten years, disagreed and determined to separate. The terms of the separation were to be decided by the justice of the arrondissement in which they lived. They were Parisians. "Have you any children?" said the judge. "Yes, monsieur." "How many?" "Three; two boys and a girl, and it is with them lies the difficulty. Madame wishes to have two of them; so do I." "Have you agreed to abide by my decision?" "We have," said both of them. "Very well, my friends, I condemn you to have another child, so that you may each have two. When you have obtained that you may return to me." The matter was then adjourned for the time being. Two years afterwards the worthy magistrate, who in the meantime had heard nothing of the husband or wife, met the former. "Ah," said he, "how about the separation?" "Still impossible Monsieur; instead of four children, we have now five."

HER BROTHER-IN-LAW.—A lady who, in defiance of the law, had married the brother of her deceased husband, was in the habit of alluding to her first spouse as "her poor brother-in-law."—*World*.

UNION STOCK YARDS, CHICAGO.

In the June number of a Chicago paper, the *Factory and Farm*, is a full and interesting account of the Union Stock Yards of that city, which, as the largest and best regulated live-stock mart in the world, and a place from which English consumers are likely in the future to obtain much of their supplies, is worthy of a short notice at our hands. We are not told the exact area comprised within the limits of the Company's boundaries; but, as it is one-third larger than Central Park, New York, and has 200 acres of yards and pens, besides all the store houses and weigh houses, some idea may be formed as to its vastness. That it is not beyond occasional requirements may be gathered from the following official table, showing the receipts of cattle, hogs, and sheep during the year 1877, from the different lines of railway, all of which deliver their freight directly into the pens. This alone is a great feature in the arrangement, which proves that the Americans have advanced far ahead of ourselves in management. They could not afford the time, cost, or loss of weight incidental to driving cattle through a crowded city, to say nothing of the cruelty which it involves.

	Cattle.	Hogs.	Sheep.
Chicago, Burlington, and Quincy R.R.	337,110 ...	1,216,058 ...	75,702 ...
Chicago and Alton R.R.	154,951 ...	281,772 ...	22,612 ...
Chicago, Rock-Iland, and Pacific R.R.	179,849 ...	623,605 ...	36,311 ...
St. Louis Central R.R.	126,923 ...	737,699 ...	36,171 ...
Chicago and North-Western R.R.	156,756 ...	713,306 ...	61,427 ...
Chicago, Milwaukee and St. Paul R.R.	40,878 ...	84,755 ...	51,687 ...
Chicago, Danville, and Vincennes R.R.	11,199 ...	88,724 ...	4,747 ...
Chicago and Pacific R.R.	2,916 ...	23,199 ...	2,318 ...
Pittsburgh, Cincinnati and St. Louis R.R.	3,255 ...	56,942 ...	1,488 ...
Lake Shore and Michigan Southern R.R.	2,628 ...	82,306 ...	8,096 ...
Michigan Central R.R.	1,121 ...	49,198 ...	6,616 ...
Pittsburgh, Fort Wayne, and Chicago R.R.	1,178 ...	45,414 ...	1,771 ...
Baltimore and Ohio R.R.	312 ...	22,569 ...	692 ...
Driven in	4,984 ...	423 ...	692 ...
Total	1,033,151	4,025,970	310,840

However enormous these supplies appear to us, it is probable that another ten years will witness a great increase; for the resources of the far Western States are well-nigh boundless, only waiting the stimulus of a market and railway development. Thirty years ago the nucleus of this gigantic business was a small market known as the Bull's Head, where the advent of a hundred head of cattle caused a glut. Yet even in those days there was one man sufficiently enterprising and far-seeing to develop the scheme which has resulted in such success. This was John B. Sherman, and with the development of railways, which were the feeding arteries, he wisely saw the importance of securing the railway interest. Hence we find the chairman and several of the directors are also directors of the railways. We will endeavour very briefly to describe the leading features of this gigantic mart. The Exchange, which is the first building reached by the visitor, is a large and commodious structure; it is divided into offices for the commission agents, by whom the business of buying and selling is principally performed. There is no monopoly, however; any farmer or drover who brings his cattle has equal rights, and the drovers especially sell largely themselves. Upwards of seventy firms are here located during the hours of business, which are, as with us, during the early morning. Outside is a princely hotel, known as the Transit House,

built and managed by the Company, and which enjoys a high reputation. Adjoining the Exchange—indeed, part of the same building—is the Stock Yards Bank, a very necessary institution, doing an enormous amount of business, as will be gathered from the fact that a year's transactions in the market represent a matter of one hundred and eighteen millions of dollars. The entire transactions, in a monetary point of view, consists in exchange on New York, Boston, Liverpool, and London. There is a handsome restaurant also as part of the Exchange, and, whether or no the American is as much given to wetting a bargain as we are, a good many drinks are consumed. For the foreign markets there are special commission agents employed, who buy up all the prime lots, giving much above average rates; the animals are at once transmitted to the abattoirs, slaughtered, cut up, the quarters packed in ice, and forwarded to New York for shipment. These buildings, which occupy the central portion of the enclosure, are surrounded by upwards of 600 cattle yards, capable of holding fifty head of cattle each, 675 covered hog and sheep pens and cow cribs, hay barns, and scale houses. Thirteen of the latter are each provided with fifty ton Fairbanks scales upon the platform of which sixty head of cattle can be driven and weighed in less than a minute. Let us now trace the progress of the animals and the system of business pursued. The railroad brings its freight of cattle trucks right into the yard; the shipper or drover is furnished by the Stock Yards Company with a stock pen, capable of holding fifty, but twenty-five or thirty are the more usual number. The number of the pen, together with the number of cattle contained in it and the name of the drover are at once entered upon the books of the Company. The drover is then charged for yardage at the rate of 25 cents per head. Abundance of water is laid on to each pen, and the charge for hay or other food is slightly in advance of prime cost. Having thus seen his animals comfortably and securely located, he is at liberty to look after customers, and seeks for them in the Exchange, where he applies to those with whom he has traded, or who are likely to appreciate his goods. Here he dilates upon their merits until he induces some one or more of the commission men to visit the pens and investigate for themselves. A very cursory inspection suffices to satisfy as to the quality and value. No useless time is spent in haggling; the bargain is either concluded in a minute or is off. In the former case the animals are instantly collected into the scale house, all transactions being per 100 lb. live weight, and thence to the abattoir, or the next Eastern stock train takes them to New York, a journey of about eighty hours. The regulations as to water and food during transit are excellent, and officers for the protection of animals from cruelty are located in the Union Stock Yards, and all cases of ill-treatment are rigorously punished. And now a word or two as to the districts and the men who supply this never-ceasing supply of stock. Formerly—previous to Sherman's enterprise—Texas was the only important grazing point; but to bring cattle such a distance required a journey of hundreds of miles, and the animals suffered seriously by the journey. Railways through Iowa, Kansas and Missouri shortened the route, and lastly the Great Union Pacific line, since the opening of which in 1870 there has been a marked increase in the receipts, as that road passes through the great grazing country from the Kansas River to the Rocky Mountains. It is computed that no less than 20,000 herdsmen are employed in furnishing these enormous supplies. To quote from the *Factory and Farm*:

Let the reader imagine, if he can, the vast extent of country reaching from the Black Hills in Dakota to the Rio Grande, and from the Kansas River to the Rocky Mountains, dotted all over with the villages of the Western herders, whose aggregate population exceeds that of the cities of Boston or Baltimore, and he will have a faint conception of one great tributary to this stupendous cattle mart.

The ranches comprise large tracts of rich pasture land enclosed within strong fences, so extensive that a long day's journey is consumed in crossing them, and devoted to the feeding of herds ranging from 5,000 to 25,000 head. Formerly, as we have said, Texas was the source from which the ranchmen drew their cattle supplies. Lately the advent of Short-horns and grade Short-horns have rendered them comparatively independent, and given them; home-bred stock of greatly improved feeding properties. One cannot doubt that even the coarse Texan will eventually give way to Short-horn influence,

which seems destined to remodel the whole cattle world. Certainly a great improvement is taking place in the quality of animals sent into the Chicago stock yards. Thus is this great region of country becoming a source of supply, not only to many of the Eastern States, but also to Europe. As we have said, its resources are practically unlimited, and the same question will trouble the Eastern States which to a lesser degree has alarmed our Scotch friends. How is this somewhat unequal competition to be met? The cost in the Eastern States, as with ourselves, is a serious matter; whereas the ranchman's feed account is of little moment. As we have before remarked, our only hope is that, by improved management and the most economical and scientific system, we may be able to produce our meat in half the time, even though it is highly probable the cost may be doubled. We have ourselves had the opportunity of seeing the Chicago markets, as well as the vast factories for bacon curing, and can therefore fully endorse all that is said by the somewhat enthusiastic writer from whose paper we have quoted.—*Field.*

THE CANT OF SPORT.

The love of sport, like religion, is found in some form or other amongst the most primitive as well as amongst the most civilised races. Like religion too, it is apt to degenerate from a genuine and natural passion into a false and artificial cant; and, with the exception of the religious variety, there is perhaps no kind of cant more detestable than the cant of sport. The tendency to cant always springs from love of approbation, and whatever is fashionable is therefore apt to lead to cant. Thus there is a cant of science and a cant of art, just as there is a cant of religion and a cant of sport, because the pursuit of science, art, religion, and sport is at the present time in fashion. When "sentiment" was in fashion there was a cant of sentiment; but now the tendency is rather to a cant of insensibility. Sport has never been so universally in fashion amongst all classes as it is now; hence the cant of sport is more rampant than it has ever been before.

A genuine love of sport is common enough amongst all classes of Englishmen. The farm-labourer, who perhaps has never fired a shot or ridden anything but a cart horse, loves his work to have a look at the hounds when they come near him, and delights to beat a covert with the gamekeepers, or to do the digging where rabbits have to be mewed. The tradesman and the artisan in town commonly delight in taking a holiday to go to the races, to see the hounds meet, or to have a run with the foot-beagles; whilst those who can get shooting, and can afford to take out a game-licence, are more numerous than they have ever been. Where there is a river to fish in, the difficulty is to preserve the fish from utter extinction, so eager are the devotees of angling to lash the water with their lines or to adopt the more ignominious expedient of netting. To a certain extent poaching proceeds from an innate love of sport, though far more generally from the most sordid and unscrupulous desire for the money that game will bring in return for but little labour. As for the denizens of our great cities and manufacturing towns, their sporting instincts find vent in such pursuits as racing, badger-baiting, and dog-fighting. Cricket, football, boating, athletic exercises and other pursuits in which live animals are not concerned are also popular; but it is not of these kind of sports that we speak. They are more correctly to be described as play than as sport, and there is very little cant in vogue concerning them. It is with the forms of recreation in which animals play a part, either as participators or victims, that we have now to do.

It would be strange, indeed, if the love of sport were not very general, since it is a kind of play that grown men are not ashamed to indulge in after they have put away childish things. With the savage it is the chief work of life as well as the chief recreation; and where men give up their lives to sport, it is chiefly as work, as employment for their energies, that they do so. But apart from the professional men who get their living by the various pursuits connected with racing, hunting, and shooting, it is only the rich who can devote any considerable proportion of their time to sport. Hence to be a sportsman is to be a "swell," and those who are the "swell" strive to assume the conversation and manners of the sportsman. It is here that the cant of sport

chiefly appears. Insufferable young cads who cannot hit a barn, ride a donkey, or distinguish between a park-hack and a hunter, delight to brag about their "bit of shooting in Norfolk, their straight runs with the Pytelley, and their "books" on the Derby or the Two Thousand. In most third-rate clubs' the talk is all horse, dog, gun, or betting, and those who cannot or will not join in the jargon are both bored and despised. In the billiard-room and the smoking-carriage it is much the same, to the great disgust of the genuine sportsman and the man who neither cares nor affects to care much about sport. Of all bores the sporting bore is perhaps the most insufferable, and a *tele-tele* with a man who will insist on enlarging for an hour at a stretch on the merits of his horses or his dogs is a weariness to the flesh of the most unmitigated kind. No attempt to turn the conversation to political or social topics is of any avail. The horsey or doggy man cares for none of these things, and at the first lull in the talk he is on his hobby again.

At a hunting-breakfast or shooting-dinner there is generally more or less of the cant of sport, especially when toasts are proposed, and the glorification of sport or of particular sportsmen is the order of the day. Sport is a healthful and delightful recreation; but there is nothing particularly meritorious in its pursuit. Yet what is more common than to hear it asserted as a climax to the merits of a village squire or county worthy that he is a "good sport-man," as if to be that were the acme of perfection? Of course great proficiency in any lawful pursuit is admirable, and it would be churlish to begrudge the man who has attained unusual success by devoting his whole energies to sport his rightful need of fame. An efficient master of a pack of hounds affords as much pleasure to his neighbour as a talented actor provides for the public, the only difference being that comparatively few people are delighted frequently by the good sportsmanship of the former, whilst a much larger number are occasionally entranced with the clever impersonations of the latter. Both equally devote their talents to the recreations of life; and if one may claim pre-eminence for his work from the intellectual standpoint, the other can show that he does most to promote or restore the good health and to strengthen the nerves of his followers. But the glorification objected to is that which is lavished upon the man who spends most money on sport rather than on the genuinely successful sportsman; and when a gentleman who cannot leap a flight of hurdles is belauded as if he were Nimrod, but really because he gives a good hunting-breakfast or entertains his friends in good shooting-quarters, the effect is a little too ludicrous.

Until recently the cant of sport was confined to the middle portion of the community. Formerly the comparatively few ladies who indulged in the sports of the field did so from a genuine love of them, and not from any desire to be "in the fashion." Indeed, they followed their incursions in spite of fashion, braving the sneers of those who charged them with being mad as a hatter. But now that sport has become so general a fashionable game, like men, often affect a taste for it they do not feel. Not only do they flock to the meets of the hounds and to the shooting-lunches, while a few have even taken to grouse shooting, but they talk the sporting slang, and talk horse and dog in the dining-room and the ball-room. The cant of sport from men is bad enough; from women it is simply intolerable.—*World.*

THE MUSIC SHE PLAYS.—A St. Louis journal advises young men to choose a wife by the music she plays and the way she plays it. If she manifests a predilection for Strauss she is frivolous; for Beethoven, she is impractical; for Liszt, she is too ambitious; for Verdi, she is sentimental; for Offenbach, she is glib; for Gounod, she is backward; for Gottschalk, she is superficial; for Mozart, she is prudish; for Etow, she is commonplace; for Wagner, she is naive. The girl who hummers away at "The Maiden's Prayer," "The Anvil Chorus," and "Silvery Waves" may be depended upon as a good cook and also as being healthful; and, if she includes "The Battle of Prague" and "The White Cockade" in her repertory, you ought to know that she has been thoughtfully, rigorously, and strictly nurtured. But, last of all, pin your faith upon the calico dress of the girl who can play "Home, Sweet Home."

PROFESSOR GAMGEE ON VIVISECTION.

A lecture on vivisection was delivered, under the auspices of the London Anti-vivisection Society, by Mr. H. R. Cooke (London), in the Salford Town Hall, on September 16. Mr. William Nuttall presided, and about 200 persons attended.

Mr. RIBTON COOKE, in the course of his address, said that not one single discovery of the slightest practical value to medicine or surgery had been made through vivisection during the last two thousand years. Those who practised it had indeed made great assertions respecting its value, but when their assertions had been tested it had been found that not one of their beneficial discoveries was due to this horrible practice, which was nothing more than scientific curiosity. The Act of Parliament which was passed not long ago to regulate vivisection was one of the most absurd and extraordinary in existence. Many laboratories where cruelties were practised upon animals were very near hospital wards, and when a student began by disregarding the sufferings of animals he would go on to disregard the sufferings of the human beings in the wards, and to look on them as objects to be experimented upon (Hear, hear). He was afraid that this spirit was creeping into the practice of the medical and surgical profession. He moved—

“That this meeting condemns vivisection as being cruel and unjust towards the lower animals, demoralising to those who practice it, and debasing to the public mind.”

Also that the following petition to Parliament be adopted and signed on behalf of the meeting:—

“That the returns of thousands of certificates granted in 1878, under the Act 39 and 40 Victoria, cap. 77, prove that this measure has failed to put an end to cruel experiments on animals, and consequently to effect that reconciliation between the claims of science and humanity which the royal commission set forth as the proper aim of legislation on the subject; wherefore your petitioners pray your right honourable House to adopt the only effectual means to stop these offences against humanity, and to pass a Bill totally prohibiting the practice of vivisection.”

Mr. R. WILLIAMSON, inspector of the Manchester Society for the Prevention of Cruelty to Animals, seconded the motion.

The CHAIRMAN inquired whether any person wished to put any question to the lecturer.

Professor GAMGEE (Owens College), rose in the body of the meeting, and proceeding to the platform, said that, as a representative of physiology in this district, and as one who knew more of vivisection than any one else in the room, he had thought it incumbent upon him to attend the meeting. There could be no doubt that some physiologists like other men had committed abominable cruelties, and he was not there to defend them; but he would warn people from arriving at the absurd conclusion that any but a very small number of physiologists had ever been guilty of any act of cruelty. Let him as a person who had charge of one of the largest physiological laboratories in the country point out that physiologists all maintained that it was absolutely essential that experiments should be performed upon living animals, not merely for the purpose of research, but for the purpose also for teaching of medicine and surgery to students; but they did not say that it was essential or important that experiments giving pain to animals should be performed. He happened to be acquainted with all the physiologists in the country, and he knew that the utmost care was taken to apply chloroform or other anaesthetics to the animals experimented upon, so that they should not suffer pain. It was, perhaps, impossible for any but a medical man thoroughly to understand what good could result from vivisection, but he asked to be believed when he said that it was enormous. That meeting had been told in the most positive manner that vivisection had been performed for two thousand years without having led to anything beneficial; but the medical profession as a whole—not one or two individuals—held that the whole body of medical doctrine rested to a great extent on the science of physiology, and that it would have held no position whatever at the present time but for the observations which had been made with infinite patience upon live animals which had been rendered in the vast majority of cases insensible to pain. Such charges as had been brought against physiologists

as a body filled him with indignation; and he might be excused for some warmth of language when he heard a noble cause to which he had devoted his life traduced as it had been traduced last night. In consequence of the researches of physiologists medical men were getting to know with extreme accuracy every morbid alteration which took place in the human body, so that soon the same certainty with which they could recognise and deal with diseases of the heart and lungs would be experienced in connection with other diseases. Were vivisection stopped the progress of medicine would be stopped, and he asked the people not to listen to the representations of anti-vivisection societies, but to go to any or all of the great physicians, whom they would trust with their lives, or the lives of their wives and children, and ask for their opinion on the subject. Were the majority of the medical profession honest? Were they likely to favour cruelty? Were they likely to favour even the painless death of the most insignificant animal unless they expected from it some result beneficial to the human race? As a body they would give their verdict in favour of vivisection, carried on as it was without pain to the animals, excepting in isolated cases. He proposed the following amendment:—

“That this meeting refuses to lend its voice in support of the agitation initiated by anti-vivisection societies, and expresses the opinion that no sufficient ground exists for interfering with past legislation regarding the performance of experiments upon living animals.”

Mr. BRADLEY, surgeon to the Manchester Infirmary, seconded the amendment, and said this was not a question of science against humanity, but of the relief of pain to human beings. It was a question in the long run of life and death to human beings, and to deny that vivisection had been pregnant of benefit to humanity was to deny some of the most patent facts known to the medical and surgical profession.

On a division, the amendment was rejected, and the resolution carried by a moderate majority.

THE MARQUIS OF RIPON ON AGRICULTURE.

The Easingwold Agricultural Society held its annual exhibition of stock on Sept 18. There were 318 entries of horses. The quality of the horses suitable for agricultural purposes was not so uniformly high. Cattle were neither numerous nor of more than ordinary quality.

A luncheon was served in a large marquee on the ground. The Marquis of Ripon, President of the Society, occupied the chair, and in proposing the toast “Success to the Easingwold Agricultural Society,” he referred to the Cattle Diseases Act and other topics. He said: His noble friend the Member for the North Riding had alluded to one topic which must naturally be of great interest to all in that district, and to all persons connected with the breeding of cattle—he alluded to the Contagious Diseases (Animals) Bill, as it was called, which was passed during the session. The first remark he was inclined to make with respect to that measure was that he sincerely trusted that all of them in their various positions, whether as magistrates, breeders of cattle, or whatever their position might be, would combine together and give the provisions of the measure a fair trial. He pleaded guilty to having entertained some doubt whether it was possible to stamp out foot-and-mouth disease by any legislative enactments, but he was well aware that the best authorities were against him upon that point, and he was not conceited enough to set his opinion against that of others who had maintained the opposite view. A law had been passed, and it imposed considerable restrictions upon farmers and owners of cattle, and he earnestly hoped that in this district and throughout the country they would all work together to put the regulations to an honest test, and to enable the Act if possible to produce the great and important result which it was intended to produce. His noble friend had alluded to the part he took in Parliament with respect to that measure. Perhaps he might be forgiven for touching upon a topic which was in some degree personal, but nothing would be a greater mistake than to suppose that he was the least inclined to raise any objection to any reasonable measures which might be required in order to get rid of that great scourge—the diseases of cattle—which had unhappily during the last few

years been so rife in this country, and inflicted so much injury on those interested in the breeding of cattle. The view he took was that it was undesirable, in the interest of the cattle trade and of other trade, to impose any restrictions which were not absolutely required, and he was anxious to obtain the minimum of restriction and interference with the trade which was consistent with preventing the introduction and spread of disease. Those views he ventured to express in the House of Lords, and though not successful there they triumphed in the House of Commons, and the Bill as it now stood was as he desired to see it, although the words were not precisely what he had the honour to propose. In some respects he believed it made great and valuable improvements. Their experience since 1869 has been embodied in the measure, and he would conclude his observations on the subject as he began them, by asking from all persons a fair and honest trial of the Bill, with the hope of obtaining from it that great end for which it was passed, namely, the extinction throughout the country of those diseases which they all lamented, and which had increased so much of late years. There was one other matter connected with agriculture on which he was desirous of saying a few words, although possibly they might have more direct application to other parts of this great county than they had to the district in which they were assembled. We lived in days in which agriculture was becoming more and more a scientific industry, in which it was becoming more and more necessary that those who engaged in agricultural pursuits should have a very considerable knowledge of certain branches of science. He was aware that some steps in the direction of promoting the spread of agricultural science had within the last few years been taken by the Government, or by one of its departments—namely, the Department of Science and Art, and that scholarships and prizes were offered by it to institutions having for their object the teaching and encouragement of agricultural science. He had lately been informed that a body existing in Yorkshire, although not in that immediate neighbourhood, called the Yorkshire College, established at Leeds, with an exceedingly competent staff of professors of various branches of science, was at the present time considering whether it would be possible for it to establish direct instruction in agricultural science, and in the appliances of chemistry and other sciences to agricultural purposes. He believed it likely that some communication would be made from the Yorkshire College to the Yorkshire Agricultural Society on the subject. His object in mentioning it now was that the idea might go forth among those who were interested in agriculture, so that they might consider whether it might be possible, with Leeds as a centre, practically to establish lectures or any other mode of scientific training which would be valuable to some at least of our young men in the county, who, when they grow up, were to devote themselves to agricultural pursuits. He was aware that there might be great practical difficulties in carrying out such a scheme. At present it only existed in the shape of a proposition which had been made to the body to which he had alluded, but he was glad to have the opportunity of drawing public attention to the matter, in order that those who were better able to judge than he was might consider the question. Before sitting down the noble marquis alluded to in terms of regret to the death of Mr. T. C. Booth.

ENTOMOLOGY AND AGRICULTURE.—When the conference on insects injurious to crops and gardens was held on the 7th of June, 1877, at the Society of Arts, under the presidency of the Duke of Buccleuch, one of the questions discussed was how a knowledge of the life histories of insects harmful and useful to the farmer and market gardener could be spread among those employed in such work in a manner to enable them readily to learn to distinguish in the different stages of metamorphosis their friends from their foes. The late Mr. Andrew Murray, who opened the conference with a paper, quoted from articles in the *Times* of September 16, October 4, 1876, and March 1, 1877, bearing upon the subject, in which the experiences of French and American scientists who had considered these matters were referred to. Direct legislation on the destruction of injurious insects had been resorted to both in France and America, but at the conference it was felt that, at least for the present, all that could

be done in this country was to promote a knowledge of the appearances and the habits of the insects in their different stages. The Government collection of the Science and Art Department, arranged by Mr. Murray, had this object largely in view, but the making of copies of this collection in various agricultural districts was recognized as somewhat expensive, and as needing skilled artists both with brush and pen and in setting up preserved specimens. It occurred to Mr. Carrington, the editor of the *Entomologist*, and now naturalist at the Westminster Aquarium, that a simple way which most village schoolmasters could adopt would be to keep the insects under glass during all their changes. He therefore obtained the requisite permission to have space in the Aquarium for the erection of a series of cases which he has called his "insectarium." The result during the summer has been good, and according to the information given, on inquiry, by two atendants, many applications have been made for information how to arrange and manage similar collections. Among the coleoptera, the stag-beetle and several corn weevils have been shown all through their life histories. Of the hemiptera there have been several varieties of plant bugs. The hymenoptera have been illustrated by the common turnip fly, *Athalia spirarum*. This caterpillar, so well known as the black jack, palmer worm, black palmer, canker, &c., is most interesting in captivity, the larvae eating immense quantities of turnip leaves very rapidly. The diptera have been illustrated by *Lepeta oleacea*, the common "cran-fly," or "daddy long-legs," the larva of which is so destructive to mangel wozzel crops while feeding on the young roots. How many are there familiar with the "daddy long-legs" who know the appearance of the larva? The orthoptera have been shown by crickets and grasshoppers all through their stages. The lepidoptera have been in the same way extensively shown in such well-known pests as the three white cabbage butterflies, *Pieris brassicae*, *napi*, and *raye*. These were plentifully shown in each stage of their respective seasons, with the parasitic *Ichneumon*s, which in a state of nature keep the balance so beautifully, never allowing the lepidoptera to become too plentiful. In Canada and in some parts of the United States where these white butterflies have become colonists from various causes, it has been found necessary to resort to the introduction of the cocoons of the parasitic *Ichneumon*s to check their ravages. Several kinds of *Noctua* have been represented both by those which feed in darkness and those which feed on roots of plants, also the stable moths, ordinary clothes moths, &c. The less conspicuous *Aphido*e, or plant lice, have been also included. One set of divisions of the cases has been occupied by silkworms which will feed on English trees, such as plum, apple, oak, and besides the usual species so well known as feeding on mulberry or lettuce, though this is rather apart from the principal object. There is hardly a village school in the country without a patron who takes an interest in the school, and who might be found ready to contribute the small cost of glazed cases in which insects might be kept. Mr. Carrington has practically shown how simple such an arrangement may be, and his happy idea goes a long way to solve the question how children in agricultural districts may be taught to recognise in their various changes the insects which are useful and those which are damaging to crops and gardens.—*Times*.

DOWN ON HIM.

"Girls have no sense of humour!" Elwin cried,

When Angelina smiled not at his chiding.

"You men are so ridiculous," she replied;

"If we had much, we should be always laughing."

—*Punch*.

SOMETHING SENSATIONAL.—Somebody advertises in the *Nottingham Journal* the startling information that there is **WANTED, A CUTTER FOR GUILLOTINE MACHINE.** None need apply unless practical hand. Apply—
For the reassurance of readers who, with a Conservative prejudice in favour of the time-honoured British constitutional Tree, in alarm for the adoption of a Frenchified substitute, may be disposed to cry, *Noluitis leges Angliæ mutari*, it may be mentioned that the blank left in the foregoing notification was not filled up with the name of Marwood.—*Ibid*.

SEWAGE FARMS IN PARIS AND BRUSSELS.

Dr. Drysdale writes to *The Echo* :—

The French Government hospitably entertained some 1,500 medical men, engineers, and *savants* from various European States, in Paris, at the beginning of last month, at the International Congress of Hygiene, held in the Palace of the Taileries, and among other objects of interest connected with the health of Paris I had the advantage of inspecting the sewers of Paris, and the important experiment going on at present at Gennevilliers, near that city. In company with a number of well-known physicians of the Faculties of Medicine of Paris, Brussels, St. Petersburg, and many English and foreign engineers and chemists, we were conveyed from Paris by the Western Railway to Asnières, where, on the right bank of the Seine, below the bridge, the great sewer from Paris enters the river. A considerable current of blackish water then invades the river, and usually occupies one-half of the stream. It is filthy to the last degree, and covered with a greasy film, with bubbles of fetid gas continually arising on its surface. This continues far below St. Denis, and renders the river quite pestiferous to the dwellers on its banks. In order to disinfect this water it has been calculated that some 2,000 hectares, or 5,000 acres, will suffice for Paris, or 7,000 for London, if the sewage of London resembled that of Paris. It is calculated, however, that if the Parisian contents of the sewers resembled those of London, it would require 60,000 hectares, or 150,000 acres, to purify the water, and London would, therefore, require 210,000 acres.

At this visit we were enabled to see the use made of one-third of the sewage of Paris on some 2,000 acres of market gardens at Gennevilliers, a kind of peninsula made by the windings of the River Seine below Asnières. A number of cottages awaited the excursionists, and we were conveyed to the fields watered by the inky contents of the Parisian sewers of the north part of Paris. The fluid part alone of the sewage of the houses, as I have said, is employed, the solids being made into manure, to the great injury, he it said in passing, of the health of the inhabitants of Paris by the stay of such matters in cesspools beneath each house. This fluid matter is pumped up and conveyed in channels laid about four feet above the surface of the level beds of Gennevilliers, where it is allowed to flow down upon the fields by means of little valves placed along the course of the conduits, which can be lifted by the *emportes* of the city of Paris, according as any particular farmer, or *cultivateur*, requires more or less of the sewage for his own fields. On arriving at the fields irrigated we found a slight uproar going on, as two men, who were not farmers, contended that the sewage water had entered the basements of their houses. The farmers and *cultivateurs*, on the other hand, were nearly unanimous in their praise of the experiment, as well they might, since the value of their yearly produce has been evidently greatly increased since they have used the sewage water. There are in some cases, it is said, five times as many artichokes, cauliflowers, potatoes, &c., per acre raised as there used to be before the fields were irrigated with sewage. We walked through some half a mile of the fields, and, although the day was warm, we perceived not nearly so much smell as I have often done on walking over farms manured with guano, or in the ordinary manner. One or two great florists raise fine flowers and fruit for the Parisian markets at Gennevilliers; and both of these were in the greatest perfection. We tasted, as a body, the melons and other fruit, and found them excellent, whilst the potatoes and beans were of the most perfect quality.

On walking through the fields we encountered several houses with children in them; and I made inquiries from the residents whether they or their children suffered from diarrhoea or other diseases likely to be produced by sewage. No such diseases are endemic in Gennevilliers, as far as I could learn; nay, the inhabitants seemed to pride themselves on the salubrity of the place, and said that many Parisians came out there for their health. At the end of our walk we came to the point where the water, having filtered through the sand, enters the River Seine; and here we found a beautifully crystal stream, to pure that we all drank of it with pleasure. The neighbours use this water for cooking and drinking pur-

poses, and say that it in no case has been known to disagree with the health. Of course, I cannot verify these assertions, but merely state what I heard. The conclusion I came to was, that the Gennevilliers experiment for utilising one-third of the liquid sewage of Paris is an entire success; and I am inclined to attribute part of it to the fact that the cultivators raise vegetables for the market, and turn up the soil much with the spade, which makes the ground rapidly absorb and filter the water. I walked over the Croydon Sewage Farm the other day, which is, near Elmer's End, entirely devoted to grass and mangold wurtzel, as far as I could see; and I did not think it nearly so wondrous or successful as the Gennevilliers experiment, although at Croydon, too, I hear that the solid manure is separated from the fluid before entering the field. The engineer of the Brussels sewage experiment read a very interesting account of the way in which the liquid and solid contents of the sewers of Brussels, which resemble at present the London system, are being utilised by the Belgians. He alleged also that it was a success.

Altogether, this subject seems to me of first-class importance, and I venture to think that the deodorisation of our London sewage will ere long be found to be imperatively necessary in the interests of the population living near Barking Creek and below and above it on the river, as also on the lower ground of economy and efficient navigation on the Thames. It is said that there are banks in the river caused by the fetid contents of the sewers that threaten to fill up the channel in various places. There is one thing quite evident to me, and that is, that the only way in which the deodorising of our sewage can be carried out effectually and economically is by using the great natural filter of the land. As to the details of what number of acres would be required for the London sewage, and where that could be obtained of satisfactory quality as regards sand and other constituents necessary for good filtration, I have no doubt that many of your readers could tell me something valuable if they would. I have only written in the cause of discussion of what I think is a most important hygienic and economical question.

THE UTILITY OF HORSE-SHOEING.

Few subjects relating to horse management have received so much attention as horse-shoeing, and it is one on which the specialist and amateur have almost equally expended much thought, speculation, invention, and experimentising. The necessity for protecting the hoofs of working horses—in Western countries at least—by some simple, economical, and non-hurtful device, has made itself felt from the very earliest times; and we have sufficient evidence to show that the Gauls, probably some of the Germanic tribes, and the Romans in Britain, if not the ancient Britons, resorted to the iron shoe now in use, securing it to the hoof by means of nails as is done now-a-days. We may be certain that nothing but the direst necessity could have led to the adoption of such a bold yet simple and ready mode of economising the powers of a horse, and rendering him a hundredfold more efficient. From climatic and other influences, it must have been early discovered that in long journeys over rugged ground, and carrying weight, the hoofs of the hardy steeds of primitive times would quickly become worn, and the animals be rendered unserviceable through being footsore. It is probable that many devices were introduced to guard against this cause of inefficiency before the crescent-shaped iron rim was nailed to the lower surface of the foot; but it has survived them all, strange to say, notwithstanding the ingenuity of generations of inventors, improvers, and modifiers, it remains to this day the only reasonable and satisfactory kind of hoof-protection known to us. True it is that, in some parts of the world, horses can perform a certain amount of work without shoes, but as true is it that they cannot do so in other regions. The Mongols do not shoe their marvellously-enduring ponies, yet these in long travels wear their hoofs through to the quick, and the creatures are lame. The Tartar remedies this accident, as he best can afford to do, by riding another steed of his drove, or exchanging the cripple for a sound one at the nearest encampment. In India cavalry do good service though the horses are only shod on the fore-feet, and at the Cape of Good Hope it is the same; in some parts they can even perform fair work without shoes. Australia is another region in which horses can journey without shoes, so long as they do not travel on

artificial roads; and in some other parts of the world horse shoes are not absolutely necessary. In Japan they were unknown until 1860, when our own farriers introduced them to the notice of the Japanese; previous to that time the only hoof garniture in use was a rice-straw sandal—for although the ponies of that remarkable country have excellent hoofs, yet in carrying loads for any considerable distance these are quickly worn down.

The evils of modern horse-shoeing—we allude to the shoeing on “improved principles”—have long been recognised;

the terrible effects of denuding the foot of its natural covering by means of knife and rasp, attaching heavy and unsuitable shoes, making the foot to fit the shoe, and other barbarities of comparatively recent times, have been only too apparent to attentive observers, as they have certainly led more or less rapidly to the deterioration of horses so maltreated, and have inflicted great suffering upon them. This abuse of a most useful art has given rise to much complaining and justifiable fault-finding, and those who have not rightly appreciated the demerits of the so-called “improved principles” have stigmatised the nailed shoe as the curse of horse-flesh. Consequently, attempts have been made from time to time by enthusiastic and humane—but only too often unpractical and imperfectly informed—people to substitute something else for this fixed armature. It is needless to repeat that all their attempts have failed, for reasons which might have been indicated beforehand by those who understood the horse's foot—anatomically and physiologically—and its requirements; and there are grounds for apprehending that success in this direction is not very probable in the future. This failure has led to the belief in some minds that because horses can work without shoes in certain countries of the world they should do so in our own. Nothing could be more fallacious, as repeated experiments have demonstrated often and over again. Our variable moist climate, hard artificial roads, the severe exertion we demand from our horses, their very unnatural treatment in the matter of food and stabling—all conspire to render shoeing absolutely essential to the profitable utilization of this most excellent servant. It is in the experience of all those who have had much to do with horses that young animals which have never been in the hands of the farrier are soon footsore when taken from their pastures and travelled on hard or newly-metalled roads, and especially in wet weather—even when carrying no weight. Nothing could be more absurd than to suppose that our mammoth dray-horses, the slaves that toil in cabs and omnibuses—stopping and starting every few minutes—could ever be brought to work even for a day without shoes. Had this been possible it would long ago have been practised; but it is not possible. Without shoes a horse would damage his hoofs as much in a week as would require three weeks' rest on soft material to repair. We surely need not point to the fact that the growth of hoof-horn is slow, and that it is a material which does not offer great resistance to wear on hard roads in wet weather. Certainly its powers of resistance can scarcely be compared with those of iron; and some idea may be formed of the effects of everyday labour on the feet of horses if we take into consideration the degree to which iron shoes are worn on our paved roads. To ask us to believe that hoofs alone can withstand this amount of wear is to presume too much on our erudition and to ignore our experience. Many people mistake the abuse of farriery for its use. Horseshoeing, intelligently practised, confers great advantages upon the horse and benefits its owner. The good service it renders far more than counterbalances the evils it produces,—indeed, we are really unable to discover what evils attend or result from shoeing as it should be done. Nothing is more beneficial to the horse, or more easily practised by the farrier, than shoeing on sound physiological principles; nothing could be more injurious to him, or tend more to abbreviate his usefulness than the “improved principle” method so much in vogue.

It is absolutely necessary that horses in this country be shod—but this shoeing need neither be injurious nor ineffective. Nothing better has been advised than the nailed shoe, and we are of opinion that it will be most difficult to displace it.

It is the faulty treatment of the hoof when in the farrier's hands, and the erroneous notions which prevail as to the application of the shoe, which bring undeserved discredit upon

hoeing. Because ordinary shoeing is productive of harm, shut is no reason why we should seek to discard shoes. In fact, we cannot do so; and those who attempt it will assuredly bring themselves within the notice of the Society for the Prevention of Cruelty to Animals. If they persist in working footsore horses merely to indulge a silly craze, they place themselves pretty nearly on a level with those who so frequently figure in the police court as guilty of cruelty.—*Veterinary Journal for August.*

LORD WINMARLEIGH ON THE CATTLE DISEASES ACT.

At the annual meeting of the Royal North Lancashire Agricultural Association, held at Lancaster,

LORD WINMARLEIGH gave the toast of the day, “Success to the Royal Agricultural Society.” He said—I am not able to give you an opinion of the success of our meeting beyond what any other individual might do. I have no opinion, but I have a great dislike to being thought wrong and I believe I shall best keep myself from an accusation of that sort by saying nothing at all as to the merits of the show till we see what the judges say, and when those judges have expressed their opinion I shall try to make mine as much as possible in accordance with theirs. As you are aware, it would be contrary to all rule and precedent if I were to indulge in anything like a political speech. But, at the same time, this is an agricultural meeting, and I may remind you that we have just finished a session of Parliament in which one or two measures have been passed that are of some importance to the agricultural community of this country, and the omission on my part of any allusion to those measures would hardly be justified on this occasion. The first of those measures is one in which not only as agriculturists, but also as members of the community at large, we are all deeply interested—I allude to the Act which is commonly called the Cattle Diseases Act. You know that that Bill was introduced for the purpose of giving protection to the agriculturists by preventing as far as can be, the possibility of our flocks and herds being affected by the foot-and-mouth disease, or by any of the other diseases that affect cattle. That measure has engaged a material part of the discussions that have taken place in Parliament during the last session. I took some part in the passage of that measure myself, and I do not hesitate to say that I did vote for the Bill as one which would entirely exclude the importation of live cattle into this country, and thus keep out the foot-and-mouth disease and other contagious and infectious complaints as far as possible. But in the course of the discussion which took place it became manifest that there was a great fear first on the part of the population generally, that this would lead to an increase in the price of meat; and secondly, on the part of the agriculturists, that their cattle might be infected by the importation of live animals—and although the question was not political—for parties on the Opposition side voted with the Ministry, while those who sat on the Ministerial side of the House voted against the Ministry and with the Opposition—it became almost a question as between town and country whether the Bill should be carried as it was. Having given my vote upon the measure I do not hesitate to say that I think Her Majesty's Government and Parliament were perfectly justified in coming to the conclusion they arrived at—that if the town population believed the price of meat would be increased by the restrictions contained in the Bill no Government would be justified in refusing to pay attention to that consideration. I believe, now we have at last got to the end of the session, that if the Privy Council exercise the discretion which has been vested in them with judgment and prudence, and at the same time with energy, we shall be successful in preventing our flocks and herds being infected by the diseases imported from foreign countries. But when I say this, and when I expressly address those members of the farming community who belong to my identical neighbourhood, I would venture to suggest to them an argument which I have met with in the course of the discussion on this question, and which, I think, is deserving of attention. It was suggested to me by one of the leading representatives of one of our town populations, that while we are imposing these restrictions on the importation of foreign

cattle, we are not taking sufficient care to check the spread of these infectious and contagious diseases in this country itself. I venture to suggest that the farmers of this country should try to aid the Government in watching the progress of disease where manifested, and thus enforcing the law, and ensuring the slaughter of all the cattle in their neighbourhood which may endanger their own herds. There is another measure which has been before Parliament, which belongs especially to the agricultural body, and that is the measure for regulating weights and measures. In the very early part of my political life, which goes back beyond the memories of most of those present, I assisted in bringing forward a measure for regulating weights and measures in this country. I propounded it at all agricultural meetings, but I met with so little encouragement that I gave it up, and the same system has gone on, and there is now no one here who knows the prices of farm produce in Gloucester and Cambridge, and on the other hand there is no farmer in Gloucester or Cambridge who knows the prices of farm produce in this county of Lancaster. But more than that. I live near Garstang, and my tenants, who take their wheat to Garstang, don't know how the farmers at Lancaster will sell their wheat. In Garstang we have a winkle of three and a half bushels. At Lancaster there is another measure, and if we have to sell in Liverpool the Liverpool bushel weighs 70 lb.—and that is the way, according to our present system of weights and measures, that the farmers are kept in ignorance, and they know no more about the price of wheat throughout England than the man in the moon. I will venture to make a suggestion. I dare say it is 30 years since I made it, and I will make it again. It is this—we have got now a new Weights and Measures Bill, which if you will carry it out (I know you won't, for it is only to be done by great exertions and the unanimity of the agricultural body) will result in great benefit to the agricultural community. The Press of this country can assist us most materially in getting a correct system of weights and measures if they only, in quoting the prices, will put the quotations in two columns, in one giving the local price, and in the other giving the price according to the imperial measure. I venture to suggest that to the editors of the different newspapers, and if the committee of the Society will help in carrying out the new Weights and Measures Bill we may in time come to common sense.

The speeches which followed were somewhat marked by a want of unanimity. A farmer who responded on behalf of the judges strongly deprecated Lord Wynnarleigh's adhesion to the Cattle Diseases Bill, and urged that all foreign cattle should be slaughtered at the place of landing.

GOOD DEEDS.—The weary traveller in the South of Spain, who, after passing many an arid plain and many a bare hill, finds himself at nightfall under the heights of Granada, will hear plashing and rippling, under the shade of the spreading trees and along the side of the dusty road, the grateful murmur of running waters, of streamlets whose sweet music mingles with his dreams as he sleeps, and meets his ear as the first pleasant voice in the stillness of the early dawn. What is it? It is the sound of the irrigating rivulets called into existence by the Moorish occupiers of five centuries ago, which, amidst all the changes of race and religion, have never ceased to flow. Their empire has fallen, their creed has been suppressed by fire and sword, their nation has been driven from the shores of Spain, and their palaces crumble into ruins; but this trace of their beneficial civilization still continues, and in this continuity that which was good, and wise, and generous in that gilded but unhappy race still lives on to cheer and refresh their enemies and their conquerors. Even so it is with the good deeds of those who have gone before us. Whatever there has been of grateful consideration, of kindly hospitality, of far-reaching generosity, of gracious charity, of high-minded justice, of saintly devotion—these will feed the stream of moral fertilisation, which will run on when their place knows them no more, when even their names have perished. The vision of a noble character, the glimpse of a new kind of virtue, does not perish. A thing of goodness, like a thing of beauty, is a joy for ever.—DEAN STANLEY.

NATIONAL PROGRESS.

Mr. H. P. Gibbey writes to *The Times*:

Many of your readers appreciate and make a daily reference to your weather chart and forecast, and this fact induces me to send you a list of some of the principal articles consumed in the United Kingdom since the year 1810, and which may be accepted as a national barometer:—

TABLE SHOWING CONSUMPTION PER HEAD OF THE POPULATION.

Year ending	Malt for					
	Mar. 31, Spirits.	Wine.	Beer.	Tea.	Sugar.	Tobacco.
	Gal.	Gal.	Bush.	Lb.	Lb.	Lb.
1810	0.97	0.25	1.59	1.22	15.20	0.86
1841	0.90	0.23	1.31	1.37	16.99	0.83
1842	0.82	0.18	1.32	1.38	16.04	0.82
1843	0.81	0.22	1.30	1.48	16.55	0.94
1844	0.87	0.25	1.34	1.50	16.80	0.89
1845	0.96	0.24	1.30	1.59	19.58	0.94
1846	1.01	0.24	1.49	1.67	20.83	0.96
1847	0.92	0.22	1.25	1.66	23.14	0.95
1848	0.97	0.22	1.34	1.75	24.73	0.93
1849	1.02	0.23	1.40	1.81	23.91	1.00
1850	1.04	0.23	1.47	1.85	24.79	1.00
1851	1.05	0.23	1.46	1.97	25.49	1.02
1852	1.10	0.23	1.48	1.99	28.15	1.04
1853	1.10	0.25	1.49	2.14	29.57	1.07
1854	1.13	0.24	1.29	2.24	32.51	1.10
1855	0.96	0.23	1.24	2.28	29.22	1.09
1856	1.01	0.25	1.48	2.26	27.34	1.16
1857	1.03	0.24	1.58	2.45	28.30	1.16
1858	0.98	0.22	1.59	2.53	33.50	1.20
1859	1.01	0.24	1.67	2.67	33.85	1.21
1860	0.93	0.23	1.45	2.67	33.11	1.22
1861	0.86	0.37	1.61	2.69	35.49	1.20
1862	0.83	0.33	1.50	2.70	34.94	1.21
1863	0.85	0.35	1.67	2.90	35.97	1.27
1864	0.90	0.39	1.75	3.00	36.90	1.29
1865	0.94	0.40	1.74	3.29	39.78	1.31
1866	1.01	0.44	1.82	3.42	41.40	1.35
1867	0.99	0.45	1.67	3.68	43.19	1.35
1868	0.98	0.50	1.73	3.52	42.01	1.35
1869	0.98	0.48	1.71	3.63	42.56	1.35
1870	1.01	0.49	1.84	3.81	47.23	1.34
1871	1.06	0.51	1.72	3.92	46.80	1.36
1872	1.15	0.53	1.93	4.61	47.37	1.37
1873	1.23	0.56	1.98	4.11	51.59	1.41
1874	1.27	0.53	1.94	4.23	56.37	1.44
1875	1.30	0.53	1.95	4.44	62.85	1.46
1876	1.27	0.56	2.00	4.50	58.95	1.47
1877*	1.21	0.55	2.01	4.50	60.00	1.48

*Estimated consumption for year.

The necessities tea and sugar, it is satisfactory to see, have made regular progress, as also has tobacco, which is accepted as a partial necessary, while the luxuries beer, wines, and spirits have fluctuated in the ratio of prosperous or depressed times. It is true during the period important alterations in taxation have occurred, causing a temporary effect upon consumption, but the most notable feature is the effect of the convulsive rise in wages in the years 1872 to 1876. If wages are receding to their normal state these figures are worthy the study of all political economists.

SCARCITY RULES VALUE.—A Scotchman who was sailing with a number of ladies in a boat—(including his wife, her sister, her mother, and his mother)—and the boat having been overturned near the shore by a squall, shouted out to the rescuers to save one old lady in particular, who was afterwards found to be his mother. On being asked why he did not point out his wife as the chief object to be rescued, he calmly replied, "Weel, ye see, a man can get as many wives as he needs—but he can never get another mither."—*Ayr Advertiser.*

A Kentucky farmer writes to the local paper: "I shall not sell my eggs for eight cents a dozen—it don't pay for the wear and tear of the hen."

AGRICULTURAL SOCIETIES.

STAFFORDSHIRE.

The authorities of the Staffordshire Agricultural Society did good service in holding their annual meeting and perhaps half the rural visitors to the showyard on the day had never been to a county agricultural show in the district which is known as "The Moorlands." Leek is about an equal distance—seven or eight miles—in three directions from Derbyshire and Cheshire—viz., due north, where the latter counties meet, and due east and west. This headland of Staffordshire was once principally composed of moors, but as they have been brought into cultivation, or converted into clean permanent pasture, it is now termed "The Moorlands."

The main object of an Agricultural Society is, of course, to improve farming in all its branches in the county or counties where it holds its meetings. In order to carry this out effectually, it is not sufficient for the authorities to hold their annual shows every year in large and populous towns where there is a better chance than in smaller places of increasing their funds. But they must occasionally go to out-lying towns containing a small population, and where the inhabitants around are comparatively few and scattered from the business being almost exclusively of an agricultural character. The latter course has been pursued on the present occasion. Leek is in the centre of a district which until recently has been singularly difficult to get to or from, and now that a railway junction is there it consists in the meeting of cross-country lines that do not often fit in conveniently with more direct systems. The farming population of the Moorlands have not, therefore, been frequent travellers, before. The inference to be drawn is that much good has been done by the collections of live stock, cheese, butter, corn, roots, engines, implements, and machines that were displayed in Bull Haye Park on September 18 and 19. No one can say what seed has been sown in the youthful agricultural mind of "The Moorlands" by what was there to be seen; and many improving, not to say distinguished, farmers and husbandmen, who may be leading and respectable men a few years hence, will probably be able to date their first impressions from their visit to the county show at Leek in 1878. By the following table it will be seen at a glance the numbers of live stock that were exhibited, and also the numbers of entries at meetings of two previous years:—

	1878.	1877.	1876.
Cattle	113	103	97
Horses	131	120	132
Sheep	83	65	57
Pigs	68	50	54
Extra stock ...	33	19	25
Poultry	323	220	220
	<hr/>	<hr/>	<hr/>
	749	577	586

PRIZE LIST.

JUDGES.—SHORTHORNS: J. Lynn, Grantham; H. Doding, Wragby; G. Gurne, Chipping Norton. STEWARDS.—E. Knight, Smallrise; G. Bagnall, Draycott. [The above also acted in the same capacity for PIGS.]—CATTLE OF ANY BREED BEST ADAPTED FOR DAIRY PURPOSES: W. Tomlinson, Bradley Pastures, Ashbourne; G. G. Blantern, Hasnall; E. Little, Chippenham. STEWARDS: F. E. Richardson, Bramshall; W. Brough. [The above also acted for LEICESTERSHIRE and LONG-WOOLLED SHEEP.] SHEEP: T. J. Mansell, Dudmaston Lodge, Bridgnorth; J. H. Bradburn, Lichfield. STEWARDS: W. T. Carrington, Croxden Abbey; R. Timmis, Endoo.—HORSES: H. Lowe,

Comberford; T. Wibberley, Walton, Stone. STEWARDS: J. Wright, Son on; J. Chappells, Leek.—FOR HUNTING PURPOSES: T. Mansell, Shuffard; T. H. Hutchinson, Catterick; Major Browne, Lichfield. STEWARDS: Capt. Colville, Churnet Grange; F. A. Worthington, Leek.

CATTLE.

SHORTHORNS.

Bull, not less than two nor exceeding five years old.—First prize, £10, and the Society's Silver Medal, the Earl of Lichfield, Shugborough (Sir Arthur); second, £5, G. Wood, Croxden Abbey, Uttoxeter (Nobleman).

Bull, one year old.—Prize £1, and the Society's Medal.—T. Smith, Hollington, Uttoxeter.

Bull calf.—First prize, £7 10s., T. Nash, Wolverhampton (Duke of Montreal); second, £5, T. S. T. Carrington, Eaton, Doveridge.

Cow, any age.—First prize, £10 10s., the Earl of Lichfield (Theresa); second, £5 5s., T. S. T. Carrington (Daisy).

Heifers in pairs, in calf or in milk, not exceeding three years old.—First prize, £5, T. Nash (Blanche) (Empress); second, £4, W. T. Carrington, Uttoxeter.

Heifers in pairs, under two years old.—First prize, £5, W. T. Carrington (Proud Cambridge Princess) (Bronley Maid); second, £3, W. T. Carrington.

CATTLE OF ANY BREED BEST ADAPTED FOR DAIRY PURPOSES.

Bull, not less than two nor exceeding four years old.—First prize, £10, and the Society's Silver Medal, W. T. Carrington Shorthorn (Prince Patrick's); second, £5 5s., H. Lownds Throley, Ham, Ashbourne, Shorthorn.

Bull, under two years old.—First prize, £10 10s., T. Nash, Shorthorn (Duke of Goldsmith); second, £5 5s., W. H. Hall, Cheadle, Shorthorn (Floverer).

Bull, any age or breed, the property of a tenant farmer, residing within eight miles of Leek.—First prize, £5, J. Fletcher, Macclesfield, Shorthorn; second, £3, H. Warrington, Leek, Shorthorn.

Cows in pairs, four years old and upwards.—First prize, £10, W. T. Carrington, Shorthorns (Cherry Eth) (Beauty); second, £5, W. T. Carrington, Shorthorns.

Cows in pairs, the property of a tenant farmer in the Leek district.—Special prize of £5 5s., G. Bagnall, Shorthorn.

Cows in pairs, under four years old.—First prize, £10, W. T. Carrington, Shorthorns (Cherry 5th) (Young Dairymaid); second, £5, W. T. Carrington, Shorthorns.

Cows in pairs, the property of a tenant farmer in the Leek district.—Prize, Silver Cup, value £5 5s., G. Bagnall, Shorthorns.

Heifers in pairs, in calf or in milk, under three years old.—First prize, £10, T. S. T. Carrington (Damsel) (Beauty); second, £5, T. Nash, Shorthorns (Malbran 11th) (U. Collins Lass); third, £3 3s., G. Bagnall, Shorthorn.

Heifers in pairs, in calf or in milk, under three years old, the property of a tenant farmer within eight miles of Leek.—First prize, £5 5s., U. Prince, Leek, cross-bred; second, £3 3s., J. W. Bassett, Ashbourne.

Heifers in pairs, in calf or in milk, not exceeding three years old.—First prize, £5, the Earl of Lichfield, Shorthorns (Daisy) (Violet); second, £3, T. S. T. Carrington (Columbine) (Comely).

Heifers in pairs, under two years old.—First prize, £4, and second, £3, W. T. Carrington, Shorthorns; third, £2, G. Wood, Shorthorn.

Cow of any age or breed, in calf or in milk, the property of a cottager within eight miles of Leek, who does not keep more than two cows.—First prize, £3, S. Eardley, Tunstall (Duchess of Keelo); second, £1 10s., J. Goldstraw, jun., Leek, cross-bred.

Extra prize of £1, W. Brooks, Leek, Shorthorn (Cherry).

FAT STOCK.

Cross-bred roan heifer.—First prize, £10, and second, £6, R. Ratcliff, Burton, Shorthorn.

Beast, the property of a tenant farmer in the Leek district—Special prize of £5 5s., G. Bagnall, Shorthorn.

LONGHORNS.

Bull under four years old.—Prize, £5, W. J. Legh, Stockport (Lord Darley) (Blucher).

SHEEP.

SHROPSHIRE.

Ram.—First prize, £5, W. Warrington; second, £3, C. Byrd, Stafford.

Shearling ram.—First prize, £5 and Society's Silver Medal, S. C. Pilgrina, Huckleley; second, £3, W. S. Tavernor, Stafford.

Ram lamb.—First prize, £5, C. Byrd; second, £3, W. S. Tavernor.

Five breeding ewes.—First prize, £5, C. Byrd; second, £3, Col. H. B. Lane.

Five breeding ewes (Local Class), the property of a tenant farmer whose farm is within eight miles of Leek.—First prize, £5 5s., W. Bassett, Leek; second, £3 3s., J. Bennion, Leek; third, £2 2s., W. Moss, Leek.

Five shearling ewes.—First prize, C. Byrd; second, £3, S. C. Pilgrim.

Five fat sheep.—Prize £5 5s., H. Lovatt, Bushbury, Wolverhampton.

Five ewe lambs.—First prize, £3, R. Wyatt; second, £2, C. Byrd.

Ten breeding ewes.—First prize, £10, G. Bagnall; second, £5, B. Goodall.

Ten thieves, the property of a tenant farmer gaining his livelihood by farming.—First prize, £10, and second £5, G. Bagnall.

Twenty ewe lambs, bred by exhibitor in Leek district.—First prize, £5, T. Fielding, Stoke; second, £3, Mrs. Bailey, Cheadle.

EXTRA STOCK.

Medal, C. Byrd, Shropshire ewe.

HORSES.

FOR AGRICULTURAL PURPOSES.

Entire horse (open to the United Kingdom).—First prize, £50, and Society's Silver Medal, on condition that the horse travels through the district, F. Crowthorpe, Yorkshire (Carleton Tom); second, £20, J. Busby, Stafford (Staffordshire Hero).

Entire horse, not exceeding three years old.—Prize £10, B. Finney, Stone.

Mare and foal, the property of a tenant farmer in the Leek district.—First prize, £10 and 17 7s., T. Lowndes (Darling); J. Hawksworth, Derby (Farmer); second (extra), £5 5s., H. Johnson, Leek (Darby).

Geldings or mares in pairs.—First prize, £10, T. Orme, Derby (Jewel) (Flower); second, W. R. and J. Birch, Leek (Bonny) (Rose).

Colt, three years old.—Prize £5, Mrs. Burnett, Leek (Lion).

Filly, three years old.—Prize £5, T. Carter, Gunside, Leek (Poppit).

Gelding, two years old.—First prize, £6, J. Brandon, Stone (Merriman); second, £4, F. Whitgreave, Stafford (Captain).

Filly, two years old.—First prize, £6, T. Lowndes (Madam); second, £4, C. E. Lyon (Gipsy).

Gelding or filly, one year old.—First prize, £6, W. Bassett; second, £4, G. Stimpson, Ashbourn.

FOR HUNTING PURPOSES.

Gelding or mare equal to 15 stone.—First prize, £20, G. H. Allsopp, Burton (Justice); second, £10, W. T. C. Mynors, Stafford (Gamester).

Gelding or mare equal to 12 stone.—First prize, £10, J. Sturdy, Wiggington, Tamworth; second, £5, W. A. Smith, Lichfield (Ladybird).

Filly, four years old, no prize to be awarded unless the animal is considered to be worth 70 guineas.—First prize, £15, J. Sturdy; second, £10, E. Baddeley, Stoke-upon-Trent.

Mare, with foal at foot, suitable for breeding hunters.—First prize, £8, The Stonetrough Colliery Company, Lawton, Cheshire (Brayton); second, £4, A. Goodwin, Leek Frith, Leek (Kitty).

Harness geldings and mares in pairs.—Prize, £10, P. Jackson, Stoke-upon-Trent (Olive) (Dolly Varden).

Cob mare and gelding.—First prize, £6, G. Moore, Atherton; second, £4, F. Walters, Stoke-upon-Trent.

EXTRA STOCK.

Medal, S. Cook, Fentou, Stoke; medal, J. Brandon, Stone.

PIGS.

LARGE BREED.

Boar: First prize, £3 and Silver Medal, M. Walker, Derby; second, £2, G. Bradford, Hanley.

Breeding sows: First prize, £3, R. Tommas, Birmingham; second, £2, W. S. Brough, Leek.

SMALL BREED.

Boars: First prize, £3, second prize, £2, and Silver Medal, R. Tommas; second, £2, G. Bradford.

BERKSHIRE BREED.

Boars.—First prize, £3, and Silver Medal, G. Hughes, Leek; second prize, £2, J. Langley, Darby.

BREEDING SOW.

First prize, £3, J. Langley; second, £2, R. Tommas.

ANY BREED.

Pens of not less than three pigs.—First prize, £4, R. Tommas; second, £2, R. Hall, Derby; third, £1, W. Warrington, Leek.

FAT PIGS.

Large breed: First prize, £3, S. Godwin, Leek; second, £2, R. Tommas.

Small breed: First prize, £3, and second, £2, W. Warrington, Leek.

Cottager's Fat Pig: First prize, £3, J. Jackson, Leek; second, £2, J. R. Nettel, Leek.—*Staffs. Advertiser.*

WARWICKSHIRE.

MEETING AT COVENTRY.

A beautiful day, an eligible site on the outskirts of the town, a well-arranged showyard, an excellent assemblage of horses and stock, and a fair gathering of sightseers made the opening day of this meeting a success for the famous old "city of the three spires." The outing was an enjoyable one, and everybody appeared to be pleased and satisfied. The number of entries, though really small, was greater than at Alcester last year, and the quality of the live stock throughout was excellent. The horses and horned stock were arranged in bedding covered with canvas, ranging nearly round the showyard, which would have been quite safe had the weather proved to be unfavourable. The classes were partly open and partly local, and the result was that many good animals were sent for competition. Thus in the Shorthorn division, although in the aged bulls' class the only prize was one of £10, there were standing in their places—and it is to be noticed that there were throughout the show fewer absentees than in any county meeting we remember to have attended—the Marquis of Exeter's Telemachus 9th, Mr. T. H. Bland's General Fusee, Mr. R. Stratton's Protector, and Mr. St. John Ackers' Clovis, all of which are well-known showyard animals. The award fell easily enough to Telemachus 9th, an animal which could not well be mistaken for any other than a Telemachus. He has the rounds, thighs, twist, and quarters of Telemachus 6th, carries a great thickness of flesh, is good in his loin, back, and chine, wide in his brisket, and massive in front, is of a good colour, and has a nice countenance; but his shoulders are rather bare, and he is a little flat in the rib, not as good as Telemachus 6th, but still a first-rate animal. To General Fusee was awarded a high commendation, and we have, on more than one occasion, spoken of him as a very useful bull, well adapted to improve the stock of the country. He has rather a coarse head, and might be better in his rounds and twist; but he handles well and is of fairly good quality. Clovis is a very uneven bull, badly so all over. Mr. Nash showed a bull that has taken several local prizes, Duke of Trentham by Duke of Waterloo (28464), but he is not a very good handler although he has merits. The second class was for bulls

"over 20 months and under three-years-old," and here Mr. J. Elwell's Bainesse Windsor secured the first place, over the head of Mr. R. Stratton's Pearl Diver, who was placed before him at the Royal. This decision can scarcely be supported, because the latter is an animal of far better style and character, very level, with an excellently well set on tail, level rump, and long quarters; whilst Bainesse Windsor with his good hide and coat and greater thickness is, despite the lighter forehead of Pearl Diver, not in our opinion as good a Shorthorn. The third prize went to Mr. Sharpe for a bull bred by Mr. H. J. Sheldon, which may be described as useful and nothing more. Mr. St. John Ackers' Sir Roland is a nice quality animal—as most of Mr. Ackers' stock are—but he has a bad chine and flat ribs, and, like Clovis, is uneven. Mr. T. H. Bland's General Favourite is narrow in the girth, wants furnishing, and is short; but he is tolerably level, handle well, and is of very fair quality. Mr. Hopkins, of Worcester, showed a very stylish bull with soft, mellow hide (Scarlati); but he had no chance, nor had a useful bull belonging to Mr. Staite, of Leamington, from the late Mr. J. Dugdale's stock, a Baron Priesley, which, though of no use in a showyard, is likely to be of use in the herd, and to the neighbourhood. The next class was for bulls "over 10 and under 20 months old," in which Mr. R. Stratton's Antunus took the lead. This animal was highly commended, and held the reserve number at the Royal, and is undoubtedly promising. Mr. Nash's Duke of Goldsmith, an older and bigger animal, took second prize, and Mr. Garne succeeded in taking a third with his Count Geneva. For Shorthorn cows Mr. St. John Ackers' Princess Georgie took the first prize, and Phantom 5th, a plain cow, bred and exhibited by Mr. G. Garne, was placed second, Mr. J. J. Sharpe taking a high commendation for a fat cow with a very patchy rump. The heifers in milk or in calf were a very creditable lot indeed. Wild Flower, bred and exhibited by Mr. R. Stratton, took the lead, and a real good one she is, with excellent points and plenty of good hair—an ornament to anybody's herd, though scarcely deserving to be placed before Captain G. A. Ashby's Innocence, which took the second award, Mr. St. John Ackers' Lady Carew 2nd being highly commended. The position of these two heifers was the same as at the Royal, in respect to each other, and the reverse of that in which they stood at Oxford, where, indeed, Innocence was not noticed at all. Mr. G. Garne's Portrait 11th and Portrait 12th were highly commended and commended respectively, and a very nice pair they are. Mr. T. Nash showed a nice red roan heifer (Eupress), which was commended, and a plain one with a good coat, Blanche; Mr. J. Darlington's heifer, Chance 10th, would have stood a better chance but for a harsh touch; and Lord Leigh's two heifers had plenty of scale but no character to entitle them to notice in a showyard. Altogether, this class was about the best of the Shorthorns. The yearling heifers were but middling, there being but two animals at all in the competition; these were the Marquis of Exeter's Coralina, by Telemachus 6th, and Mr. St. John Ackers' Lady Carew 3rd. To put the latter before the former we think an unaccountable mistake; as the Telemachus heifer is of good colour—as all the family are—has an excellent coat, is short in the leg, fine in the bone, of good quality, and has all the character of her sire; whereas, Lady Carew 3rd, highly commended at Bristol, has fat instead of flesh, is bare-backed, patchy-rumped, and plain-headed, though her quality, like that of all her family, is undeniably good. Nevertheless, she won.

There were four classes of Longhorns, and the breed may be supposed to have been fairly represented on its own ground. But if the plain truth has to be spoken there was

nothing there that commanded itself to us either by eye or by hand. The dairy cattle entered for competition in the classes which were purely local were, as usual under these circumstances, very useful but not very striking. The pairs were not well matched in the cow classes. Mr. J. A. Beile's first prize pair of tenant farmers' cows, were, for instance, very good, but very unlike, one of them being a decent Shorthorn, and the other a fine milk walk cow of the old Yorkshire type. Lord Leigh exhibited a pair of very useful and promising heifers, and Mr. W. T. Wakefield's 22 months old heifer, Vintage, first in her class, was deserving of great praise.

The sheep were few and very select. Mr. G. Turner represented the Leicester breed with four third-rate entries which were awarded the prizes. But, Mr. John Gillett, of Charlbury, filled the three classes of Cotswolds with four of his very best sheep, got up quite in "Royal" form, and took the awards of course. It was like cracking a nut with a steam hammer. Then came a very interesting class for "other longwoolled sheep," and next the Shropshires. Here Mr. Baker, of More Barns, who was also very successful at Derby, had it all his own way with rams, and was first with ewes; but Mr. C. Pilgrim's second prize shearling ewes were to our mind better character Shropshires, and Mr. H. Town-head's highly commended pen were capital sheep. Lord Leigh's selection did not do much credit to his flock.

There was a good lot of pigs. The Colley dogs, were judged by their points instead of by their ability to work a flock of sheep.

There were no less than 170 entries of horses, with scarcely an empty stall. The two classes for stallions were on local conditions. For those which had been used in the county of Warwickshire during the past season, Mr. T. Hodges, of Long Marston, took first prize with a rather leggy but useful stamp of horse, Mr. W. Rogers' second prize horse from Rugby being clean-fibred and well-made all but his neck, and Mr. W. Wynn's older black horse, whose legs are not so clean, was put third. For cart stallions "to stand one day each week at Coventry" Mr. W. Barber, of Atherstone, won with a rare stamp of Shire-bred horse, there being two other entries. Mares and foals were fairly good, and there was said to be a good show of hunters. At all events the attraction was very great at that end of the yard; but we did not see them.

Amongst the exhibitors of implements we noticed several local firms and a few of the more noted makers, and a very clever little one-horse portable engine exhibited by Messrs. T. L. Gillett and Co., of Coventry, which looked very little bigger than a model, but worked well, and was driven by a boy in knickerbockers. The cylinder of this baby engine is a four-inch, and the stroke $6\frac{1}{2}$ inches. It looked exceedingly like being used for it could so easily be moved and adapted to the various kinds of steam-work required on a farm. There is no doubt this clever little engine would do a great deal of work if it were used for one implement at a time as grinding, chaff-cutting, pulping, &c., are all well within its power.

There was a small show of cheese and butter, and there were some well-contested classes for hedging, draining, and ploughing—judging by the latter, which could be seen from the rail—but the distance from the show-yard was greater than the time at our disposal would enable us to undertake. Altogether the Coventry meeting was a most successful show and enjoyable outing.

PRIZE LIST.

JUDGES.—CATTLE: Mr. R. Wood, Clippstone Park, Mansfield; Mr. T. Morris, Malsmore Court, Gloucester. AGRI-CULTURAL HORSES: Mr. Henry Lowe, Coventry.

Tamworth; Mr. Parsons, Chorwilton, Banbury. HACKS, HUNTERS, PONIES, &c.: Colonel Luttrell, Badgworth Court, Axbidge; Mr. H. Sanders, Brampton Hill, Northampton. SHEEP AND PIGS: Mr. R. J. Newton, Cumpsfield Farm, Woodstock; Mr. J. Lynn, Stroxtou, Grantham. DOGS: Mr. Mapplebeck, Chessetts Wood, Knowle. IMPLEMENTS: Mr. G. Lowe, Wellington Terrace, Sutton Coldfield. CHEESE AND BUTTER: Mr. H. Scampton, Coventry. PLOUGHING AND DRAINING: Mr. Burchinal, Drakelow, Burton-on-Trent; Mr. E. Wayte, Prescott Manor, Cropredy. HEDGING AND THATCHING: Mr. T. Arnold, Catton, Burton-on-Trent; Mr. R. H. Masfen, Pendeford, Wolverhampton. HORTICULTURAL DEPARTMENT: Mr. William Hewitt, nurseryman, Solihull; Mr. A. Hossack, gardener to the Marquis of Hertford, Ragley Hall, Alcester.

CATTLE.

SHORTHORNS.

Bull above three years old.—Prize, £10 the Marquis of Exeter, Burghley Park, Stamford (Telemachus IX).

Bull over twenty months and under three years old.—First prize, £10, J. Elwell, Timberley, Castle Bromwich (Bainsse Windsor); second, £5, R. Stratton, The Duffryn, Newport (Mon.), (Pearl Diver); third, £2, J. J. Sharpe, Broughton, Kettering.

Bull over ten and under twenty months old.—First prize, £10, R. Stratton (Autumnus); second, £5, T. Nash, Featherstone, Wolverhampton (Duke of Goldsmith); third, £2, G. Garne, Churchill Heath (Count Geneva).

Cow in milk, above three years old.—First prize, £10, B. St. J. Ackers, Prinknash Park, Painswick; second, £5, G. Garne.

Heifer, under three years old, in milk or in calf.—First prize, £10, R. Stratton; second, £10, G. Ashby, Rugby.

Heifer, under two years old.—First prize, £8, B. St. J. Ackers; second, £4, the Marquis of Exeter.

LONGHORNS.

Bulls.—First prize, £5, R. Hall, Thurston Grove, Derby (Blue Knight).

Cow or heifer, in milk.—First prize, £5, R. Hall; second £3, S. Forrest, Kenilworth.

Bull, under two years old.—Prize, £10 and £5, J. Godfrey Wigston Parva.

Heifer, under two years old.—Prize, £5, R. Hall.

CATTLE BEST ADAPTED TO DAIRY PURPOSES.

Pair of cows, in milk, which have been used in the exhibitor's dairy for the last two seasons.—First prize, £10 H. Townshend, Caldicott Hall, Nuneaton; second, W. Farmer, Chesterton.

Pair of dairy cows, the property of a tenant farmer residing within fifteen miles of Coventry, and having been in his possession not less than twelve months.—Prize, £25, J. A. Beale, Brockhurst.

Shorthorn cow, with her produce, calved in 1878, the property of a tenant farmer within fifteen miles of Coventry.—Prize, 10gs., W. T. Wakefield, Fletchamstead Hall.

Shorthorn heifer, the property of a tenant farmer within fifteen miles of Coventry.—Prize, 10 gs., A. Walker, Rugby.

Pair of Shorthorn heifers, above eighteen months and under two years old, exhibited and bred by a member of the Society resident within fifteen miles of Coventry.—Prize, 10 gs., W. T. Wakefield.

Shorthorn bull, above twelve months and under eighteen months old, to be at the service of the tenant farmers in the county of Warwick, at not more than £1 per cow; the exhibitor to reside within fifteen miles of Coventry.—Prize, T. Hauds, Canley (4th Baron Shendish).

SHEEP.

The show of sheep was not so large as might have been expected, but any shortness of number found its compensation in the good general quality of the exhibits.

LEICESTERS.

Shearling ram.—First prize, £6, and second, £3, G. Turner, jun., Thorpeplands, Northampton.

Two-shear ram.—No entry.

Five shearling ewes.—First prize, £5, and second, £3, G. Turner, jun.

COTSWOLDS.

Shearling ram.—First prize, £6, and second, £3, J. Gillett Ozklands, Charlbury.

Two-shear ram.—First prize, £6, J. Gillett.
Five shearling ewes.—First prize, £5, J. Gillett.

OTHER LONG-WOOLLED SHEEP.

Shearling ram.—First prize, £5, T. W. D. Harris, Wootton, Northampton; second, W. Wheeler, Long Compton.
Five shearling ewes.—First prize, T. W. D. Harris.

SKROPSHIRE.

Shearling ram.—First prize, £6, and second, £3, W. Baker, Moor Barns.

Two-shear ram.—First prize, £6, and second, £3, W. Baker.
Five shearling ewes.—First prize, £5, W. Baker; second, £2, S. C. Pilgrim, The Outwoods, Ilunkley. Highly commended: Lord Leigh and H. Townshend, Caldecote Hall, Nuneaton.

PIGS.

Boar pig of a large breed (except Berkshire) under 16 months.—First prize, R. Tommas, Winson Green, Birmingham; second, G. P. Rayner, Dunchurch Hall.

Boar pig of a large breed (except Berkshire) above 18 months.—Prize, £3, R. Tommas.

Boar pig of the small breed under 18 months old.—First prize, £3, S. Spencer, Holywell, St. Ives, Hunts.; second, Lord Moreton, Totworth Court, Gloucestershire.

Boar pig of small breed above 18 months old.—First prize, £3, S. Spencer; second, £2, Lord Moreton.

Sow pig of the Berkshire breed, under 18 months old.—First prize, £3, and second, £2, H. Humphrey, Shrivenham.

Boar pig of the Berkshire breed, above 18 months old.—First prize, £3, and second, £2, H. Humphrey.

Breeding sow, suckling pigs of her own farrow, and in milk at the time of the show, of large breed (except Berkshire).—First prize, £3, W. Wheeler, Long Compton; second, Mr. Godfrey, Wigston Parva.

Breeding sow of the small breed, suckling pigs of her own farrow, and in milk at the time of the show.—First prize, £3, Lord Moreton; second, £2, W. Wheeler.

Berkshire sow, suckling pigs of her own farrow, and in milk at the time of the show.—First prize, £3, B. St. J. Ackers, Painswick; second, £2, F. J. Walker, Mercote Hall.

Three breeding pigs of one farrow of 1878, of large breed.—Prize, £2, S. Spencer, Holywell, St. Ives.

Three breeding pigs of one farrow of 1878, of small breed.—Prize, S. Spencer.

Three breeding pigs of one farrow of 1878, of Berkshire breed.—Prize, £2 H. Humphrey.

Sow of any breed and suckling pigs of her own farrow.—Prize, £2, G. P. Rayner, Dunchurch Hall.

HORSES.

AGRICULTURAL.

Stallion which has been used in the county in 1878.—First prize, £15, with £5 added, T. H. Hodges, Long Marston; second, £10, W. Rogers, Combe Field, Rugby (The General); third, £5, W. Wynn, Ryon Hill (Chimney Sweep).

Mare, with foal at her foot.—First prize, £10, E. Pease, Green Copt, West Darlington (Clydesdale); second, £5, W. Wynn (Queen of Trumps).

Gelding under three years old.—First prize, £5, R. H. Timms, Braunston, Rugby; second, £2, R. H. Timms.

Filly under three years old.—First prize, £5, J. A. Beale, Brockhurst; second, £2, W. Hurlston, Ditchford Friary.

Gelding under four years old.—First prize, £5, J. Hawkes, Farnborough (Captain); second, £2, J. Garner, Tachbrook Hill.

Filly under four years old.—First prize, £5, Lord Ernest Seymour, Kingley, Alcester; second, £2, T. Proof, Church Bickenhill.

Cart gelding, above four years old, that has been regularly worked.—First prize, £5, E. Humphries, Mount Pleasant Hill, near Tamworth (Champion); second, £2, J. R. W. Inn, Coundon, Coventry.

Cart mare, above four years old, that has been regularly worked.—First prize, £5, T. Russell, Lower Shuckburgh (Bonny); second, £2, the Dowager Countess of Aylesford, The Bury, Offchurch.

Stallion, used in the county in 1878, to stand one day each week at Coventry.—Prize, £21, W. Barber, Congerstone, Atherstone (Ruckingham).

Mare, with foal at her foot; exhibitor to reside within fifteen miles of Coventry.—Prize, £10 10s., W. T. Wakefield Fletchamstead Hall.

Pair of draught horses, mares or geldings.—No entry.

Cart mare, above four years old, that has been regularly worked up to the time of the show, and to have been the property of a tenant farmer not less than six months, residing within fifteen miles of Coventry; the exhibitor to occupy at least 100 acres of land.—First prize, £10 10s., W. Wynn (Matchless); second, H. W. Goodacre, Grandborough Cottage, Rugby.

Cart colt or filly, under two years old, the property of and bred by a tenant farmer occupying not less than 100 acres of land in the county.—Prize, £10, W. Hurlstone.

HUNTERS.

Stallion which has been used in the county in 1878.—Prize £15, Wm. Bragg, Whitton, Birmingham (Young Stockwell).

Hunter that has been ridden in the past season with the Warwickshire, North Warwickshire, Atherstone, Pytchley, Bicester, Qorn, Lord Coventry's, Heythrop, North Cotswold, or Worcestershire hounds.—First prize, £15, H. Ford, Leamington (The Baron); second, £5, T. Holland, Malvern Link (Kimmerton).

Hunter four years old and upwards (to be jumped on the ground).—First prize, £15, A. R. Adecock, Northampton (Achalnt); second, £5, F. E. Thompson, Nail (Ivanhoe).

Stallion used in the county in 1878, to stand one day each week at Coventry, and to have been at the service of tenant-farmers at not more than three guineas.—Prize £21, A. B. Proctor, Coventry (Somerset).

Four-year-old gelding or filly, the property of a tenant-farmer occupying not less than 100 acres of land, to have been in his possession at least twelve months previous to the day of show, and to be jumped on the ground, exhibitor to reside within 15 miles of Coventry.—Prize £10 10s., W. Nurse, Hineckley (Warrior).

Four-year-old gelding or filly, the property of a tenant-farmer occupying not less than 100 acres of land, to have been in his possession at least twelve months.—Prize £5 5s., T. Hinds, Cnley (Black filly).

To the owner of half-bred two-year-old colt or filly, the property of and bred by a member.—Prize £3, R. K. Bassett, Whitley Abbey Farm.

HACKNIES AND PONIES.

Hackney exceeding 15 hands high.—Prize £10, F. Synonds, St. John's, Lichfield (Prince Charlie).

Hackney not exceeding 15 hands high.—Prize £10, Gilsen and Brown, Tamworth (Perfection).

Pony above 13 and not exceeding 14 hands high.—Prize £5, C. A. Jacobs, the Royal Leamington Riding School (The Gem).

Pony above 12 and not exceeding 13 hands high.—Prize £5, J. Burnett, Tamworth (Pappy).

Hackney not exceeding 15 hands high, the property of a tenant-farmer occupying not less than 100 acres of land, to have been in his possession at least twelve months.—Prize £10 10s., W. T. Wakefield, Fletchamstead Hall.

BISHOP AUCKLAND.

The eighth annual show of the Bishop Auckland Agricultural Society was held on Sept. 17, in the Cricket Field, Bishop Auckland. The entries were numerous, and the quality of the stock was considered good. The chief feature of the show was the horses, of which there were 253 entries, many of the animals being well-known prize-takers at various important shows throughout the country. The hunters and roadsters were a fine lot, and there were some very useful heavy draught horses. The show of pigs was a fair one. The entries of dogs and poultry were very numerous, and grain and roots were also shown.

CARDIGANSHIRE.

The fourth annual show of this Society was held at Aberystwyth on Sept. 17. The *Cambridge News* says:—At the outset, it may be said that comparing Tuesday's show with former shows—and this is the only fair way to do—a great advance was visible on every side. Even the black cattle which Mr. Ellis, one of the judges, most truly remarked at the dinner, were not equal to the Merionethshire blacks, have improved. A great deal, it is true, has yet to be done; but on looking back five years it is impossible not to feel that a good

deal has been done. In class II. the black cattle (pure Welsh breed) for the best bull of any age there were three entries, and it must be admitted, even by adverse critics, that the prize-taker was a fine animal. The yearling bull that took the prize was also very promising. In the cows in calf or milk there were seven entries. In this class it is not easy to say on what principle the judge awarded the three prizes. A very good animal got a third prize, a not very good one came second, and it would be difficult to say the best was put first. In class B, section II., for the bull of any age, Mr. David Jenkins, Blaenauvan, took the first prize with a very good animal. In the class for cows in calf or milk there were ten entries. An old prize-taker was left out in the cold, although her sons and daughters did well. This cow, Catherine, 172 in the Black Cattle Herd Book, has taken several prizes since she was calved in 1855. She was bred by Mr. Jenkins, Ghanvern, and on Tuesday was not so much as "commended." She was beaten by three rivals, but still there was some of the old glory left, and it is not quite clear that all those preferred before her were better than. A very promising yearling bull, a son of Catherine's, took the first prize in his class. In class C, section II., Mr. David Jenkins, Cerrigaranau, took the first prize. There were some poor animals exhibited, altogether the blacks could not be called a good level representative lot, but they were an improvement on what were exhibited at previous shows, and the young stock indicate further improvements. It was generally admitted that the Southdown bulls were really fine. The Shropshire sheep were as good as could be desired, and far better than could be expected. As was said at the dinner, there need be no fear of exhibiting them in the Smithfield at Shrewsbury. Some of the mountain sheep exhibited showed a good deal of kemp, and few, if any, were pure Welsh. They were well acquainted with the lowlands, and although very good, do not call for special remark. The show of horses were very large, and, notwithstanding some expressions of a contrary opinion, manifested a fair advance on the past.

LONG SUTTON.

This exhibition was held on September 9th and 10th.

The first day dawned gloomily, but the weather improved as the day advanced, and thousands of people visited the ground. As regards the exhibits the show was a grand success, the beasts and horses and implements being unusually good; the Marquis of Exeter sent some of the doughty Telemachus tribe and one of the horses shown (a two-year-old cart stallion) belonging to Mr. Charles Brooks, of Claxby, we believe, was sold to the Earl of Ellesmere for 500 guineas. The entries were equal in number to those of last year. For horses there were 173 entries for 2 silver cups, 60 money prizes, 26 medals, and 3 whips; for beasts 35 entries for 16 prizes and 7 medals; for sheep, 32 entries for 18 prizes and 7 medals; for pigs, 21 entries for 13 prizes and 6 medals; for roots, 7 entries for 22 prizes; for implements there were no less than 263 entries for money prizes and a large quantity of medals, which were awarded according to merit. As a rule, the competition for ploughing and the rewards for labourers fall far short of what has been heretofore customary. Though 39 ploughmen were sufficient to make a good contest, yet a falling off of half in the number of former years must be a source of regret to those who believe that these meetings are calculated to strengthen the ties which bind different classes closer together. The work, however, was on the whole satisfactory; that of the boys and farmers' sons was exceedingly well done, while all the work of the double furrow ploughs was good, the local work being considered the best of the field. To prepare and arrange for the easy working of this multifarious business requires no small amount of care and skill, and the Stewards and their indefatigable Secretary may be congratulated on the success which has attended their labours.—*Sanford Mercury*.

LOUGHBOROUGH.

On September 11 the forty-first show of the Loughborough Agricultural Society was held in Southfield Park, Leicester Road, Loughborough, lent for the occasion by Mr. W. B. Paget. The weather was splendidly fine throughout the day, and the show was in every respect a complete success. The classes on exhibition included cattle, horses, sheep, pigs,

poultry, corn, vegetables, roots, and shoeing, and in nearly all these there was a considerable increase over those shown last year. The show of pigeons and poultry was exceptionally fine both in quality and number, there being nearly twice as many entries as last year. The one set of classes which showed a backward tendency was that of sheep, which were not half as numerous as they were twelve months ago. The attendance was large, and included a number of visitors not only from the town and its immediate district, but from Nottingham, Derby, Leicester, and other towns at a distance, the Midland Railway Company affording facilities for attendance. As regards the show itself the dairy cows which had calves before July 1st were deservedly commended, as were those in calf and milk, the property of a tenant farmer. The heifers under three and two years of age were also a couple of nice classes, and they were rivalled by the bulls, some of the points of which showed good blood. The cottagers' cows were the most numerous of the whole. Among these classes Colonel Ellis, of Ellistown Farm, Mr. W. Metts, of the Pines, Goddesby, and Mr. Breddon, of Barton House Hill, were at once the largest exhibitors and the most successful prize-takers. In the diminished sheep classes Mrs. Perry Herriek, Brammanor Park, who had also shown a very fine bull, over two years of age, swept away the principal of the prizes. In long-wooled ewes, long-wooled thraves, and long-wooled wethers (five of each), she took the first, second, and third prizes as well as the first and second for the best ram, the first for sheep escaping her being that for the best long-wooled ram, and in that case the solitary entry was so small that the judges decided only to award half the prize. The pigs were good, Mr. G. E. Paget, of Sutton Bonington; Mr. L. B. Dobell, of Loughborough; and Mr. C. Brew, of the Mohel Farm, Wollaton, were the largest exhibitors, though not all successful to an extent proportionate to the number of their entries. Mr. Andrew's animals were very fine.—*Notts. Guardian*.

NORTH-WEST BUCKS.

The annual show of live stock, and the ploughing matches in connection with this Society were held at Birmingham on Sept. 17th. The entries were 210 for stock, 14 for ploughing, and 11 for butter. The weather was fine, and the show was considered a successful one.

SOUTH TYNE.

The annual exhibition of horses, cattle, sheep, pigs, and butter in connection with the South Tyne Agricultural Society was held in G. Generoff Park, Haltwhistle, on Sept. 14. The show was the largest show ever held in connection with this Society, and in regard to quality there was also a gratifying improvement. The highest number of entries for any previous show was 369, a figure attained in 1876. This year the entries numbered 424, or an increase of 55 upon the show of 1876, 89 upon last year's show, and 100 upon the average for the last thirteen years. The increase was mainly noticeable in the Shorthorn cattle and Leicester sheep. The horses were a fair average show. The half-breds were rather diminished in number, but the agricultural class was well represented.

WAKEFIELD.

The eleventh annual show, promoted by the Wakefield Agricultural Society, was held on September 14, and in every respect it proved to be the most successful show of that character ever held in Wakefield. The exhibition again took place in Thornes Park, the seat of Mr. Charles Miles Gaskell, and notwithstanding that the weather was gloomy and rather showery, it was calculated that between 7,000 and 8,000 persons were present. The show was confined to horses and dogs, and about £200 was offered in prizes. 166 horses had been entered, or about 60 more than last year, and every class was well represented. Several of the prize-takers at the recent shows of the Royal Yorkshire, and other societies were exhibited, and the collection of both light and heavy horses was undoubtedly the best and most valuable ever seen in Wakefield. Foalsters and juppers were a splendid lot, the foalsters

were excellent, and the show of agricultural and draught horses was particularly good. There were also a number of capital and well appointed tandems. About 155 valuable dogs were shown in the various classes, the exhibits including many well-known prize-takers at the leading shows in England.—*Leeds Mercury*.

BRITISH DAIRY FARMERS' ASSOCIATION.

A meeting of the Committee of this Association was held on September 10 at the new offices, Agricultural Hall, Islington, to transact business in connection with the forthcoming Dairy Show. Colonel Burnaby, who was lately elected president for the current year, occupied the chair.

The following new members were elected:—

Andrews, H., Todbe, Blandford, Dorset.
 Burnand, J., 149, High Holborn.
 Cobbett, Arthur, 18, Pall Mall.
 Cobbett, A. R., 18, Pall Mall.
 Coupac, E. (directeur des Caves, rennies de Roquefort),
 Roquefort, France.
 Harwood, B., 27, Winchester Street, South Hampstead.
 Hucksman, Thos., New House, Cruckton, near Shrewsbury.
 Jacob, Miss A., The Mount, Finner, Middlesex.
 Lefebvre, Monsieur, Nesle Hodeng, France.
 Noel, Ludovic, 43, Frith Street, Soho.
 Reed, G., St. John's, Hertford.
 Sater, Mr. Colston, Devon.
 Sevestre, Monsieur, Buivillers, France.
 Stokes, Mr., Colyton, Devon.
 Taylor, Garrett, Easton Lodge Farm, Norwich.
 Van der Meerse and Co., 77, Long Acre.
 Vincent, E. M. Wembley, Middlesex.

An addition of £30 from Colonel Burnaby, towards the Guarantee Fund for Prizes, was announced, and also the receipt of a cheque for £3 3s. toward the Subscription List, the total amount now guaranteed and subscribed for the above purpose being reported as £306.

Mr. Thomas Nuttall, of Beeby, Leicester, was formally presented by the President with the gold medal awarded to him at the last dairy show, and it was announced that the remainder of the silver and bronze medals would be forwarded to their respective winners in a few days, as soon as the necessary inscriptions thereon had been completed. Col. Burnaby expressed regret that these awards had been so long forthcoming, but added that he was informed a great part of the delay had been unavoidable, the design not having been received until a few months ago. A vote of thanks was unanimously passed to Mr. Harrison Weir, who had kindly made the Association a present of the design.

Messrs. E. C. Tisdall, H. F. Crump, and J. H. Raffety (the trustees of the Society) were, with Messrs. W. and F. W. Wilson, appointed a Finance Committee for the current year.

The *Journal* Committee reported that proofs of the *Journal* had been received, and that copies would be in circulation before the show commenced. It was resolved that the price be reduced from half-a-crown to one shilling.

The hon. sec. (Mr. H. S. Holmes Pegler) read the names of several gentlemen who had been proposed by various members as judges in the different classes of the forthcoming show, in answer to circulars requesting the same; but, owing to the lateness of the hour, this matter was adjourned to the next meeting (Tuesday the 17th), when the question of the selection of judges will be finally settled.

There is one crop which is held to be all the better the more weeds it produces—the tobacco crop.

AGRICULTURE IN CYPRUS.

The two natural drawbacks to agriculture in Cyprus are drought and locust. The former, as in adjacent regions and other countries, has often been experienced in Cyprus. One famine, which lasted for seventeen years, in the third century, has given its name to one of the capes of the island—Cape Gatta, or "Cape Cat." The legend is that the whole of that region having become depopulated through the famine was overrun with serpents. In order to exterminate these, cats were introduced, who did their work effectually. However true the story of the cats may be, that of the famine is recorded in history. During the Venetian *regime* the country also suffered from the same cause. That referred to already is the most recent occurrence of the kind. Cyprus, however, can be saved from this drawback by the planting of trees, and a utilization of its abundant subterranean water supply for the purposes of irrigation. The other natural drawback, that of locusts, has also in past years caused much suffering, and has no doubt materially checked the progress of the island. A few years ago, owing to the efforts of Said Pacha, one of the governors of Cyprus, the destruction of these pests was accomplished. In one year over sixty tons of bags (50,000 oaks) of eggs alone were destroyed. Each of these bags contained the germs of no fewer than forty locusts. One oke, my informant tells me, was computed to contain nearly a million of locusts. Since the time of Said Pacha, one of the few able governors of the island, I am sorry to say that his efforts for the destruction of this terrible pest, from what I can learn, have not been energetically followed up. It is now feared that unless this is done the island will not long enjoy that immunity from their ravages with which it has for several years been blessed. One thing about these locusts makes their complete extirpation quite possible. They do not come from Syria, as I supposed before I left England, but are indigenous, if I may use that word, to Cyprus. A Cypriot remarked to me that the island would eventually be freed from locusts as England had been from wolves.

I had last week a pointed illustration of the evils of the system of farming taxes. Having gone into a vineyard to purchase some grapes, I asked the owner why he did not harvest his crop, as his grapes appeared to be quite ripe. He told me he was anxious to do so, but could not get the tax-farmer to value it. He further stated that he feared he would lose a part of his harvest by this delay—and this the tax-farmer well knew—and used this means to make him pay more than the stipulated tenth. In this manner I am told that extortion is usually practised upon the peasant, often forcing him to pay twenty per cent. instead of ten, in order to avoid a greater loss. This, I need hardly say, was connived at by the officers of the late Government, who received a share of the spoils. Under the present *regime* matters are somewhat changed. The tax-farmers have recently asked the aid of the Government to collect their taxes, as stated in my last letter; but I am since informed that in preferring this request they have made representations about the peasants calculated to prejudice them in the eyes of the Government, but which are either gross exaggerations or utterly false. As might be expected from Sir Garnet Wolsley, they have not yet won him over to their side. It is unfortunate that this evil cannot be remedied at once, but nothing can be done in the matter until next spring, as the taxes are annually sold in June.

While the Government cannot at present remedy the evil just referred to, much surprise is felt that the Customs of the island are still collected under the old Turkish system. The general impression prevailing here when I arrived was that after a certain date, which expired last week, the Custom House management should pass entirely into our hands. Upon inquiry I find that this is incorrect, and that even no movement is yet apparent in that direction. There is something mysterious about the whole matter. A report was current that one class of Turkish bondholders having a lien on the Customs of the Porte had objected to an entire transference of the Customs of the island to the English. Other vague and some equally absurd rumours were also current upon the subject. That there is a hitch somewhere is pretty evident, some obstacle raised by the Porte or coming from some other quarter. The management of the Customs here, at any

rate, is so un-English that it is impossible to believe that it will be tolerated a moment longer by our Government than is necessary.

There has been a good deal of grumbling amongst British importers, chiefly at the delays, and what they regard as the impositions to which they have been subjected in getting their merchandise through the Customs. In order to satisfy myself, I accompanied a friend yesterday, who went to clear a lot of merchandise he had brought with him. I must confess that from Mr. Robson, the English collector, down to the lowest clerk every possible facility was given him to clear his goods without waste. The fault to me appeared not to be so much in the official as in the system they are compelled under existing circumstances to carry out. My friend's goods had been landed and stored before his arrival by Messrs. H. S. King and Co. The first operation in clearing them was to obtain a delivery order from that firm. On its presentation about eleven o'clock orders were given for immediately examining the goods. Although the Custom House closes here from noon till half-past two, his thirty odd packages were all examined by four o'clock. But here a delay occurred. The goods are examined by one set of officers and valued by another who never see them. The principal upon which this valuation is based is that duty is paid upon the value of the goods when landed here, and not that at which they have been invoiced in England. This increased valuation is limited, I believe, to an addition to the invoice of the cost and charges of their transportation. The process as I witnessed it was as follows:

All duplicate packages were placed together, and one of each lot only opened and examined—although the right exists of opening every package. This opened package was first weighed and then its duplicates. If the weight of each tallies no more are opened. A note is taken by the clerk in attendance, who rather amused us yesterday by suspecting a box of lime juice cordial to be something stronger. My friend had a bottle uncorked, but the clerk being a Mahometan and this being Ramazan he could not taste it. His Greek assistant did, however, and by his verbal assurance he gave and the wry face the draught caused him to make the difficulty was got over. The process of weighing was also amusing. Two men, one of them in this case a very, very black negro, hitched the package to a balance scale on a pole, and then lifted the latter to their shoulders, holding it there until a venerable Arab took the weight. And so every one of the thirty odd packages, including several casks, were dealt with. This morning, between the notes made by the examiner and the invoices of the goods, a valuation was made by the clerk in what appeared to be a very slipshod manner. The value of the goods over that of the invoice was between 25 and 35 per cent.

Objections are taken by English importers to charging them eight per cent. duty on what they have paid for the transportation, and this done in a very warm manner by many of them, especially by those who wish their goods and themselves back in England again. Others complain of the annoyance and delay of opening their goods. In order to get over this, Mr. Robson the collector, I am told, in one case offered to add 25 per cent. to the invoice in order to expedite matters. This gave rise to a report that the Government had suddenly raised the duties to 25 per cent., and a general outcry was raised against every one having anything to do with the Customs. As is usual in such cases, the officers came in for the blame of a system which they are compelled to carry out. It is to be hoped that, as the Union Jack floats over the Custom House here, the Turkish system on which it is now carried on may be changed for that of the country whose flag waves over it. Better raise the duty at once from eight per cent. to such an amount as may be necessary than continue the vexatious system now in force. By none of our colonies is such a system of valuing merchandise pursued, and one naturally asks why should it be continued here.—*Standard*.

"DARWINIAN."—Our Village Grocer (great floriculturist).—"Most extraordinary thing, sir; last year I had some bacon in my shop that went bad during that hot weather, and I buried it in my garden. You'll hardly believe it, but all my asters this season come up streaky!"—*Punch*.

THE AGRICULTURAL INTEREST.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The close of the cereal year on the 31st ult., immediately preceded by the publication of the Agricultural Returns for Great Britain and Ireland, appears a suitable opportunity for a cursory glance at the present position of the Agricultural Interest.

The deficient corn crops of the last three years have undoubtedly reduced the capital of the majority of tenant farmers, and their pressing necessities are now forcing them to send out of condition grain into the market when prices are at the lowest point they have touched for many years—namely, 4s. a quarter, or 12s. a quarter less than Sir Robert Peel anticipated it would average after the repeal of the Corn Laws.

The extra cost of bringing foreign food to the English market still affords the English farmer a protection equivalent to 40s. an acre, but, with this exception, he has nothing to rely upon but quantity of produce and quality of production.

The following figures, however, appear to indicate that the rate of production is decreasing instead of increasing.

WHEAT RETURNS FOR THE UNITED KINGDOM FOR THE CEREAL YEARS ENDING AUGUST 31ST, 1876, 1877, AND 1878.

Areas.	Farmers' deliveries.	Rates per acre.	Nett. Imports.	Rates per acre.
Acres.	Quarters.	Bushels.	Quarters.	Bushels.
3,115,657	8,467,196	22	14,081,900	36
3,507,837	8,083,016	18½	13,321,050	30
3,372,590	7,923,220	19	14,416,000	34½

These returns show a home and foreign supply of 22,330,000 quarters for the year 1877-78, but they do not represent the actual consumption, which, for a population now estimated at 33,560,000 at a minimum consumption of 5½ bushels per head, amounts to 23,280,000 quarters.

I estimate the outcome of this year's wheat crop at 11,800,000 quarters, being at the average rate of 28 bushels per acre on 3,372,590 acres. Deducting 800,000 quarters for seed, this would leave 11,000,000 quarters available for consumption, and necessitate a foreign supply of from 12,000,000 to 13,000,000 quarters.

Since 1868 our wheat area has decreased by half-a-million acres, while the population has increased by three millions; but this does not fully account for the increased importation of foreign food, which, since 1857, has been in the following three main articles:—

Wheat and flour	from	£20,000,000	to	£64,000,000
Dead meat and provisions	„	4,000,000	„	30,000,000
Live Stock	„	1,250,000	„	6,000,000
Together	„	£25,250,000	to	£100,000,000

Some radical changes thus appear necessary to resuscitate home production.

The natural fertility of the soil of this country has long been exhausted, and it is only by the labour and expendi-

ture of the tenantry that its productive powers can now be maintained; but of late years, unfortunately, they have been “dropping buckets into empty wells and growing old in drawing nothing up,” and some new incentive is now required to induce them to continue their occupation and improve their farms.

In Great Britain they number 560,000 individuals, occupying fifty million acres, and have a floating capital estimated at £100,000,000. In Ireland they number 600,000, on 15,000,000 acres of available land, and have probably a floating capital of £60,000,000. The large proportion of grass land and the profitable returns from stock-rearing in Ireland has exempted the tenantry from the vicissitudes which have overtaken the British farmer during the last three years.

The Agricultural Holdings Act was intended for his benefit, but has proved futile for the purpose. Landlords who wish to retain the control of their estates have contracted themselves out of it in the case of all new lettings and renewals, but even had they not done so the substance of the Act could be of little or no benefit to a tenant farmer, as it merely amounts to this—“that farm tenants shall be entitled to compensation at the end of their tenancies for unexhausted improvements made with the consent of their landlords!”

The Inclosure Commissioners report that there are still 1,000,000 acres of reclaimable land in England and Wales, but its reclamation has come to a standstill. So with land drainage, although there remains several millions of acres of undrained wet land.

The cessation of these and other improvements, and the laying down of 1,000,000 acres of arable land to grass, has resulted in a decrease of the agricultural population to the extent of 100,000 individuals within the last ten years. Labour is consequently dearer by 30 per cent., and not to be got at any price in some districts.

It is not easy to devise a remedy for the evils that have thus crept upon British agriculture during the last few years; but the main remedies appear to me to be:—

1st. The abolition of entails, which, in nine cases out of ten, disable the life-owners from co-operating with their tenants for the improvement of their estates.

2nd. Freedom of action to tenants in the cultivation of the land and in the disposal of the produce.

3rd. A compensation clause in leases and agreements for unexhausted condition in the soil at the termination of a tenancy.

4th. An Incumbered Estates Act for the quick and economical sale of the estates of encumbered owners.

It has become of vital importance to both landlords and tenants, as it always must be, although in lesser degree, to the country at large, that the land be maintained in a maximum state of fertility; and I believe this could yet be attained by the adoption of the above suggestions, but unless some such new departure is taken, I fear British agriculture will go down.

I am, Sir, yours, &c.,

THOS. C. SCOTT.

19, King's Arms Yard, Moorgate Street, E.C.,
Sept. 13.

Miscellaneous.

MOLLY TREFUSIS.

" Now the Graces are four and the Venuses two,
And ten is the number of Muses;
For a Muse and a Grace and a Venus are you,—
My dear little Molly Trefusis!"

So he wrote, the old bard of an "old magazine;"
As a study it not without use is,
If we wonder a moment who she may have been,
This same "little Molly Trefusis!"

She was Cornish. We know that at once by the "tre;"
Then of guessing it scarce an abuse is
If we say that where Bude bellows back to the sea
Was the birthplace of Molly Trefusis.

And she lived in the era of patches and bows,
Not knowing what rouge or ceruse is;
For they need'd (I hope) but her natural rose,
The lilies of Molly Trefusis.

And I somehow connect her (I frankly admit
That the evidence hard to produce is)
With Bath in its hey-day of Fashion and Wit,—
This dangerous Molly Trefusis.

I fancy her, radiant in ribbon and knot
(How charming that old-fashioned puce is!),
All blooming in laces, falbals, and what not,
At the Pump Room,—Miss Molly Trefusis.

I fancy her reigning—a Beauty—a Toast,
Where Bladud's medicinal cruse is;
And we know that at least of one Bard it could boast,—
The Court of Queen Molly Trefusis.

He says she was "Venus," I doubt it. Beside
(Your rhymers so hopelessly loose is!),
His "little" could scarce be to Venus applied,
If fitly to Molly Trefusis.

No, no. It was Hebe he had in his mind;
And fresh as the handmaid of Zeus is,
And rosy, and rounded, and dimpled,—you'll find,—
Was certainly Molly Trefusis!

Then he calls her a "Muse." To the charge I reply
That we all of us know what a Muse is;
It is something too awful,—too acid,—too dry,—
For sunny-eyed Molly Trefusis.

But "a Grace." There I grant he was probably right
(The rest but a verse-making ruse is);
It was all that was graceful,—intangible,—light,
The beauty of Molly Trefusis!

Was she wood? Who can hesitate much about that,
Assuredly somewhat obtuse is;
For how could the poet have written so pat
"My dear little Molly Trefusis!"

And was wed? That I think we must plainly infer,
Since of sniters the common excuse is
To take to their wives. So it happened to her,
Of course,—"little Molly Trefusis!"

To the bard? 'Tis unlikely. Apollo, you see,
In practical matters a goose is;—
'Twas a knight of the shire, and a hunting J. P.,
Who carried off Molly Trefusis!

And you'll find, I conclude, in the "Gentleman's Mag.,"
At the end, where the pick of the news is,
"On the (blank), at 'the Bath,' to Sir Ullary Brag,
With a fortune, Miss Molly Trefusis."

Thereupon . . . But no farther the student may pry:
Love's temple is dark as Eleusis;
So here, at the threshold, we part, you and I,
From "dear little Molly Trefusis."

—AUSTIN DOBSON, in *Gentleman's Magazine*.

HABITS OF SWALLOWS.—The following will be read by naturalists with great interest; Early in the migratory season a swallow was seen flying in and out the bedroom window of Mr. Fison, of Feversham Works, Camb. Upon Mr. Fison going into his bedroom about noon he was surprised at seeing a swallow flapping its wings in front of the looking-glass. The bird, frightened at Mr. Fison's approach, went away, but soon returned to its imaginary mate, as seen in the looking-glass. For some days the inmates of the old manor house frequently saw this sanguine bird either hanging and chirping on the glass, or fluttering in front of it. At length, after spending its strength in vain by endeavouring to catch a shadow for a whole week, the swallow wisely left the shadow for the substance, and returned to the mirror with a real mate. Two now fluttered in front of the looking-glass, and unlike the dog and his shadow, as the table goes, these birds had no object in view but that of sympathy and affection. When the time arrived for swallows to build their nests, the domesticated pair had become so attached to the room that they built a nest at the foot of the bedstead. In process of time four young birds were hatched and reared, and the old birds passed in and out while the proprietor lay in bed. The four took to their flight, and strange to say, five more swallow have been reared in the bedroom.—*London and Water*.

THIRLMERE.

O lovely lake! Time was, long years ago,
I knew each inlet of thy happy shore—
Thy tributary streamlets scarce on score—
The paths beside thy banks or high or low;
Shore thy bright waters, anchored on thy breast—
Passed long-five days a fishing, watched thy birds—
Nutt'd on Great How, climbed up Eaglesnest.
Araboth and Wythburn!—all were household words—
Dark-browed Helvellyn, beetling Ravenscrag!
Sent'nelled by the shadows of the mighty dead!
Time was each nodding brake, each water-flag
Among the fells and fields of fair Dalehead
Was precious to me for its own sweet sake.
Long moonlight nights we loitered on the bridge
Which spans thy fairy waist, loitered and sung—
Voices now still for ever!—every ridge
Most musically echoed. Lovely lake!
'Twas English summer-time, and I was young.

Enough of this! Ours is a riper age—
Poets be damned. The thirsty cotton-lord
Wants water, plans a plan, and forms a Board;
Will take the lake in hand, raise it a stage,
Make it in bulk and fixings far beyond
Old Nature's petty Thirlmere—may it pay—
Build up a brand-new practicable pond
Among these useless hills, which had their day;
Then sow some boulders, plant a billion shrubs,
To prove that there is taste in money-grubs!

—*Spectator*.

ENGLISH AND AMERICAN MILLERS.—The following characteristically Yankee remarks are taken from the American *Grain-Cleaner*:—The English millers seem to be in genuine earnest about improvements in their system of milling; the great success attained by American flour manufacturers has awakened them up from the Rip Van Winkle-like sleep they have been enjoying for so many years. When once thoroughly aroused there is but little doubt as to the result. Englishmen are slow, but just as sure. They are frank enough to admit that America has got the start of them in flour-making, and are seemingly quite willing to profit by America's example. This is just as it should be, and we are glad of it. This country has enough and to spare. We can supply the world, if necessary, with improved machinery and appliances for making first-class flour, and we are glad to know that our efforts are being appreciated abroad. We do not say this in a spirit of boasting; we claim no special merit, for it has been the creation of necessity. We were forced into it just as the English millers are being forced into it now. The tastes of the people demanded high grades of flour, and it was forthcoming. The necessities of trade required that the greatest possible quantity of first-quality flour be made out of a given quantity of wheat. This is also being done. These things are what the English millers are now looking after—not so much

from choice as from necessity. They are obliged to keep step to the music of eternal progress, or else drop to the rear and be left, and "being left" has never as yet been any part of the policy of the English people. In the matter of flour-making we are glad, as we have said, that they are waking up, and we will willingly furnish all the aid in our power to assist them in advancing. At the same time we shall always endeavour to keep just a little ahead, if possible, at least far enough to be able to make better flour out of American Wheat than can be made anywhere else, and by so doing, keep the business at home, and the profits thereof.

WEARY OF LIFE.

(From "Song Streams," by J. Gregory.)

Weary of life? Do you know what you are?

Is it little or nothing to stand

Alive on the crest of this beautiful star?

Would you fling a bright jewel out of hand,

To please a mad whim,

That maketh it dim—

Are you what you might be in the land?

Weary of life? Is it nothing to ride

Through splendour-hill regions of space,

With planets that swim in the cerulean tide,

And God taking care of our race?

For nothing at all,

Ere you hide in a pall—

Have you done what you might if you tried?

Weary of life? Is thy mission fulfilled,

Hast thou finished thy share of its toil?

Shall thy epitaph be, "Here a craven lies killed?"

Would you creep to cave in the soil,

And hie as a worm,

From a pass-away storm?

Is there naught to be won from the moil?

Weary of life? Do you know you can find

Sweet pleasures in fighting the foe?

The angels are watching, and He is all kind

That gave thee Love's labour to do.

For live then to arms,

For the battle hath charms,

And thy soul shall ascend over all.

IRISH EUPHEMISMS.—Next to the rain, the thing which most strongly strikes the tourist in Ireland is the aversion of the people to admit the existence of anything unpleasant. The rain itself supplies a familiar illustration of this mental attitude. When the morning breaks disclosing another and a wetter day, an Irishman will answer your desponding remark about the weather by saying, "Yes, it's misting." When the rain comes down in torrents and the hapless tourist, beguiled by a momentary gleam of sunshine into venturing on a little excursion, bewails the insufficiency of his cloaks and the inadequacy of his umbrella, the driver will raise his wet face to the dun sky, and, with an air of making a generous admission to Saxon prejudice, will observe, "Dred, Sor, and it's nice soft rain." This cheerful way of viewing things nearly led to serious consequences in a case within my own experience. I wanted to hire a horse for a lady's use. It was in a remote district, where there was not an inn, much less a livery stable. But there was not lacking a farmer who had a horse which, according to neighbourly description, was precisely the thing. The animal was brought up for inspection and proved to be a bay mare, warranted (in spite of her looks, which suggested that she was lonely without the plough) to trot fast, to canter easily, and to jump anything! "Is she quiet?" I asked her owner. "Deed an' she is, Sor," "No vice?" "Sorra a bit." "Does she shie?" This was evidently a poser. The man took off his cap thoughtfully, scratched his head, and furtively regarded the crowd of witnesses assembled to watch the progress of the bargain. At last he replied, "Well, Sor, if there was a bit of paper on the road she might stop to take a look at it." That struck me as being the most euphemistic description of the habits of a shieing mare I had heard. One more illustration of this national frame of mind. One Sunday morning I was riding to

church, having only a vague notion of the time it would take me to get there. Going down a lane I met a man, from whom I learned that the church was some distance along the high road, which the lane joined at right angles. "Do I turn to the right or the left when I get to the top?" I inquired. "Whichever yer honour plazes," the man replied, with the bred, indomitable courtesy of his race.—*Mayfair.*

SURPLUS WOMEN IN ENGLAND.—According to the "Population Returns" of 1851, as quoted by Mr. Greg, there were in England and Wales at that time no less than 1,248,000 women single between the ages of 20 and 40. reckoning for the numbers who in England marry after 20 this total would be considerably diminished; but, even so, it is believed that the permanent number of unmarried women may be accepted as about three-quarters of a million. Nor is the fact that the estimate was made twenty-seven years ago likely to have reduced the amount, but rather the reverse. This discloses what must be called a strange social phenomenon, suggestive of desolate positions and bitter needs, which has to be viewed under two aspects. Woman is the help-mate for man, but man is the support hitherto deemed necessary for woman. Both aspects, in the tremendous extent of their present non-fulfilment, are matters of the gravest and of equal importance; but we have now only to do with the last. Assuming that the majority of these three quarter of a million women are independent in circumstances, or so placed—especially in the lower ranks—as to support themselves, there still remains a body of single helplessness, living on shitts, alms votes, and institutions, fit for no work, and eager to take any, of which society at every turn is made aware. There are other ties, it is true, and of a sacred nature, between men and women; but the fact is too evident that what there is no husband to supply is but imperfectly supplied by father or brother. It is a forlorn sight to see maidens "withering on the stalk;" but it is a piteous one to see them starving on it. Poor ladies—or of such this class is principally made up—may truly say "all things are against us," for the parents who are bound to protect and provide are too often both the primary and ultimate cause of the misery of their daughters. Misfortunes are, it is true, sometimes of a kind which cannot be foreseen or prevented; but the breakdown of all power and resources for meeting them can be prevented. False indulgence and false authority are the rocks on which thousands of these poor souls are wrecked. In some homes—and there are too many of them—young women, in the sense of thinking or acting for themselves, may be said never to come of age. They are lepped in a luxury which the stoppage of one heart or one bank suddenly brings to an end; and they are kept in leading-strings or go-carts which prevent their realising the intention of their own limbs. The incapacity of some parents to perceive when their daughters have come to years of discretion—the jealousy to retain their authority over women more fitted by age to lead them—is a feature peculiar to English life. French mothers have, as M. Mohl used to express it, a *férocité* which dictates the choice in marriage both to son and daughter, and keeps their authority over both, even when married; but they do not turn their daughters out, single and dowerless, into the world, as English parents do. We may rail against French matrimonial arrangements; but, when contrasted with the sufferings of thousands of our country-women, the *marriage de convenance* rises in the scale. The case is simple to state. If we accustom a lap-dog to live on chicken, cakes, and cream—to warm washings, aromatic soaps, blue ribbons, and soft rugs—we do perhaps a silly thing; but if after all this petting we turn him out in the cold without a bone we do a cruel thing. Nor is the matter amended if we have drilled him into perfect obedience, sought him to bark at certain signs, to sit up and beg, and to keep a biscuit on his nose till he is told to eat it; for all these arts and accomplishments will neither get him a crumb nor spare him a kick in the crowded streets. But this is virtually the practice of many parents towards their grown up daughters, who are kept in a kind of stalled ease and plenty, are required to look to them for the commonest decision, and who, having been disciplined exactly in those qualities which will least help them in the battle of life, wake up one sad mornning, with the bitter blast of poverty blowing upon luxurious habits and with the consciousness of not excelling in one single thing that they can exchange for bread.—*Quarterly Review.*

REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING SEPTEMBER 23.

Cool autumnal weather has prevailed during the past week, with intermittent showers, which have told unfavourably upon the condition of new Wheat, but have not to any serious extent impeded the ingathering of the cereal crops in the later districts. Harvest is now practically ended, except in Scotland and certain Northern localities, the securing of the crops having extended over a period of some seven or eight weeks, owing to the variable weather which has prevailed. Wheat has yielded fairly well as far as can be seen at present, but a spell of dry weather is now desirable, that thrashing may be proceeded with, when a more accurate estimate of the out-turn will be practicable. Barley varies to an unusual extent, particularly in the Eastern Counties; but in Hampshire and Dorsetshire this grain has turned out well both in quantity and weight. The cleaning of stubbles by horse or steam power is now the chief work of the farm, and fine weather is needed to render the operation thoroughly effectual. The bulk of the grain has been secured in Scotland, but there is still some quantity outlying, and it is considered that, although somewhat deficient in straw, the crops generally will yield better in weight and quality of grain than was the case last year. Turnips give general satisfaction, and roots have derived great benefit from the rain, but potatoes are suffering from disease in many districts, which has been spreading rather rapidly of late, and which cool dry weather is needed to check. Oats were thin in many parts of Scotland, the crop having been much damaged by grub. The country markets are now beginning to be well supplied with new Wheat; but the damp and sprouted state of the offerings has had a depressing effect on the trade, which has naturally resulted in lower prices. Much of the Wheat is in most unsatisfactory condition, and will require to be kept for a considerable time before it can be brought into a state to command millers' attention. The pressing needs of farmers have doubtless been the cause of so much inferior grain being thrown upon the markets; but with the present low range of values it is probable that all who can afford to do so will withhold their produce, at any rate until such time as it is in sufficiently saleable condition. The decline of 1s. to 2s. per qr. which was quoted last week has been due to the unfit state of the samples offered rather than to the increased supplies or any actual weakness in the trade. Foreign Wheat, of which the imports into London up to Friday amounted to 50,430 qrs. has been in moderate demand throughout the week at the reduced rates of last Monday, and the general milling inquiry proves how large an admixture of sound dry corn is necessary to work up the damp English into Flour. Much speculation is rife as to the future course of prices, but all that can be said at present is that

America is overweighting the trade with enormous shipments both to the United Kingdom and the Continent, and that as long as these continue the tendency of values will be against sellers. At the same time the wants of France are undoubtedly large, and as long as the Continental demand continues a healthy counteracting influence will be felt. The arrivals of floating cargoes at ports of call have been moderate during the past week, and several of both Wheat and Maize have been purchased for the Continent. There has, however, been very little demand for Wheat, owing chiefly to the continued large shipments from America, coupled with liberal supplies of home-grown at all our own markets, and prices paid for arrived cargoes have shown a decline of 6d. per qr. Maize has also given way about 6d. per qr., with very little demand for shipment, the unsatisfactory state in which cargoes from America continue to arrive being very discouraging to cost, freight, and insurance buyers. Barley has been dull at about late rates. The sales of English Wheat noted last week were 60,458 qrs., at 43s. 2d., against 57,140 qrs., at 57s. 6d. in the previous year. The London averages for the week ending Sept. 21st were 45s. 10d. on 1,673 qrs. The imports of Wheat into the United Kingdom for the week ending September 14th were 1,271,215 cwt., and 133,552 cwt. Flour. There was a good attendance of millers and country buyers at Market on Monday last, but business was not altogether of a satisfactory character, as samples of English Wheat on offer were mostly in poor condition, while foreign, although in moderate supply, ruled the turn against sellers for all except the finest descriptions of old corn. The week's arrivals of home-grown Wheat amounted to 6,182 qrs., and there was a fair supply fresh upon factor's stands. Owing to the damp and inferior condition of the offerings sales were difficult to effect, and, although a concession of 1s. to 2s. per qr. was offered, buyers operated sparingly, and only a limited business resulted at the decline. The total imports of foreign were 43,511 qrs., of which quantity 19,687 qrs. were from Canada and the United States, and 18,355 qrs. from North Russia. Germany contributed 3,663 qrs., and the remainder was from Persia and the East Indies. The trade opened languidly, but eventually buyers were attracted by the prospect of lower prices, and a large consumptive demand was experienced at a decline of about 1s. per qr. on the currencies of the previous Monday; while in the case of new sorts of American the reduction was nearly 2s. per qr. The week's exports were 2,919 qrs. There were only 3,442 qrs. American Maize reported, and, with a light retail inquiry, prices slightly favoured buyers. The supply of Barley consisted of 1,174 qrs. of home-grown and 6,980 qrs. of foreign. Maltng descriptions were unaltered in value, but grinding sorts

gave way 6d. per qr. on the week. The arrivals of Oats were 50,519 qrs., and a fairly active demand was experienced for fine corn at previous prices, while inferior sorts were neglected and the turn cheaper. On Wednesday there were 221 qrs. of English Wheat and 21,100 qrs. of foreign. With a thin attendance, the trade was dull throughout the day, and no quotable change took place in the value of Wheat or feeding stuffs. On Friday the returns showed 513 qrs. of home-grown Wheat and 50,430 qrs. of foreign. Business was quiet for Wheat, and where sales were pressed, ex ship, a decline of 6d. to 1s. per qr. had to be submitted to, the trade closing very flat for all articles. The imports of Flour into the United Kingdom for the week ending Sept 14 were 133,552 cwts., against 95,032 cwts. in the previous week. The receipts into London were 81,600 sacks of English and 1,696 sacks and 4,685 barrels of foreign. A dull and dragging trade has been experienced throughout the week for both sacks and barrels, and where sales have taken place prices have slightly favoured buyers. The week's imports of Beans were 18,458 cwts., and of Peas 41,087 cwts., showing an increase of 8,414 cwts. on the former and a decrease of 5,138 cwts. on the latter. Beans have met a steady demand, and prices must be noted 1s. per qr. dearer, while Peas have been difficult to move although offered at 1s. per qr. less money. The deliveries of Malt were 15,021 qrs., and the exports 768 qrs. Holders have been disinclined to accept lower rates; consequently there has been but little business passing and quotations remain nominally unaltered. Business in agricultural seeds has been somewhat restricted during the past week, as no English Clover has yet appeared, and any tendency to speculate in American seed for forward delivery has been checked by the recent cable advices, which report a large crop both in Canada and the Western States. Favourable anticipations are also entertained with regard to the English crop. Trefoil remains firm, but not very active, and Alsike and white Clover are now to be bought on reasonable terms. Canary has maintained the late advance, and fine Rape has occasionally brought 1s. to 2s. per qr. more money. There was a large supply of new white Mustard at market on Monday, and a considerable quantity changed hands at 12s. to 13s. per bushel. The provincial markets have been rather more liberally supplied during the past week, but prices have, generally speaking, ruled in buyers' favour, as Wheat offered has been in more or less unsatisfactory condition. Spring Corn has not varied much, but in a few instances rather less money has been accepted. At Liverpool, on Tuesday, the market was fairly attended, and a moderate consumptive demand was met for Wheat at a decline of 1d. per cental. Flour was inactive, and the turn cheaper to sell, and Oats were also rather lower. Egyptian Beans were held for rather higher rates, but buyers did not respond readily. The week's imports included 60,000 qrs. of Wheat and 55,000 qrs. of Maize, which latter has been in moderate request, and mixed American closed at 23s. 4½d. per qr. At Newcastle the Wheat trade has ruled dull at a decline of 1s. per qr., and Flour has also given way to a similar extent, but there has been no quotable change in the price of feeding

corn. At Hull and Leeds prices have been the turn lower for both English and foreign Wheat, while Maize has been steady and Spring Corn quiet at about late rates. At Edinburgh the market has been well supplied with grain from the farmers, and Wheat and Barley have sold slowly at a decline of 6d. to 1s. per qr., while Beans, with an improved inquiry, have advanced 1s. per qr. At Leith the weather has been stormy and wet, retarding the completion of harvest; but even in the later districts a large proportion of the cereal crops has been safely housed. The grain trade has ruled dull, and at market on Wednesday both Scotch and foreign Wheat was 1s. per qr. lower to sell. Flour was unaltered, but malting Barley receded 1s. per qr., and new Scotch Oats were also 1s. to 2s. per qr. cheaper. At Glasgow the week's arrivals from abroad have been fair of Wheat and Flour, but light of other articles. Sales of Wheat and Flour have been difficult to effect, except at a reduction of 1s. and 6d. per qr. and sack respectively, while Oats have also receded 1s. per qr., but Maize has been in moderate request at about previous rates. At Dublin stormy weather has prevailed, but the grain trade has been quiet. In the little business passing last week's prices have been obtainable for both Wheat and Maize. At Cork the weather has been favourable for harvest, and there has been a moderate inquiry for Wheat at a decline of 6d. to 1s. per qr. Maize, with a somewhat diminished consumption, remains without alteration in value.

The following are the reports from Mark Lane during the past month:—

MONDAY, September 2.

The arrivals during the past week have been: English Wheat, 4,990 qrs.; foreign, 44,894 qrs. Exports, 1,576 qrs. The supply of English Wheat was moderate this morning, and the condition of some of the samples damp and bad. The trade opened without activity, and closed at barely last Monday's prices. For foreign there was a steady consumptive demand at 6d. over last Monday's currency; any further advance checked the trade. Country Flour, 12,389 sacks; foreign, 5,298 sacks and 8,157 brls. The demand has not been large, but prices are 6d. per brl. and sack over last Monday. English Barley, 390 qrs.; Scotch, *nil*; foreign, 12,676 qrs. The trade was good for malting descriptions, and prices irregular, while grinding varieties advanced 1s. per qr. Malt: English, 15,678 qrs.; Scotch, 125 qrs. Exports, 1,873 qrs. Steady in demand, and value unaltered. Maize, 29,536 qrs. More money was asked for sound Maize, which checked the demand, leaving a limited business at 6d. per quarter more money. Oats: English, 147 qrs.; Scotch, 420 qrs.; foreign, 43,337 qrs. Exports *nil*. The trade opened without activity, but as the day proceeded a better trade was felt for Russian at 6d. advance from this day week. Beans: English, 48 qrs.; foreign, 2,400 qrs. There was the usual local business at unaltered rates. Linseed, 4,178 qrs. Exports *nil*. The late weather has damaged the condition of most varieties of seed, and higher prices are asked pretty generally.

MONDAY, September 9.

The arrivals during the past week have been: English Wheat, 6,294 qrs.; foreign, 45,975 qrs. Exports, 6,058 qrs. The condition of the English Wheat fresh up this morning from the home counties was generally unsatisfactory, and with little disposition on the part of millers

CORN IMPORTED AND EXPORTED
FOR THE WEEK ENDING SEPT. 14.

	Imported into			Exported.	
	Engl'd.	Scotl'd	Irela'd.	British	Foreign
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Wheat.....	937935	100362	232918	39651	2229
Barley.....	263044	34354	14000	264	720
Oats.....	198723	6624	...	107	47
Rye.....	43278	2172	...	...	...
Peas.....	12165	28622	...	242	...
Beans.....	5113	13040	...	...	...
Indian Corn.....	426134	109289	103570	...	2670
Buckwheat.....	354	...	...	...	...
Total.....	1887351	294463	350498	40564	25553
Wheat Flour.....	82226	50975	251	445	2364
Barley meal.....	...	...	...	20	...
Oat Meal.....	5972	4186	...	52	...
Rye Meal.....	963	...	...	...	...
Ind. Corn Meal	125	...	...	...	10
Total.....	89936	55161	251	517	2374
Grand Total.....	1976737	348624	350739	41081	27827
Malt.....qrs.	...	...	...	1748	...

FOREIGN GRAIN ENTERED FOR HOME CONSUMPTION during the week ending SEPT. 23.

Wheat.....	cwts. 236920	Peas.....	cwts. 3500
Barley.....	" 84575	Maize.....	" 41316
Oats.....	" 82812	Flour.....	" 15383
Beans.....	" 3500		

LONDON AVERAGES.

Wheat.....	1,673 qrs.	45s. 10d.
Barley.....	..	..s. 0d.
Oats.....	..	..s. 0d.

IMPERIAL AVERAGES

For the week ending Sept. 21, 1878.

Wheat.....	60,458½ qrs.	43s. 2d.
Barley.....	13,087½	46s. 11d.
Oats.....	4,697	23s. 6d.

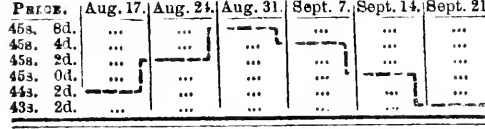
COMPARATIVE AVERAGES.

Years.	WHEAT.			BARLEY.			OATS.		
	Qrs.	s. d.	Qrs.	s. d.	Qrs.	s. d.	Qrs.	s. d.	
1874	71,768½	46 9	51,734½	41 11	4,156¼	27 9			
1875	51,830½	47 1	9,925	35 9	3,563½	26 9			
1876	65,658½	47 0	13,698½	38 6	3,762½	24 7			
1877	57,110½	57 6	4,758½	43 8	3,065½	25 10			
1878	60,458½	43 2	13,087½	40 11	4,697	23 6			

AVERAGES

FOR THE SIX WEEKS ENDING	Wheat.		Barley.		Oats.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Aug. 17, 1878.....	44 2	33 3	26 1	27 9		
Aug. 24, 1878.....	45 2	36 3	3	27 9		
Aug. 31, 1878.....	45 8	42 1	26 2	27 9		
Sept. 7, 1878.....	45 4	42 5	25 4	27 9		
Sept. 14, 1878.....	45 0	41 11	24 4	27 9		
Sept. 21, 1878.....	43 2	40 11	23 6	27 9		
Aggregate Avg. of above.....	44 9	39 6	25 6	27 9		
The same period in 1877.....	61 6	37 3	27 6	27 9		

FLUCTUATIONS in the AVERAGE PRICE of WHEAT



Hide and Skin Markets.

LONDON, SATURDAY, September 21.

MARKET HIDES	s. d.	s. d.	Horsehides, each	6 0 to 12 0
56 to 64lbs.....	0 2½	0 9	Calfskins, light	2 0 4 0
64 to 72lbs.....	0 3½	0 3½	Full	7 0 0 9
72 to 80lbs.....	0 4	0 4½	Sheep Skins: Llechl.	0 0 0 0
80 to 88lbs.....	0 4½	0 5	Kent's and half-breds	0 0 0 0
88 to 96lbs.....	0 5	0 5½	Lambs	2 6 0 0
96 to 104lbs.....	0 5½	0 6½	Shearings	2 6 4 0
104 to 112lbs.....	0 6	0 6	Tegs	0 0 0 0

Covent Garden Market.

LONDON, THURSDAY, Sept. 19.

FRUIT.

Appricots, ½ dozen.....	0 6 to 0 7	Melons each.....	1 0 to 3 0
Apples, ½ sieve.....	1 6 4 0	Oranges, per hundred	0 0 0 0
Figs, per dozen.....	0 8 2 0	Peaches, ½ doz.....	6 0 15 0
Filberts, per lb.....	0 6 0 0	Pears, per doz.....	1 0 3 0
Lemons, ½ hundred	10 0 16 0	Pine Apples, ½ doz	2 0 6 0
Grapes, ½ lb.....	0 6 4 0	Plums, ½ sieve.....	2 0 5 0

VEGETABLES.

Artichokes, per bus. 0 to 0	Lettuces, per doz.....	0 0 0 0
Eng. Globe, doz.....	Cos Eng., score.....	1 6 2 6
Asparagus, sp. bun.....	Mint, grn., per bunch	0 4 0 0
Eggs, per bus.....	Mushrooms, ½ bottle	0 0 0 0
Aubergines, per doz.....	Onions, ½ bushel	0 0 0 0
Beans, Fr., new, ½ lb.	Young, ½ bundle.....	0 4 0 8
runners, ½ bus.....	Parsley, per bunch.....	0 4 0 0
broad, per bus.....	Peas, green, per qt.....	1 8 2 0
Beet, per dozen.....	Potatoes, n w, French,	0 0 0 0
Cabbages, per dozen	per lb.....	0 0 0 0
Carrots, ½ bunch.....	Jersey, per lb.....	0 0 0 0
New Fr., per bun.....	Radishes, per bunch.....	0 1 0 0
Chilliflowers, per doz	Salsify, per bundle.....	0 0 0 0
Oslery, ½ bundle.....	Scallions, per doz.....	1 0 0 0
Chilies, per lb.....	New Jersey, per doz	2 0 0 0
Green, per doz.....	Rhubarb, per bundle.	0 0 0 0
Cucumbers, each.....	Salsify, ½ bundle.....	0 0 0 0
Custard Mar., doz.....	Sprouts, per punnet.....	1 0 0 0
Endive, per doz.....	Shallots, ½ lb.....	0 8 0 0
Batavian, per doz.....	Spinach, per bushel.....	2 0 3 0
Garlic, per lb.....	Tauatots, per dozen	2 6 3 0
Herbs, per bunch.....	Turnips, ½ bun.....	0 0 0 0
Horse Radish, ½ bund.	New, per bat.....	0 6 0 0
	Veget. Marrows, ½ doz	0 0 0 0

The Potato trade is dull, and prices remain the same:—Myatts, 120s. to 160s.; Regents, 100s. to 130s.; Early Rose, 110s. to 120s. per ton.

Fertilizers.

	£ s. d.	£ s. d.
Gaano, Peruvian, 10 to 12 am....	per ton 11 10	0 to 13 0 0
Do. High Phosphatic.....	" 7 13 3	8 0 0
Bone Ash, River Plate.....	" 6 10 0	6 15 0
Linseed Cake, American, thin oblong, prime, in bags.....	" 8 15 0	9 0 0
Do. common.....	" 0 0 0	0 0 0
Cottoncake, N.A., decorticated, prime, ..	" 7 5 0	7 10 0
Do. English, undecorticated ..	" 6 0 0	6 2 6
Superphosphate, 75 to 0 per cent in bulk	0 0 0	0 0 0
Ditto 0 to 0 per cent, ..	" 0 0 0	0 0 0
Nitrate of Soda.....	per cwt. 0 14 6	0 0 0
Linseed, Bombay.....	per qr. 2 13 0	2 13 6
Niger.....	" 2 0 0	2 1 0
Cloverseed, N.A., n.r., f. to g., ..	" 1 1 0	2 3 0
Tallow, superior North's.....	" 1 18 0	0 0 0

SAMUEL DOWNES AND CO., General Brokers,
No. 57, The Albany, Liverpool.

O-seam Manure, for Wheat, Barley, Oats, &c.....	per ton £11 0 0
B-an Manure, for Beans, Peas, Tares, &c.....	" 8 0 0
Wheat Manure, for Autumn Sowing.....	" 8 0 0
Soluble Guano.....	" 12 10 0
Manure Manure.....	" 8 0 0
Licato Manure.....	" 8 0 0
Turnip Manure.....	" 7 10 0
Dissolved Bones.....	" 6 10 0
Superphosphate of Lime, best quality.....	" 6 0 0

PRENTICE BROS.,

Agricultural Chemical Works, Stowmarket Suffolk.

Driffeld " Special" Linseed Cake.....	per ton £11 0 0
Corn Cake.....	" 8 5 0
Cotton Cake.....	" 7 0 0
Ma. ures for all Crops.....	6 10 0 to 10 10 0

F. C. MATTHEWS, SON & CO.,

PERUVIAN GOVERNMENT GUANO, imported by the Peruvian Guano Company.

	£ s. d.	£ s. d.
London: High phosphatic.....	7 15 9	to 10 7 8
" High ammoniacal.....	11 2 0	to 12 13 0
Liverpool: High ammoniacal.....	11 11 0	to 12 10 0
" High phosphatic.....	7 12 3	to 9 15 4
Falmouth: High ammoniacal.....	10 8 1	to 12 10 0
Plymouth: High ammoniacal.....	11 0 4	to 12 10 0
Southampton: High ammoniacal.....	0 0 0	to 11 16 0
Gloucester: High ammoniacal.....	11 3 3	to 12 10 0
Bristol: High ammoniacal.....	10 1 1	to 12 10 0
" High phosphatic.....	7 2 1	to 8 10 0
Hull: High ammoniacal.....	10 15 0	to 12 10 7
Newcastle-on-Tyne: High ammoniacal.....	0 0 0	to 12 10 0
" High phosphatic.....	8 5 2	to 8 18 6

W. A. BAU, 57, Old Broad-street, London.
Sole Agent for the Company

	£ s. d.
Special Concentration Top Dressing for Wheat, Barley, Beans, Peas, Grass, &c..... (per Ton)	12 10 0
Ammonia Fixed Guano.....	" 11 0 0
Manure and Potash Manures.....	" 10 15 0
Special Dissolved Bone.....	" 8 1 0
Dissolved Bone.....	" 7 13 0
Super-phosphate (best quality).....	" 8 0 0

LANGLADE'S Chemical Manure Co. (Limited),
122, Drinston House, Mark Lane.

Printed by HAZELL, WATSON, & VINEY, 265, Strand, London.

THE FARMER'S MAGAZINE.

C O N T E N T S.

OCTOBER, 1878.

PLATE.—TREEING A CUB.

	Page
DESCRIPTION OF PLATE	237
SEED CORN.—BY T. BOWICK	237
LIFE IN NEW ZEALAND, NO. II	245
AGRICULTURAL SOCIETIES	249, 269, 301
THE CONTAGIOUS DISEASES (ANIMALS) ACT, 1878	253
THE SHOTLEY HALL SALE	274
SALE OF EARL FEVERSHAM'S SHORTHORNS	277
THE AGRICULTURE OF PERSIA	278
LIVE STOCK NOTES	279, 291
FREE TRADE IN LAND	281, 288
THE BEER QUESTION	284
ENGLAND'S SOURCES OF SUPPLY	285
WHEAT AND "CHEAT"	286
THE HARVEST IN SOUTHERN RUSSIA	287
SHORTHORN SALES	294
UNION STOCK YARDS, CHICAGO	292
THE CANT OF SPORT	295
PROFESSOR GAMGEE ON VIVISECTION	296
THE MARQUIS OF RIPON ON AGRICULTURE	296
SEWAGE FARMS IN PARIS AND BRUSSELS	298
THE UTILITY OF HORSE-SHOEING	298
LORD WINMARLEIGH ON THE CATTLE DISEASES ACT	299
NATIONAL PROGRESS	300
DISEASED ANIMALS AS HUMAN FOOD	307
AGRICULTURE IN CYPRUS	308
MISCELLANEOUS	309
REVIEW OF THE CORN TRADE	311
MARKET CURRENCIES, &c.	314

IMPORTANT TO FLOCKMASTERS.

THOMAS BIGG,
Agricultural & Veterinary Chemist,

By Appointment to his late Royal Highness
 The Prince Consort, K.G.,

LEICESTER HOUSE, GREAT DOVER STREET,
 BOROUGH, LONDON,

BEGBS 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 included)	0	10	0
30 lb. 150 " " " " " " " " " " " "	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. HERKPATH, the celebrated Analytical Chemist:—
 Bristol Laboratory, Old Park, January 18th, 1861.

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 "yolk") in the skin, the

fleece, or the carcase. I think it deserves the numerous testimonials published. I am, Sir, yours respectfully,

WILLIAM HERKPATH, Esq., F.R.S., &c.,
 To Mr. Thomas Bigg, Professor of Chemistry,
 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, is. 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 500 sheep were all dressed in August last with 8½ 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 sweetest and best remedy now in use.

"I remain, dear Sir,
 "For JOHN TINGEY, Esq.,
 "R. RENNEY.

"To Mr. Thomas Bigg." "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 APARATUS.....£14, £6, £3, & £3.

GENERAL ADVERTISING.

C. H. MAY & CO.,

ADVERTISING OFFICES,

78, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1846.

APPOINTED AGENTS TO THE ADMIRALTY, TRINITY HOUSE, &c., &c.

ADVERTISEMENTS INSERTED

IN ALL BRITISH, FOREIGN, AND COLONIAL PAPERS.

TRANSLATIONS IN ALL LANGUAGES.

THE
ROYAL FARMERS' & GENERAL
INSURANCE OFFICE.

ESTABLISHED 840
TO INSURE AGAINST LOSSES BY
FIRE AND HAIL STORMS,
AND TO GRANT
INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.
Deputy-Chairman—B. P. SHEARER, Esq., 47, Gloucester-place, Portman Square.
Thomas Henry Burroughes, Esq., 17, Lower Berkeley Street,
William Clutton, Esq., 7, Clifton Villas, Penge.
A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury.
E. J. Hawker, Esq., 37, Cadogan Place, Sloane Street
Richard L. Loveland, Esq., 4, Hare Court, Temple.
John Reddish, Esq., 9, Highbury New Park.
Major F. Anderson Stebbing, 4, Cleveland Gardens,
Castle Hill, Ealing.

FIRE.—Insurances at moderate rates.

LIFE.—Insurances on equitable terms. Profits divided every five years.

HAIL.—Crops insured against Hail Storms at 5d. per acre.

LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand
London, W.C., or of the Agents.

THE
MARK LANE EXPRESS
AND
AGRICULTURAL JOURNAL

IS THE

LARGEST AND THE LEADING FARMER'S AND GRAZIER'S NEWSPAPER.

PUBLISHED EVERY MONDAY EVENING, IN TIME FOR POST.

Office of Publication and for Advertisements, 265, Strand, London. May be had of all Booksellers
and Newsmen throughout the Kingdom, price 7d., or £1 10s. 4d. per annum.

J. C. NESBIT AND SON, Analytical, Agricultural, and Consulting
Chemists (Manager A. Anthony Nesbit, F.C.S., &c.), undertake the analysis
of manures, feeding stuffs, seeds, soils, waters, and all agricultural requisites.
And may be consulted upon the cause of the failure of crops, or any questions
in scientific agriculture. Laboratory: 38, Gracechurch Street, E.C. A
list of fees sent on application.—[ADVT.]

No. 5, Vol. LIII.]

NOVEMBER, 1878.

[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.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

PORT	...	...	24s.,	30s.,	36s.,	42s.	per dozen & upwards.
SHERRY	...	...	18s.,	24s.,	30s.,	36s.	„ „
MADEIRA	...	...	30s.,	36s.,	42s.,	48s.	„ „
<small>(As supplied to the wounded in the East.)</small>							
MARSALA	...	...	20s.,	24s.,	28s.,	32s.	„ „
CHAMPAGNE	...	...	30s.,	36s.,	42s.,	50s.	„ „
CLARET	...	...	12s.,	15s.,	18s.,	24s.	„ „
BURGUNDY	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		36s.,	42s.,	48s.,	54s.	„ „
MOSELLE	...	...	24s.,	30s.,	36s.,	42s.	„ „
Ditto	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
HOCK	...	...	20s.,	24s.,	30s.,	36s.	„ „
HOCK	(Sparkling)		32s.,	38s.,	44s.,	50s.	„ „
SAUTERNE	...	...	18s.,	24s.,	30s.,	36s.	„ „
BRANDY	...	...	38s.,	42s.,	48s.		„ „
WHISKY	...	...	38s.,	42s.			„ „
RUM	..	...	40s.,	42s.			„ „
GIN	...	...	30s.,	32s.			„ „

PORT in Quarter Casks of 28 gallons, from £14 14s.

SHERRY in Quarter Casks of 27 gallons, from £10 10s.

Sole Agent for Rousseau & Cie Reims Champagne,
Rivaz & Cie Cognac Brandy.

TUXFORD & CO.,

Wine Importers,

48, FENCHURCH STREET, E.C.

ESTABLISHED 1847.

SAMPLES ON APPLICATION.

ALL GOODS FORWARDED CARRIAGE PAID.



St. George



THE FARMER'S MAGAZINE.

NOVEMBER, 1878.

PLATE.

G L E N G Y L E.

▲ PRIZE HUNTER, THE PROPERTY OF T. H. HUTCHINSON, ESQ., THE MANOR HOUSE, CATTERICK, YORKSHIRE.

Glengyle is a chesnut gelding, six years old, by Knowsley, out of Pet, a mare of Mr. Russell Swanwick's, Royal College Farm, Cirencester, by whom he was bred. He stands sixteen hands high, showing a deal of blood with good form, and was one of the finest gallopers that ever went round a show ring, and where there was room to gallop was awarded first honours as a twelve stone hunter, at all the most important shows in England; but since our sketch was taken he caught cold, which settled on his lungs and will, we are sorry to hear, prevent him from again appearing in a show ring. As a three-year-old he won the first prize at Pomona Gardens, Manchester, first at the Bath and West of England meeting at Croydon, and the champion cup for the best hunter in the yard; the first prize at Alexandra Park, and the champion plate, beating all the showyard cracks of

the day, including his present owner's famous horse the Jester, a winner of nearly £2,000 in prizes, when Glengyle became the property of Mr Hutchinson for 400 guineas, and the same year won the Great Yorkshire and several local prizes. As a four-year-old he won first prize at North Yorkshire and South Durham show; second at Islington; second at Alexandra Park; second at the Royal Birmingham, first at the Great Yorkshire, beating those previously placed before him; first at Northumberland, Richmondshire, and Easingwold shows, and several local prizes besides. As a five-year-old he won first prizes at the Royal, Liverpool, the Great Yorkshire, Durham County, Darlington, Cleveland, &c., &c. This year he was first at Manchester and at Alexandra Park, where he took cold or in coming home.

WEIGHTS AND MEASURES ACT, 1878.

The Weights and Measures Act, 1878, which comes into operation on the 1st of January next, was passed through Parliament with very little notice from the outside public, but is now attracting a great deal of attention throughout the country. Generally the Act is welcomed as an attempt to introduce order where disorder now reigns, and as at least a pioneer to a coming measure which will enforce absolute uniformity in the weights and measures used throughout the United Kingdom. There are some people, however, who grumble at the Act as a piece of "harassing legislation," as if a complicated muddle of local weights and measures, most confusing to buyers and sellers, could be done away with without causing inconvenience. That the Act is faulty in a few points few would deny; but it is unreasonable to declaim against it as a few hasty critics have done. The

intentions of its promoters were, and its ultimate effect will be, good. It is a pity that it was not fully criticised before instead of after it became law; and yet, perhaps, if it had been it would never have been passed. Now that it has passed those who are affected by it will be bound to make the best of it, and in a measure that affects so materially the commercial interests of the whole country anything very objectionable is certain to be pointed out and amended.

For the benefit of those of our readers who are not already familiar with the Act we append the principal clauses. From these clauses it will be seen that after the first of January the same weights and measures will have to be used throughout the United Kingdom, unless the optional adoption of the metric system may be deemed to be an exception. The standard of weight for all

goods except precious metals, jewels, and drugs will be the pound of 16 ounces, and it will be illegal to sell by any other weight than the pound or some multiple of it, such as the stone of 14 pounds, the hundredweight of 112, or the ton of 20 hundredweight. The imperial measure of length will be the yard of 3 feet or 36 inches, and the rod will be $5\frac{1}{2}$ yards, the chain 22 yards, the furlong 220 yards, the mile 1,760 yards, the rood 1,210 square yards, and the acre 4,840 square yards. As to the measures by which corn and other goods now commonly sold by measure, the Act says:—"The unit or standard measure of capacity, from which all other measures of capacity, as well for liquid as for dry goods, shall be derived, shall be the gallon containing ten imperial standard pounds weight of distilled water weighed in air against brass weights, with the water and the air at the temperature of 62 degs. of Fahrenheit's thermometer, and with the barometer at 30 inches. The quart shall be one-fourth part of the gallon, and the pint shall be one-eighth part of the gallon. Two gallons shall be a peck, and eight gallons shall be a bushel, and eight such bushels shall be a quarter, and thirty-six such bushels shall be a chaldron." The heaped measure will be illegal, and potatoes, fruit, lime, and other goods now usually sold by heaped measure will have to be struck as corn is, or otherwise made as level as the size of the articles will allow.

Some critics of the Act have fallen into the error of supposing that market quotations of corn, for instance, may only be given by the standard bushel, and not by the quarter; but Clause 19 clearly states that sales and contracts may be made "according to one of the imperial weights and measures ascertained by this Act, or to some multiple or part thereof"; and Clause 23, which relates to the quotations of such sales and contracts, simply makes it penal to publish any price list "in which the denomination of weights and measures quoted or referred to denotes or implies a greater or less weight or measure than is denoted or implied by the same denomination of the imperial weights and measures under this Act." In fact, the usual mode of selling corn in the London and many of the provincial markets—by the quarter of eight bushels—will not be interfered with by the Act. It may be fairly objected, however, that the penalty to be imposed on any journal which publishes a quotation of sales as they are actually made, instead of by the imperial standard, is unreasonably and unnecessarily severe, amounting as it does to "a fine not exceeding ten shillings" for every copy of the paper published. The persons who sell by illegal weights and measures, and not those who simply chronicle the sales as they are made, ought to be the persons to be punished. It is not enough to say in excuse for this severe stipulation that a similar penalty has been imposed by previous Acts relating to weights and measures. The same may be said with respect to the use of other than standard weights and measures; but it does not follow that because previous Acts have been dead letters, and their penalties have consequently not been imposed, the Act of 1878 will be similarly inoperative. On the contrary, we believe that it is fully

intended to enforce this Act, and those who framed it should, therefore, have been careful not to re-introduce old penal clauses of a harsh and unreasonable character.

Our readers probably will have seen from a report of a meeting of members of the grain trade at Liverpool that it is proposed to sell corn by the cental, or 100 lb., and the proposal has been very favourably received by the trade generally. There has for some time been a growing feeling in favour of selling corn by weight. Some years ago some of the Chambers of Agriculture agreed to advocate the plan, and the cental was named as a convenient weight. It is impossible to avoid the conclusion that if the framers of the Act had consulted sufficiently with members of the corn trade the standard for the sale of corn would have been one of weight and not of capacity. The Act allows the introduction of the metric system as an alternative to the standards named above; but if that system should be adopted in some parts of the country, while corn continues to be sold in other districts by the imperial measures, we shall not have the uniformity which is so highly desirable. Fortunately, as the *Corn Trade Journal* has pointed out, "The third clause of Section 8 of the new Act provides that 'The Board of Trade shall from time to time cause such new denominations of standards being either equivalent to or multiples or aliquot parts of the imperial weights and measures ascertained by this Act, or being equivalent to or multiples of each coin of the realm for the time being, as appear to them to be required, in addition to those mentioned in the Second Schedule of this Act, to be made and duly verified, and those new denominations of standards when approved by Her Majesty in Council shall be Board of Trade standards in like manner as if they were mentioned in the said schedule.' It would therefore appear that if proper representations are made to the Board of Trade it would be quite within their province to legalise standards of say 100lb., 200lb., 300lb., 400lb., and 500lb. as most useful to the trade. These under suitable names could be used, the first, the cental, as the unit and to supersede the bushel; the 200lb. for a sack of flour, 300lb. for cargo transactions in oats, 400lb. for barley, and 500lb. for wheat and all other grain, but it is very desirable that only standards having the cental for a basis, at all events, be adopted."

We quite agree with our contemporary in this opinion, as also in this—that if 200lb. were adopted as the weight of a sack of corn or flour the convenience would be very great. It is not only millers who find it difficult sometimes to obtain draymen who can carry sacks of flour weighing 280lb. Farmers experience a like difficulty in getting carters to carry sacks of wheat weighing from 230lb. to 260lb., and it is a common joke amongst them that they will soon have to use three-bushel sacks. The difficulty is peculiarly felt when thrashing is going on, and the regular horsemen are at work in the fields. Then it is by no means easy to find odd hands, or day labourers, not horsemen, both able and willing to carry sacks of corn.

The abolition of the heaped measure will probably be more troublesome to enforce than any other portion of the Act, as it will affect hawkers of fish, fruit, and vegetables, and other ignorant men. Nevertheless, it is a wise reform, as the heaped measure is obviously a very elastic quantity, greatly dependent upon the generosity or parsimony of the seller or the watchfulness of the buyer.

On the whole we regard the Weights and Measures Act as at least the initiation of a great and much-needed reform; and there is no doubt that if men of business will do their best to get it perfected and to make it work an immense amount of labour, confusion, and loss will be spared.

IMPERIAL MEASURES OF WEIGHT AND CAPACITY.

3. The same weights and measures shall be used throughout the United Kingdom.

13. The weight in vacuo of the platinum weight (mentioned in the First Schedule to this Act), and by this Act declared to be the imperial standard for determining the imperial standard pound, shall be the legal standard measure of weight, and of measure having reference to weight, and shall be called the imperial standard pound, and shall be the only unit or standard measure of weight from which all other weights and all measures having reference to weight shall be ascertained.

14. One sixteenth part of the imperial standard pound shall be an ounce, and one sixteenth part of such ounce shall be a dram, and one seven thousandth part of the imperial standard pound shall be a grain.

A stone shall consist of fourteen imperial standard pounds, and a hundredweight shall consist of eight such stones, and a ton shall consist of twenty such hundredweights.

Four hundred and eighty grains shall be an ounce troy.

All the foregoing weights except the ounce troy shall be deemed to be avoirdupois weights.

15. The unit or standard measure of capacity, from which all other measures of capacity as well for liquids as for dry goods, shall be derived, shall be the gallon, containing ten imperial standard pounds weight of distilled water weighed in air against brass weights, with the water and the air at the temperature of sixty-two degrees of Fahrenheit's thermometer, and with the barometer at thirty inches.

The quart shall be one-fourth part of a gallon, and the pint shall be one eighth part of the gallon.

Two gallons shall be a peck, and eight gallons shall be a bushel, and eight such bushels be a quarter, and thirty-six such bushels shall be a chaldron.

16. A bushel for the sale of any of the following articles, namely, lime, fish, potatoes, fruit, or any other goods and things which before (the passing of the Weights and Measures Act, 1835, that is to say) the Ninth day of September, One Thousand Eight Hundred and Thirty-five, were commonly sold by heaped measure, shall be a hollow cylinder having a plane base, the internal diameter of which shall be double the internal depth, and every measure used for the sale of any of the above-mentioned articles which is a multiple of a bushel, or is a half bushel or a peck, shall be made of the same shape and proportion as the above-mentioned bushel.

17. In using an imperial measure of capacity, the same shall not be heaped, but either shall be stricken with a round stick or roller, straight and of the same diameter from end to end, or if the article sold cannot from its size or shape be conveniently stricken shall be filled in all parts as nearly to the level of the brim as the size and shape of the article will admit.

METRIC EQUIVALENTS OF IMPERIAL WEIGHTS AND MEASURES.

18. The table in the Third Schedule to this Act shall be deemed to set forth the equivalents of imperial weights and measures and of the weights and measures therein expressed in terms of the metric system, and such table may be lawfully used for computing and expressing, in weights and measures, weights and measures of the metric system.

USE OF IMPERIAL WEIGHTS AND MEASURES.

19. Every contract, bargain, sale, or dealing, made or had

in the United Kingdom for any work, goods, wares, or merchandise or other thing which has been or is to be done, sold, delivered, carried, or agreed for by weight or measure, shall be deemed to be made and had according to one of the imperial weights or measures ascertained by this Act, or to some multiple or part thereof, and if not so made or had shall be void; and all tolls and duties charged or collected according to weight or measure shall be charged and collected according to one of the imperial weights or measures ascertained by this Act, or to some multiple or part thereof.

Such contract, bargain, sale, dealing, and collection of tolls and duties as is in this section mentioned is in this Act referred to under the term "trade."

No local or customary measures, nor the use of the heaped measure, shall be lawful.

Any person who sells by any denomination of weight or measure other than one of the imperial weights or measures, or some multiple or part thereof, shall be liable to a fine not exceeding forty shillings for every such sale.

20. All articles sold by weight shall be sold by avoirdupois weight; except that—

(1.) Gold and silver, and articles made thereof, including gold and silver thread, lace, or fringe, also platinum, diamonds, and other precious metals or stones, may be sold by the ounce troy or by any decimal parts of such ounce; and all contracts, bargains, sales, and dealings in relations thereto shall be deemed to be made and had by such weight, and when so made or had shall be valid; and

(2.) Drugs, when sold by retail, may be sold by apothecaries weight.

Every person who acts in contravention of this section shall be liable to a fine not exceeding five pounds.

21. A contract or dealing shall not be invalid or open to objection on the ground that the weights or measures expressed or referred to therein are weights or measures of the metric system, or on the ground that decimal subdivisions of imperial weights and measures, whether metric or otherwise, are used in such contract or dealing.

22. Nothing in this Act shall prevent the sale, or subject a person to a fine under this Act for the sale, of an article in any vessel, where such vessel is not represented as containing any amount of imperial measure, nor subject a person to a fine under this Act for the possession of a vessel where it is shown that such vessel is not used nor intended for use as a measure.

23. Any person who prints, and any clerk of a market or other person who makes any return, price list, price current, or any journal or other paper containing price list or price current, in which the denomination of weights and measures quoted or referred to denotes or implies a greater or less weight or measure than is denoted or implied by the same denomination of the imperial weights and measures under this Act, shall be liable to a fine not exceeding ten shillings for every copy of every such return, price list, price current, journal, or other paper which he publishes.

24. Every person who uses or has in his possession for use for trade a weight or measure which is not of the denomination of some Board of Trade standard, shall be liable to a fine not exceeding five pounds, or in the case of a second offence ten pounds, and the weight or measure shall be liable to be forfeited.

UNJUST WEIGHTS AND MEASURES.

25. Every person who uses or has in his possession for use for trade any weight, measure, scale, balance, steelyard, or weighing machine which is false or unjust, shall be liable to a fine not exceeding five pounds, or in the case of a second offence ten pounds, and any contract, bargain, sale, or dealing made by the same shall be void, and the weight, measure, scale, balance, or steelyard, shall be liable to be forfeited.

26. Where any fraud is wilfully committed in the using of any weight, measure, scale, balance, steelyard, or weighing machine, the person committing such fraud, and every person party to the fraud, shall be liable to a fine not exceeding five pounds, or in the case of a second offence ten pounds, and the weight, measure, scale, balance, or steelyard, shall be liable to be forfeited.

27. A person shall not wilfully or knowingly make or sell, or cause to be made or sold, any false or unjust weight, measure, scale, balance, steelyard, or weighing machine.

Every person who acts in contravention of this section shall

be liable to a fine not exceeding ten pounds, or in the case of a second offence, fifty pounds.

APPLICATION OF ACT TO SCOTLAND.

This Act shall apply to Scotland, with the following modifications:—

71. In the application of this Act to Scotland, the expression "rents and tolls" includes all stipends, feu duties, customs, casualties, and other demands whatsoever payable in grain, malt, or meal, or any other commodity or thing.

The fairs prices of all grain in every county shall be struck by the imperial quarter, and all other returns of the prices of grain shall be set forth by the same, without reference to any other measure whatsoever.

Any person who acts in contravention of this provision shall be liable to a fine not exceeding five pounds.

APPLICATION OF ACT TO IRELAND.

This Act shall apply to Ireland, with the following modifications:—

76. In Ireland, every contract, bargain, sale, or dealing—

For any quantity of corn, grain, pulses, potatoes, hay, straw, flax, roots, carcasses of beef or mutton, butter, wool, or dead pigs, sold, delivered, or agreed for;

Or for any quantity of any other commodity, sold, delivered, or agreed for by weight (not being a commodity which may by law be sold by the troy ounce or by apothecaries weight).

Shall be made or had by one of the following denominations of imperial weight, namely,

The ounce avoirdupois;

The imperial pound of sixteen ounces;

The stone of fourteen pounds;

The quarter hundred of twenty-eight pounds;

The half hundred of fifty-six pounds;

The hundredweight of one hundred and twelve pounds, or

The ton of twenty hundredweight;

and not by any local or customary denomination of weight whatsoever, otherwise such contract, bargain, sale, or dealing shall be void:

Provided always, that nothing in the present section shall be deemed to prevent the use in any contract, bargain, sale, or dealing of the denomination of the quarter, half, or other aliquot part of the ounce, pound, or other denomination aforesaid, or shall be deemed to extend to any contract, bargain, sale, or dealing relating to standing or growing crops.

77. In Ireland, every article sold by weight shall, if weighed, be weighed in full net standing beam; and for the purposes of every contract, bargain, sale, or dealing, the weight so ascertained shall be deemed the true weight of the article, and no deduction or allowance for tret or beamage, or on any other account, or under any other name whatsoever, the weight of any sack, vessel, or other covering in which such article may be contained alone excepted, shall be claimed or made by any purchaser on any pretext whatever under a penalty not exceeding five pounds.

A proceeding for the recovery of a penalty under this section shall be begun within three months after the offence committed.

THE NEW HIGHWAYS ACT.

The President of the Local Government Board has addressed to the various Clerks of the Peace for Counties a circular embodying the chief matters with which the Highways and Locomotives (Amendment) Act, 1878, which received the Royal assent on the 16th of August last, deals, requesting them to bring the observations contained in the circular under the notice of the Justices at the ensuing Quarter Sessions. The chief matters with which the Act deals are:—1. Highway Districts and Highways; 2. Disturmpiked and Main Roads; 3. Locomotives on Roads. In regard to the first class an important provision among others is that which enables the county authority (*i.e.*, the Justices in Quarter Sessions), upon a complaint by any interested person of the non-repair of a highway by any highway authority within their jurisdiction, and after the report upon the same of their surveyor, to proceed to make an order limiting a time for executing such repairs as may be necessary, and in default to appoint a person to do the works and recover the expense from the highway

authority. This power is analogous to that conferred by the Public Health Act, 1875, which enables the Local Government Board to appoint a person to execute the duty of a defaulting sanitary authority. But the most important alteration effected by the Act is that which provides that after the 29th September, 1878, all turnpike roads which have been disturmpiked since the 31st December, 1870, or which may hereafter become disturmpiked within any highway area, shall be deemed to be main roads, and one half of the expenses of repairing the same shall be repaid to the highway authority out of the county rate. After reciting the bodies which, for the purposes of such repayment, are to be deemed highway authorities, Section 15 of the new Act proceeds to authorise the county authority to declare certain highways to be main roads, and thus to confer upon the highway authorities a right to this repayment of a moiety of the cost of the repairs. In order to enable the justices to exercise this power, the highway authority must first state the reasons why the particular highway ought to become a main road, such as that it is a medium of communication between important towns, or a thoroughfare to a railway station, or because it is otherwise subject to extraordinary traffic of a public and general character. On the other hand as a counterbalance to this contribution of a moiety for the repair of what may be deemed main roads, the county authority, if it appear to them that any road which has become disturmpiked between the 31st December, 1870, and the 16th August, 1878, ought not to become a main road, may apply to the Local Government Board for a provisional order declaring that such road ought not to become a main road. This power is conferred in order to provide for reducing those main roads, from which the traffic has been largely diverted, to the status of ordinary highways. The expense of the Local Government Board inspection of any such road is to be defrayed by the county authority. Another very responsible function confided to the county authority is that of making bye-laws for various purposes connected with the traffic on the roads within their county, and this power is not limited to the main roads in respect of the repairs of which they are liable to contribute a half of the expenses, but to the ordinary highways also, in regard to which no such liability attaches. One of the purposes for which such bye-laws may be made is for regulating the use of bicycles; the others have reference to breadth of wheel-tires, locking wheels on hills without the use of a skid or shoe, gates opening outward on highways, locomotives, &c. The county authority can also license locomotives not used solely for agricultural purposes, and obtain a fee of £10 yearly in respect of such licence. Some miscellaneous instructions are added with regard to the framing of these bye-laws, and some provisions as to the taking over of county bridges will no doubt be useful in fixing a tangible responsibility upon the county authority for their repair in certain cases.—*Beds' Times*.

INJURIOUS DYES.—Mr. Charles Ekin writes to the *Times*:—Some years ago the public was warned through the *Times* against the irritation and inflammation occasioned by wearing the bright coloured socks then in vogue. The dyes were aniline colours, and in the case of striped socks where bright colours alternated with white it was found that the foot was affected only where the coloured part came in contact with the skin. This year a special green and bronze are fashionable, the former colour used chiefly for gloves and the bronze for artificial flowers for bonnets, &c. These colours, also from aniline dyes, have produced just the same discomfort. I have had several cases lately brought under my notice, some very obstinate ones, where the patient has suffered for weeks from a troublesome eruption either of the head or hands, as the case may be, whether from a bonnet or gloves. In one case the gloves were suspected and tested for arsenic, with, of course, negative results, and the eruption, which necessitated several weeks of medical attendance, continued until the gloves were worn out. As this eruption has, to my knowledge, considerably puzzled, not only patients, but their medical advisers, you would be rendering good service by pointing out the cause.

DEGENERATE TIMES.—First Dragon: "Awfully fine girl, that!" Second Dragon: "Y'es—but hasn't got a word to say for herself. Asked her if she wasn't awfully fond of hunting? Said she'd never been on a horse in her life. Now, what's a feller to say after that? Can't make out what girls do talk about in these days!"—*Punch*.

GENERAL VIEW OF BRITISH AGRICULTURE.

HOME AND FOREIGN SUPPLY OF FOOD.

One of the most important functions of Government is to take care that there shall be no hindrance to the people supplying themselves with food and clothing, which are the first necessities of life. And as these are, in one form or another, annual products of the earth, dependent for their abundance on the skill, capital and labour employed in its cultivation, much of the safety and welfare of a country arises from the condition of its agriculture. That of England has attained an exceptionally high productiveness. The best of our land has long been occupied, and, though there is yet much of the inferior class that admits of improvement, it has become our interest as a nation to look also for further supplies from the broader and richer lands of other countries, which, to their advantage and ours, the beneficent principle of Free-trade has placed within our reach.

The progressive increase of foreign supplies during the past twenty years is marvellous, the value of foreign cereal and animal food imported having risen from £35,000,000 in 1857, to £110,000,000 in 1876. The greatest proportional increase has been in the importation of animal food: living animals, fresh and salted meat, fish, poultry, eggs, butter and cheese, which in that period has risen from an annual value of seven to thirty-six millions sterling. More than half the farinaceous articles imported, other than wheat, are used in the production of beer and spirits.

The imports of animal food during the first fourteen years of Free-trade were comparatively small, the difference of price here and in foreign countries not then offering a margin sufficiently encouraging to justify costly arrangements of transit. But as the price of meat in this country moved steadily up, rising in a few years from fivepence to sevenpence, ninepence, and even a shilling a pound, enterprise with skill and capital were called into rapid action to meet the growing demand. It became clear that an article so valuable could cover the cost of carriage for much longer distances than corn, a pound-weight of meat being many times more valuable than a pound of corn. All kinds of salted meat were expected, and came; but fresh meat (except as live animals), from its perishable nature, was not anticipated in any considerable quantity. The cost of transporting live animals from any great distance must obviously present a very important difficulty. And a further and most serious objection arose, in regard to those from nearer European ports, in the risk of such live animals bringing with them across the seas the contagion of cattle-plague, or other pests, dangerous to the live-stock of this country. All this could be avoided by the importation of fresh meat and a plan with this object, recently adopted by an American company, has been attended with a large measure of success. The steam ships in which the meat is carried have chambers fitted in such a manner that the meat can be kept fresh during the voyage by currents of air cooled by ice. During the last winter and spring large shipments have been thus successfully made, and most of them have arrived in good condition. Should this plan prove on the whole safe and successful, we shall have the vast prairies of America added to our own pastures as new sources of supply. This will be a great benefit to the consumers of meat in this country, but probably more by preventing a further rapid rise in the price of meat than by effecting a reduction upon it. The American people are themselves much greater consumers of meat, man for man, than the English, and when prosperity returns to that country their home consumption will increase, and the surplus for exportation be diminished. Moreover, the English market will take only the best quality. Under any circumstances the English producer has the advantage of at least a penny a pound in the cost and risk of transport, against his Trans-Atlantic competitor,—an advantage equal to £4 on an average ox. Of this natural advantage nothing can deprive him; and with this he may rest content.

The proportion in which the people of this country are

dependent for their principal articles of food on home and foreign supply was the subject of an inquiry by me in 1858, in a paper read to the Statistical Society. At that time I found the foreign supply to be in the proportion of one-fifth of the whole. In the ten years since that time the importation of meat has more than doubled, butter and cheese have risen nearly one-third, wheat more than a third, and other grain has doubled. More than one-fourth of our total consumption of agricultural produce is now obtained from other countries.

But it is a question of interest, both to the home and foreign producer, to ascertain more closely the proportion of the two chief articles, bread and meat. In the past ten years there has been a gradual reduction of the acreage and produce of wheat in this country, and a more than corresponding increase in foreign supply, the result of which is that we now receive our bread in equal proportions from our own fields and those of the stranger. In regard to meat, and other animal products, ten years ago the proportion of foreign was one-tenth of the whole. It has now risen to nearly one-fourth.

This country thus derives from foreign lands not only one-half of its bread and nearly one-fourth of its meat and dairy produce, but must also depend on the foreigner for almost the entire addition that may be further required by an increase of its population. In the last ten years there has been no increase in the acreage or production of corn, and little in that of meat. The extent of green crops and grass has slightly increased, from the double impulse of the rise in wages, and the increasing demand for dairy produce and meat. But, excluding good lands capable of being rendered fertile by drainage, we appear to have approached a point in agricultural production beyond which capital can be otherwise more profitably expended in this country than in further attempting to force our poorer class of soils. It is cheaper for us as a nation to get the surplus from the richer lands of America and Southern Russia, where the virgin soil is still unexhausted; or from the more ancient agriculture of India, which, with its cheap and abundant labour more skilfully applied, and its means of transport extended and better utilised, seems destined to become one of the principal sources of our future supply of corn.

The cost of carriage depends very much on distance, and as the chief supply of wheat comes from great distances, California, the Black Sea, and India, the cost of transporting a quantity equal to the produce of an acre in England is seldom less, and often more, than 40s. Hay and straw are so bulky that they can only bear the cost of carriage from near Continental ports. Fresh meat from America, from the costly methods necessary to preserve it, will, on the produce of an acre, cost equal to 40s. for transport to this country. This natural protection enjoyed by the British farmer in his proximity to the home market, as compared with the foreign farmer who seeks our market for his produce, thus gives him an advantage equal to the present average rent of his land, and forms some reasonable compensation for the higher taxes and wages which he has to pay as compared with his competitors in most foreign countries.

The total home produce can now be very correctly calculated from the annual agricultural returns. The collection of these returns was instituted in Ireland at the time of the potato famine in 1847, and they have been published continuously since that time. The information is collected by the constabulary, a semi-military force, stationed in all parts of the country, and is arranged by the Registrar-General, and annually printed. Not for twenty years afterwards were there any complete returns from Great Britain. After long perseverance I succeeded in obtaining a Resolution of the House of Commons in favour of the collection of agricultural statistics which was in consequence carried out for the first time in 1867, the collection of the returns being made by officers of Inland Revenue, and their arrangement for publication by the Statistical Department of the Board of Trade. The experience gained by ten years' repetition of the various inquiries has

* From the Journal of the Royal Agricultural Society of England, Vol. XIV, Part II. By James Caird, C.B. F.R.S.

created such a fund of local knowledge among the officers of the Inland Revenue that there can now be no doubt entertained of the substantial accuracy of the returns. Minute accuracy is not expected or required, but the comparisons from year to year show the relative accuracy obtained to be sufficient for all practical purposes.

It appears from these returns that though there was an exceptional decrease in the acreage of wheat in 1876, arising from the great floods in the autumn seed-time of 1875, which prevented a considerable proportion of the land being sown, no great change has occurred during the past ten years in the production of wheat in Great Britain. It has somewhat diminished in England and largely in Ireland, but the diminution is quite made up by a corresponding increase in barley. Oats remain much the same, and the total extent of arable is very slightly altered.

The permanent pasture during the same period has increased 8 per cent., no doubt from the increased cost of labor and the gradual rise in the value of live-stock and its produce. This increase of 8 per cent., amounting to nearly one million acres, not having diminished the extent of corn, must represent an addition of that breadth gained by reclamation during the ten years; and, as some considerable extent of land is yearly taken from cultivation by the increase of towns and the construction of new railroads, this shows an important gain by agricultural enterprise.

The general extent of green crops has very slightly altered in the ten years, potatoes alone showing some diminution. A large increase, however, in the proportion of mangold is shown by a rise of 100,000 acres more than in 1867. This is a root-crop peculiarly well suited to the deep soils and dry and warm climate of the south-east and southern counties; and its keeping properties, continuing well into the following summer, are a great recommendation to the stock farmer. A rise of 40 per cent. in the breadth cultivated, within so short a period as ten years, is a convincing proof that the great value of this plant is at length beginning to be generally recognised, and there seems a probability of its continued extension. In live stock there has been a moderate increase in Great Britain during the past ten years.

In Ireland the change of crops has been greater than in England or Scotland, the extent of land under corn having diminished in ten years by 12 per cent. Wheat has fallen to less than one-half, there is an increase of 28 per cent. in barley, but a decrease of nearly 10 per cent. in oats. Potatoes have fallen 12 per cent., while turnips have slightly increased. On the whole there has been a diminution of 267,000 acres of land under corn, and an addition of 203,000 acres to permanent meadow and grass. The reduction of the acreage of wheat, for which the climate of most parts of Ireland is too moist, and the considerable decline in potatoes, the tempting but precarious crop upon which that country has hitherto too much relied, are evident signs of prudence and prosperity. In the same period, though there has been a reduction in the number of sheep, that is much more than compensated by an increase in cattle; and as the expenditure on drainage and land improvement, and in the building of farm-houses and labourers' cottages, has been greatly increasing, year by year, the state of agriculture in Ireland, chiefly owing to the high price of live stock, and the increasing demand for store animals to be fattened in Great Britain, now appears to have attained a position of general progress and prosperity greater than has ever been previously experienced in that portion of the United Kingdom.

The extent of land under the various crops in the United Kingdom in 1877 was in wheat, 3,321,000 acres; barley 2,652,000 acres; oats, 4,239,000 acres; potatoes, 1,393,000 acres; other green crops, 3,566,000 acres; flax, 130,000 acres; hops, 70,000 acres; bare fallow, 633,000 acres; grass under rotation, 6,441,000; permanent pasture, 24,000,000 acres (besides mountain pastures and wastes); woods and plantation, 2,511,000 acres.

The number of live-stock of various kinds in 1877 was, of horses, 2,834,000; cattle, 9,693,000; sheep, 32,157,000; pigs, 3,964,000.

By the aid of the agricultural returns, and those of the annual imports of foreign and colonial produce, I have constructed the following Table, showing the comparative quantities of home and foreign growth, and the value of agricultural produce at present required for the annual consumption

of the people, and live-stock, of this country. The grass green crops other than potatoes, and straw used on the farm, are not included, nor the value of the increase of horses.

TABLE SHOWING COMPARATIVE QUANTITY AND VALUE OF HOME AND FOREIGN AGRICULTURAL PRODUCE CONSUMED ANNUALLY.

	Home Growth.	Foreign Growth.	Total.	Value of Home Growth.	Value of Foreign.	Total Value.
Wheat	Cwts. 55,000,000	Cwts. 55,000,000	Cwts. 110,000,000	£ 32,187,500	£ 32,187,500	£ 64,375,000
Barley	44,000,000	11,000,000	55,000,000	19,800,000	4,950,000	24,750,000
Oats	64,000,000	12,000,000	76,000,000	28,800,000	5,400,000	34,200,000
Beans and Peas	14,000,000	5,000,000	19,000,000	6,300,000	2,250,000	8,550,000
Indian Corn	.....	20,000,000	20,000,000	.....	7,000,000	7,000,000
Total Corn	177,000,000	103,000,000	280,000,000	87,087,500	51,787,500	138,875,000
Potatoes	111,000,000	5,000,000	116,000,000	16,650,000	750,000	17,400,000
Butchers' Meat, Bacon, Ham, and Pork	24,500,000	6,300,000	30,800,000	87,000,000	22,050,000	109,050,000
Cheese and Butter	3,000,000	3,100,000	6,100,000	18,500,000	14,000,000	32,500,000
Wool	1,214,000	3,160,000	4,374,000	8,500,000	22,120,000	30,620,000
Milk	.....	.....	.....	26,000,000	.....	26,000,000
Hay for horses, agricultural, and not agricultural	80,000,000	.....	80,000,000	16,000,000	.....	16,000,000
Straw sold for Town consumption	40,000,000	.....	40,000,000	6,000,000	.....	6,000,000
Total	436,714,000	120,560,000	557,274,000	360,737,500	110,707,500	371,445,000

The total value of the home crop is more than double of that which we import, but the proportion of vegetable and animal food is singularly close, as will be seen by this farther arrangement of the figures:—

	Home Growth.	Foreign.
Value of corn and vegetable produce	£125,737,500	£52,537,500
Value of animal produce	135,000,000	58,170,000

The quantity of Indian corn imported in 1876 was nearly 40,000,000 cwt., an amount quite exceptional and unprecedented, and therefore not included in its full amount in the preceding table.

CHANGES AND PROGRESS OF AGRICULTURE IN RECENT YEARS.

Before entering on a more detailed description of the principles which regulate the agriculture and general management

of landed property in this country, it may be useful shortly to notice its more recent progress, and those changes of practice which science or art, or the circumstances of his position in regard to competition or labour, have forced on the British farmer. With a few exceptions the change will be found rather in the more general diffusion of a knowledge of good principles and practice than in any considerable advance upon either.

The most striking feature of agricultural progress within the last twenty years has been the general introduction of reaping-machines, one of which can do the work of ten men. This has multiplied the effect of human labour tenfold, and that at the most critical season, the harvest, when the entire crop ripens within a fortnight, and must with all possible expedition be saved without loss of time. For haymaking, a similar machine is in the same proportion available. It would be difficult to reckon the vast saving which the introduction of this most important invention has made at these most critical periods, haytime and harvest.

Next to it is the steam-plough, which, on heavy land and in large fields, especially where coal is moderate in cost and water easily available, is both economical and expeditious. A steam-plough capable of ploughing ten acres a day will do the labour of ten men and twenty horses, and will execute the work much more effectively, and with no injurious trampling of the tender soil. But it is as yet a costly implement, beyond the reach of small farmers except when hired as an auxiliary, and not capable of doing its work with economy within small enclosures. The saving of labour is great in suitable localities, but it is not so universally applicable, nor does it so certainly and quickly repay its cost as a reaping-machine. On light and friable soils the double-furrow plough, balancing itself with greatly less friction in proportion than the single plough, is found to do the same with one man and three horses as two single ploughs with two men and four horses. This is equal to a saving of 100 per cent. in man-power, and 25 per cent. in horse-power, and it will become more generally available on the lighter soils if any serious pressure arises from scarcity of labour. In the thrashing of corn, and cutting of straw and hay for fodder, and the grinding and bruising of corn and cake for horse and cattle food, the aid of steam-power has long been used by the farmers of this country.

Next to the economy of labour may be ranked the increase of produce by the expedient of taking two corn crops in succession where the land is clean and in high condition, and can bear the application of special manure, and where the agriculturist is free to follow a rational system of farming. The four-course system of alternate corn and green-crops—wheat, turnips, barley, clover—had two great advantages, first by alternating restorative and cleansing crops with corn; and second, by regular distribution of labour throughout the year. The introduction of guano, nitrate of soda, and other ammoniacal and phosphatic manures, has now rendered the farmer comparatively independent of this alternate system of cropping. As the supply of nitrate is believed to be capable of lasting for a very long period, we may reckon with considerable certainty on its continuance at a moderate price. It might become an instrument of great national value if any unforeseen occurrence should cut off one of our main supplies of wheat, that of Russia, for example. If only the twentieth part of the corn land of the United Kingdom were called on to bear an additional wheat crop the loss would be at once made good, and with no perceptible strain on our agricultural system. If all Europe were shut against us, we should be quickly able to meet the increased home demand by double cropping to the extent of one-tenth of our corn land, and without any greater change in the use of nitrate of soda than has already been met by the advancing supplies of recent years. It is unnecessary to consider the position of this country were even a heavier calamity to befall us, obtaining as we do from the foreigner so large a proportion of our food, for it is not conceivable that the producers of corn in any country would desire to see the best market in the world long closed to them. But it is clear that we possess in this power of taking a second crop of wheat a latent reserve which might, on very short notice, be brought into action, and which should dispel all fear of our being starved into submission in case of war; and this without reckoning anything on the immense reserve power of cereal

production which is stored up in the pasture lands ready in case of need.

It is a power, moreover, that will check any considerable permanent rise in the price of wheat. A decline in the acreage under wheat, when not caused by a bad seed-time, is the natural result of low price; but when the price rises increased acreage quickly follows. Were the price to rise steadily, and show signs of permanence, the second-crop system would extend, and continue to do so until the increase of produce was found to check the rise in price. Barley may be taken after barley with mere success on many soils than wheat; and where there is reason to suppose that a second crop of wheat, however carefully the ground may have been manured and manured, may be likely to fail, barley may, with great probability, be expected to succeed.

The use of nitrate of soda or other sources of ammonia, combined with phosphatic manures, promises to be a more permanent resource to British culture than Peruvian guano, which unites the same properties in itself, but seems likely to become exhausted. Autumn culture, aided by the command of time which steam-power has given to the agriculturist, and that supplemented by spring top-dressings of nitrates and phosphates, have made continuous corn-cropping possible and profitable, without injury to the land, whenever soil and circumstances render such a practice necessary. The old plan of relying on the resources of the farm by depending on the manure made upon it, while the corn and meat were sold away, will not always answer now. Commerce and mercantile enterprise have provided other means for maintaining fertility at a cheaper cost, and in a more commodious and portable form. One cwt. of nitrate of soda will give a more certain return of corn than fifty times its weight in farmyard-manure and can be carried to and spread upon the ground at one-fiftieth of the labour. The proof of this, Mr. Lawes's experiments has been before the country for more than thirty years, and yet it is only beginning to be generally recognised.

To Mr. J. B. Lawes the agriculture of this country is more indebted than to any other living man. For 33 years he has conducted, at his own cost, a series of experiments on his estate in Hertfordshire, the results of which have been annually published, and the farm itself, with every detail of the work, has been laid open to public inspection and criticism. Among other valuable results, one most useful fact has been elicited, that of that mass of dark, strong-smelling substance called dung, its sole property as a manure depends upon the small quantity of chemical salts and of organic nitrogen which it contains, the bulky organic matter being only useful in making the land work better, and rendering it more capable of absorbing and retaining moisture. Beginning in 1844 with wheat, the staff of life in this country, he for eight years concentrated his attention upon it, dividing his experimental field into 22 plots, upon 2 of which no manure has ever been applied, and upon the other 20 a carefully considered variety of manures has been continuously used. In 1852 he commenced a similar series of experiments with barley, and in 1869 on a smaller area with oats. Experiments with leguminous crops had been for a series of years continued, but this species of plant being found, when grown too frequently on the same land, to be peculiarly subject to disease, which no conditions of manuring appeared capable of obviating, they were discontinued. With regard to red clover, when the land becomes clover-sick, it was found that no manure could be relied on to secure a crop, and continuous crops of it are therefore impossible. Experiments on the various root-crops were continued for a series of years, and the result published, also on sugar-beet; and in 1876 a commencement was made with potatoes. His experiments on the corn-crops go on without cessation. In 1856 an important series of experiments was commenced on grass-land, which, with very little change on each of the 20 plots, has been continued to the present time. The average of the past twenty years shows that the natural produce may be doubled, and even trebled, by the continuous use of special manures. Seeing that nearly two-thirds of the cultivated area of this country, and all the uncultivated, are in grass, this series of experiments is of very great interest and value. After 33 successive wheat crops it is not surprising that the soil begins to exhibit symptoms of exhaustion. The rotation experiments show that this may be corrected by interposing a heavily dunged green-crop, such as mangel, while the introduction of red clover between the corn-crops is also found to

add greatly to the corn-producing power of the soil. To attain a maximum-paying produce, he finds that the land should be dunged heavily for manure, to be followed with wheat or barley or oats, according to soil and climate, for several years in a session; then interpose clover, and follow it with corn crops, keeping the land perfectly clean, and manuring all the corn-crops with nitrate of soda and superphosphate. When the land shows need of change, begin again with heavily-dunged green-crops. Successive crops of barley he finds to pay better, and are more certain than either wheat or oats, and give more corn in proportion to straw. If a heavily-dunged green-crop is occasionally introduced, it is not necessary to give any other manure to the corn-crops than nitrate of soda and superphosphate. Potash (which may be supplied by dung) is very necessary in a grass manure, especially for clover, which, unlike corn, is injured by ammonia. The grass experiments show that by giving food to the plants, the strongest and best varieties appropriate what they most need, and, by the law of the strongest, put the weakest down. In the best plots the weeds almost disappear, while on one plot, to which no manure is applied, the weeds form 50 per cent. of the produce. Besides these experiments on crops, Mr. Lawes has carried out investigations on the feeding of live-stock, and on the different values of their food both as affecting the processes of fattening and the quality and value of the manure.*

The Royal Agricultural Society has commenced a series of experiments on the growth of crops and the fattening of live stock, with a special relation to the manures applied and the food used, and to the effect of the manures resulting from specific kinds of food. The Duke of Bedford, with great liberality and public spirit, has undertaken the cost of these experiments, and has placed suitable land and buildings at the disposal of the Society, whose Council, under the guidance of Mr. Lawes, and of Dr. Voelcker, their consulting chemist, regulate and superintend them. They are open to public inspection, and under such management the most useful results may be anticipated.

There has been a great extension of drainage in recent years, and in the construction of improved farm-buildings, and in the better lodging of farm-labourers in more commodious cottages. And in regard to live-stock there has been a wider diffusion of the best breeds, and generally an earlier maturity obtained in the process of fattening. The use of improved implements and machinery has greatly extended, as also has the general application of locomotive steam-power to the thrashing and other preparation of crops for market or feeding purposes. Cheap descriptions of corn are largely employed in the fattening of stock, and also oil-cake, cotton-cake, and rape-cake. For these, and for bones, guano, and nitrate of soda used as manure, the annual expenditure cannot now be less than twelve millions sterling.

But, with the exception of the reaping-machine and steam-plough, and the more general use of steam-power, and other implements and machines, there is really little that is new in the practice of the last quarter of a century. The present system of drainage was previously well understood. Bones, guano, and nitrate of soda were fully appreciated by those who then used them. Covered buildings and autumn cultivation had then been introduced. Mr. Hudson, of Castleacre, in Norfolk, then manured his land for every crop. In running my eye over the account which I wrote of English agriculture in 1850, I find descriptions of good farming in nearly every part of the country, the details of which differ very little from the practice of the present day. Mr. Pusey and Sir John Conroy in Berkshire; Mr. Thomas in Bedfordshire; Mr. Beasley in Northampton; Mr. Paget in Notts; Mr. Torr in Lincoln; Mr. Mechi, Mr. Fisher Hobbs, and Mr. Hutley, in Essex; Mr. Huxtable in Dorset; Jonas Webb in Cambridgeshire; Mr. Morton in Gloucestershire; the Messrs. Wells and Outhwaite in Yorkshire; Mr. Fleming of Barrochan, Mr. McCulloch of Anchness, and Mr. George Hope, in Scotland; Lord Lucan, Mr. St. John Jeffreys, and Mr. Boyd of Castlewellan, in Ireland, and many others, then carried out the business of farming in a manner that would bear favourable comparison with the prize-farms of the present year. And, as to breeds of cattle, the brothers Colling's and Messrs. Booth's

and Mr. Bates's Shorthorns, George Turner's and the Messrs. Quartley's Devons, Mr. Bakewell's Leicesters, Jonas Webb's Southdowns, are not surpassed by the best of the present day. The change has been not in any considerable progress beyond what was then the best, but in a general upheaval of the middling and the worst towards the higher platform then occupied by the few.

Towards this end, but beyond all efforts of the agriculturists themselves, or of the engineers and chemists who have done so much to aid them in developing the capabilities of the land, has been the influence of the general prosperity and growing trade and wealth of the country. Thirty years ago probably not more than one-third of the people of this country consumed animal food more than once a week. Now, nearly all of them eat it, in meat or cheese or butter, once a day. This has more than doubled the average consumption per head; and when the increase of population is considered, has probably trebled the total consumption of animal food in this country. The increased supply has come partly from our own fields, but chiefly from abroad. The leap which the consumption of meat took in consequence of the general rise of wages in all branches of trade and employment, could not have been met without foreign supplies, and these could not have been secured except by such a rise of price as fully paid the risk and cost of transport. The additional price on the home-produce was all profit to the landed interests of this country, and is now being shared among them, partly in rise of rent, partly in increase of profit, and chiefly in rise of wages and expenses, and local rates. Within the last twenty-five years, the capital value of the live stock of the United Kingdom had risen from one hundred and forty-six to two hundred and sixty millions sterling, a gain of one hundred and fourteen millions.

It will be subsequently shown, when treating of the value of land, that within a somewhat shorter period the increase of the land-rent of this country, when capitalised at 30 years' purchase, shows an increased value of three hundred and thirty-out millions sterling. When we add to this the increase of farm capital, through the rise in the value of live-stock, one hundred and fourteen millions, there is the amazing sum of four hundred and forty-five millions sterling as the gain to the agriculturists—the landowners, and farmers—and, in higher wages, to the agricultural labourers of the United Kingdom from the improvement of land and the general prosperity of the country. I may, perhaps, be excused for quoting the concluding words of my volume, written in 1851, at a time of great agricultural depression, when I stated that I believed the landlords and tenants of England possessed energy and capacity sufficient to meet and adapt themselves to the Free-trade policy, "which, in its extraordinary effects on the welfare of all other classes of the community, would, sooner or later, bear good fruits also to them."

SOIL, CLIMATE, AND CROPS.

The total extent of the United Kingdom is 76,300,000 acres of which 26,300,000 are in mountain pasture and waste, and 50,000,000 in crops, meadows, permanent pasture, and woods and forests. Of the crops, one-fourth is in various kinds of corn, one-eighth in green crops, one-eighth in grass under rotation, and one-half in meadow and permanent pasture. About a thirtieth of the whole surface of the Kingdom is in woods and forests. These proportions show the prevailing system of husbandry, and reveal the cause of its increasing productiveness. Three-fourths of the whole are green crops, which feed and clean, or grass which rests and maintains, the remaining fourth in corn. This preponderance of restorative over exhaustive crops greatly exceeds that of any other country, and is very much due to the climate.

The climate of the eastern side is drier than that of the west, the fall of rain at equal altitudes being as 25 inches in the east to 35 in the west. The drought and heat are greatest in the east, centre, and south-east in spring and summer. The whole western side of the country is comparatively mild and moist, and specially adapted for green crops and pasture. The east, having generally a deeper soil and greater heat in summer, is best suited to wheat and barley. It produces 64 per cent. of all the wheat and barley grown, and 74 per cent. of the pulse crops. The west, on the other hand, contains more than twice the extent of permanent pasture, and produces nearly double the number of cattle. The waters of the Gulf Stream envelop the British Islands. Their vapours, carried over

* A more full description of the plan and results of Mr. Lawes's operations is given by Dr. Voelcker in his contribution to this Memoir.

every part of the kingdom by prevailing west winds, temper the cold of winter and the heats of summer. This favours the growth, in the west especially, of succulent herbage and green crops, and we are free from the extremes experienced on the Continent. Grass and green crops flourish in all parts of the country, and both in the low lands and on the mountain pastures of the west and north sheep feed unsheltered and unhoisted during both winter and summer. Beasts of prey are unknown.

The annual rainfall in the lower parts of the country varies from 25 to 35 inches. In the mountainous districts these figures may be doubled. But, limiting our consideration to the cultivated lands, it must be obvious that an annual rainfall upon an acre of land, in the one case of 2,500 tons and in the other of 3,500 tons, accompanied by corresponding humidity of atmosphere, will greatly modify the respective systems of husbandry practised. Accordingly, the eastern half of the country may be correctly described as the corn and fattening region, and the western half as the dairy and breeding region of the kingdom. The winter temperature is more severe in the east than in the west, and that of the summer warmer and more sunny and better suited to the ripening of wheat; while that of the west, being less scorching and more cloudy, is better adapted to pasture and oats. The value of live stock is so much greater than corn that it is not found profitable to push the limit of cultivation to a greater height than 800 feet in the east and 500 in the west, and these limits are becoming more circumscribed by the increasing cost of labour and the continued rise in the value of live stock.

The soil varies greatly in fertility, and its cultivation is regulated both by the amount it yields and the cost of cultivating it. The most profitable and productive soil is that which is at once fertile and easy of cultivation. A rich loam which yields a ton of wheat to the acre is less costly in labour than a poor clay which yields little more than half that weight. Between corn and straw an average crop of wheat, barley, and oats will weigh two tons an acre, about two-fifths being corn and three-fifths straw, though the proportion of straw to corn in wheat and oats is greater than in barley. A ton of wheat, at the average price of the last fifteen years, is worth £11 14s.; a ton of barley, £9 12s.; and of oats, £9. But the wheat is more costly to grow, as it is four months longer in the soil, and therefore takes more out of it than either barley or oats, and requires either a better soil or more enriching preparation. On soils of equal quality the average weight of barley and oats yielded by an acre exceeds that of wheat in about the same proportion as it falls short of it in value per ton. Hence, where the soil and climate are equally suited to the production of these varieties of corn, the choice of one or the other is more a question of convenience than profit, and depends much on the local value of the different kinds of straw.

The fertility of the soil may be expressed by examples taken, 1st, in the natural state of pasture, and 2nd, on similar soils after treatment. The maximum of fertility in the natural state is a rich pasture capable of fattening an ox and two sheep on an acre. Such soils are exceptional, though in most counties they are to be met with. The Pawlet Hams in Somersetshire, for example, is a tract of rich alluvial soil on the River Parrott, stretching along the sea-board. It is in permanent pasture, and is let for grazing at £5 to £6 of rent an acre. Some of the marsh lands of Sussex and Kent are of equal fertility. And on certain limestone lands, not alluvial, in various parts of the country, both east and west, feeding pastures of great fertility are met with. Such lands, as they require neither labour nor manure, yield the largest rent to their owners. The profit to the stock feeder beyond the rent paid to the landowner depends on the skill with which he conducts his business. The minimum of fertility may be exemplified by a bleak mountain pasture, where ten acres will barely maintain a small sheep.

The artificial maximum and minimum of fertility which result from the treatment of soils of the same quality is more instructive, and may be clearly exemplified by taking two of the experiments which have been carried on by Mr. John B. Lawes of Rothamsted, in Hertfordshire, for the last thirty years. Confining the comparison to the average of the last twelve years, the following is the weight in pounds of an average crop:—

	Corn.	Straw.	Total.
	lb.	lb.	lb.
1st. Wheat grown comparatively without manures	739	1120	1859
2nd. " " " " with special manure	2342	1928	2770

The soils here are exactly similar and in the same field, strong loam on clay with a substratum of chalk; the management is the same, in so far as culture is concerned; both crops are kept equally clean and free from weeds, the same seed is used, and they are exposed to the same changes of weather. The only difference is, that in the one case nature has for thirty years been unassisted by manure, and in the other the soil receives every year the various kinds of manure which have been found most suitable to the crop. The result of this treatment is a return of three times the weight of corn, and four times the weight of straw, for an expenditure in manure which leaves a profit of 100 per cent. on its cost. In both cases the wheat is grown continuously year after year.

The plants which predominate in uncultivated land depend both on the nature of the soil and on the climate and situation. On poor gravel, tuzé grass is abundant; on peaty plains, short heath; on cold, wet bottomed soils, rushes cover the ground. Natural woods of birch and oak are found in sheltered Highland glens, and self-sown Scotch firs spread themselves in the neighbourhood of extensive pine forests.

DISTRIBUTION OF LANDED PROPERTY.

The distribution of landed property in England, so far as ownership is concerned, is, by the growing wealth of the country, constantly tending to a reduction in the number of small estates. This tendency is further promoted by the law, which permits entails and settlements, thus hindering the natural sale of land so death with; and also by rights of primogeniture, which prevents subdivision of landed property among the family in case of intestacy. Cultivation thus passes out of the hands of small owners into those of tenant-farmers, causing a gradual decrease of the agricultural population, and a rapid increase of the towns. This has been much accelerated by a policy of Free-trade, which has at once opened up the markets of the world for our commerce, and for the produce of our mines and manufactures. These are advantageously interchanged for the corn and other agricultural products of foreign lands. This will go on while the commerce is found mutually profitable. And it will be profitable so long as by superior skill and enterprise, combined with exceptional mineral advantages, we can undersell other countries in the produce of our manufactories and mines, while they can supply us with corn at a cheaper rate than we can grow it at home. Our present relation with foreign countries is becoming like that of a crowded capital, which draws its fresh supplies of vegetables, milk, and meat, from the market-gardens, meadows, and rich grazings in its vicinity, but looks to more distant lands for the corn and other commodities which bear long transport from cheaper and more distant farms. More than one-half of our corn is now of foreign growth, and nearly one-fourth of our meat and dairy produce; whilst year by year our corn land is giving place to the more profitable produce afforded by the milk and grazing and market-garden farms, which are gradually extending their circle. Such produce renders the land more valuable, more tempting prices are offered for it to the small landowners, and their numbers decrease. Wealthy men from the mines and manufactories and shipping and colonial interests, and the learned professions, desire to become proprietors of land; and some competition exists between them and those landowners whose increasing wealth tempts them to suitable opportunities to enlarge the boundaries of their domains. Thus small proprietors are bought out, and agricultural landowners diminish in numbers; while, side by side with them, vast urban populations are growing up, living in other connection with the land than that of affording the best market for its produce.

The Domesday Book for the United Kingdom, lately published, divides the landowners into two classes—those who have less than one acre of land, and those who have one acre and upwards. The former comprise 70 per cent. of the whole; but as none of this class has so much as an acre, and they hold altogether less than a two-hundredth part of the land, they may be regarded as householders only. Excluding these

as not properly agricultural landowners, it may then fairly be said that one person in every hundred of the entire population is a landowner. Subdividing that figure by the average numbers of each family, it may be concluded that every twentieth head of a family is an owner of land.

But the tenant farmers are entitled also to be reckoned as part owners of agricultural property, for in the crops and live and dead stock they own equal to one-fifth of the whole capital value of the land. Part of this is incorporated with the soil, and it is all as indispensable for the production of crops as the land itself. As cultivators, they employ and possess individually a larger capital than the peasant proprietors of other countries in their double capacity as owners and cultivators. They are 1,160,000 in number, and when added to 320,000 owners of one acre and upwards, make 1,480,000 altogether, engaged in the ownership and cultivation of the soil. When reckoned as heads of families they comprise more than one-fifth of the total male adult population; and it is thence not unreasonable to infer that, in that proportion, the people of this country are more or less interested in the preservation of landed property.

When we come more closely to analyse the landowning class, the aggregation of land amongst small numbers becomes very conspicuous. One-fourth of the whole territory, excluding those under one acre, is held by 1,200 persons, at an average for each of 16,200 acres; another fourth by 6,200 persons at an average for each of 3,150 acres; another fourth by 50,770 persons, at an average for each of 380 acres; whilst the remaining fourth is held by 261,830 persons, at an average for each of 70 acres. An interesting compilation from the Domesday Books by *The Scotsman* newspaper, shows that the perage of the United Kingdom, about 600 in number, possess among them rather more than a fifth of all the land, and between a tenth and eleventh of its annual income.

The great bulk of the land in the United Kingdom is not cultivated by the owners, but by tenant-occupiers. Of these there are 561,000 in Great Britain, and 600,000 in Ireland. Excluding the mountains, wastes, and water, the cultivated land is held by these at an average of 56 acres each in Great Britain, and 26 acres in Ireland. But the proportion of large and small farms in the two countries is very different, nearly half the land in Ireland being held in small farms under 15 acres each, while less than a fifth of Great Britain is so occupied. 86 per cent. of the farmers in Ireland hold nearly half the land, while 70 per cent. in Great Britain hold less than a fifth. Agriculture is the principal occupation of the people of Ireland, the revenue from the land there forming twice as much as that from all other sources, whilst in Great Britain it is but a seventh of the whole. Hence in Ireland the possession and occupancy of land is the great political question, while in Great Britain it has ceased to have pre-eminence.

This country, from its insular position and the great resources it possesses in minerals of iron and coal, and the outlet it finds in extensive colonies, has advantages which have hitherto enabled it to disregard those prudent considerations which, in some other countries, have checked the rapid increase of population. Where full employment and the means of subsistence are abundant, population increases in geometrical progression, and therefore in a far more rapid proportion than the increased productivity of the soil, which, after a certain point, is stationary. The population of England increases more rapidly than that of France, because our enormous foreign trade, amounting in value to £20 per head of our population, enables us to add the food resources of other countries to our own. Our surplus population, not wedded to the soil by property, emigrate to countries of the same language at the rate of 100,000 a year, partly to the United States and partly to our own colonies. Our agriculture is no longer influenced by considerations of the means of finding employment for surplus labour, but is now being developed on the principle of obtaining the largest produce at the least cost, the same principle by which the power-loom has supplanted the hand-loom. In this process many ancient ties are loosened, and among them that adhesiveness to the soil which for generations has more bound the English labourer than the owner of the land to the parish of his birth; the man of the most ancient known descent being in very many cases the labourer. The process is a wholesome one so long as the command to multiply and replenish the

earth has not been fulfilled. And the general rise of wages among the labouring class both in town and country, with the diminution of pauperism, in the last five years, would seem to be a satisfactory proof that there is still room in this country and no need to check the growth of population.

Such a check, however, took place in Ireland at the time of the potato famine in 1846. The population was then eight millions and a half. Within five years it had fallen to six millions and a half, nearly one-fourth of the people having either emigrated or died. The deaths from fever and famine had ceased in 1850, but the emigration continued, partly to Great Britain and the colonies, but chiefly to the United States. The population had fallen in 1871 to 5,412,000, and was then almost the same as that in 1801, seventy years before. There is no darker page than this in the history of our country in the present or preceding century. Millions of money were lavishly spent by the Government in direct relief, and in relief and improvement works to give employment, with a view to palliate the collapse which befel a people who had no resources when the potato failed them. The landowners in the more distressed districts were nearly as much broken down as their tenants. They had either encouraged or not discouraged the continued subdivision of small farms, as well as the rapid increase of the people, by which, so long as the potato could be relied on, their rents were increased. The famine-stricken land was everywhere abandoned by the starving occupiers, and thrown tenantless upon the owners' hands, making many of them bankrupt. An "Encumbered Estates Act" was passed, to sell off the lands of those proprietors whose encumbrances had overwhelmed them, and substitute others more capable of fulfilling the duties of landowners. In a few years land to the value of twenty-five millions sterling was disposed of, twenty-four of which were distributed among creditors. In order to secure the landowners' prompt attention in future to the condition of the people, the incidence of the poor-rates, which had previously been placed wholly on the tenant-occupier, was divided equally between him and the landowner. In fifteen years, emigration and the sale of encumbered estates had removed the most needy class of the population. Prosperity then began again to dawn upon agriculture in Ireland, works of improvement followed the introduction of capital, supplied partly by Government loans and partly by the new landowners. Labour having become less plentiful, was better employed and more liberally paid, and the more energetic of the small farmers were ready to enlarge their holdings on every favourable opportunity. As time went on, a great change was found to have taken place, the old eagerness for the occupancy of land returned, but not for its subdivision. In less than thirty years 270,000 of the smallest holdings were merged into adjoining larger farms, one-half of the small holdings of 1845 having totally disappeared. The tide of emigration began to turn, extreme poverty ceased, the proportion of paupers to the population became much lower, and the cost of poor relief nearly one-half less, than in either England or Scotland. This was accompanied by better wages to the labourer, higher profits to the farmer, and a rise in the value of land, all fostered by a growing demand for the kind of produce which the soil and climate of Ireland are specially adapted to yield. But the lesson left by the previous disaster has led to the gravest distrust in the system of very small holdings, in a country producing neither wine nor oil, and where the occupier is not the owner of the land.

It is worthy of note that the strictly rural parishes of England exhibit some decline of population. In one-fourth of the registration-districts there has been a diminution of the agricultural population in the ten years ending 1871, amounting altogether to 105,000. And it is quite certain that this continues. It arises from the natural draft to the better paid labour of the mining, manufacturing, and other industrial centres, which are augmented both by this immigration and by natural increase. Diminished population in the rural districts is followed by a rise of wages; and this leads to greater economy of labour, both by the introduction of labour-saving machinery and the conversion of arable land to pasture, where the nature of the soil admits. The higher price of meat and dairy produce also contributes to this change. But the loss in numbers of the agricultural districts is amply made good by the gain in the rest of the country, the population now employed in agriculture being small compared with that of the

other industries. Fifty years ago a fifth of the working population of England was engaged in agriculture. At the present time there is less than a tenth.

The land of the United Kingdom may be said to be now almost wholly cultivated by tenant-farmers. The class of yeomen, or small landowners farming their own land, is found here and there in England, but scarcely at all in Scotland, and now bears but small proportion to the whole. Many of the larger landowners retain a farm under their own management for home supplies, or for the breeding of selected stock; very few as a matter of business or for profit. The general system is, that the landowners make the permanent works on their estates, their income being paid in rent by tenant occupiers; the tenants in their turn direct the cultivation, provide the farm stock and implements and all the necessary capital and skill, and employ and pay the agricultural labourers by whose work the land is cultivated. The system is so general in the United Kingdom that we really cannot be said to know any other, and yet, with reference to almost every country but our own, is so exceptional in Europe that some description of it may here be useful.

The circumstances of Ireland eight years ago appeared favourable for the creation of a class of peasant proprietors, and Parliament resolved to give the principle a trial. Two opportunities presented themselves; first, in 1869, on the disestablishment of the Church, which possessed upwards of 10,000 small holdings of land, in the benefices situated all over the country. The pre-emption of these was offered to the tenants on terms most favourable to them, both as to price and payment, and nearly two-thirds of the offers were promptly accepted. Again, in 1870, the Irish Land Act contained provisions expressly favouring the system; but, though great advantages in regard to terms of payment were also offered by that Act, the results hitherto have been comparatively small. The cause of the difference is very plain. In the first case the disposal of the lands was imperative, and did not occasion the subdivision of property; while the vendors, the Church Commissioners, having no one to consult but themselves, offered these small holdings at low fixed prices without competition. In the second case, on the other hand, it is the duty of the Landed Estates Court to get the best price they can for the landowner, who may very naturally object to allow small portions to be sold here and there out of his estate to suit the convenience of individual tenants. The farmers, moreover, begin to find themselves very secure in their possession as tenants, under the clauses of the Act, and have thus less inducement to buy the fee-simple; and the landowners, participating in the general prosperity, are no longer under pressure to sell at the low prices hitherto realised. It is thus not from any defects in the Land Act, but from the improved condition of the country, and the increased security given to farmers' capital by the Act itself, that this branch of it has become less operative than was anticipated.

LANDOWNER, FARMER, AND LABOURER.

The landowners are the capitalists to whom the land belongs. Their property comprises the soil and all that is beneath it, and the buildings and other permanent works upon it required for the accommodation of the people, and of the working stock employed in its cultivation. Thus, where the land itself may be worth £35 an acre, the buildings, roads, fences, and drainage may have cost the landowners £15 an acre more. The landowner has thus two capitals in the land, one of which is permanent and growing rapidly in value with the prosperity of the country, the other liable to decay and occasioning cost in repair. In nearly all permanent improvements arising from the progress of agriculture he is also expected to share the cost. And he is necessarily concerned in the general prosperity and good management of his estate, and in the welfare of those who live upon it, with which his own is so closely involved. He takes a lead in the business of his parish, and from his class the magistrates who administer the criminal affairs of the county, and superintend its roads, its public buildings, and charitable institutions, are selected. Nor do his duties end here, for the landowner, from his position, is expected to be at the head of all objects of public utility, to subscribe to, and, if so inclined, to ride with the honours, showing at once an example to the farmers and tradesmen and meeting them on terms of neighbourly friendship and acquaintance. The same example is carried out in his intercourse with

the clergy and schoolmaster, and his influence, where wisely exercised, is felt in the church, the school, the farm, and the cottage.

This class in the United Kingdom comprises a body of about 180,000, who possess among them the whole of the agricultural land from 10 acres and upwards. The owners of less than 10 acres each, hold not more than one-hundredth part of the land, and may here be regarded as householders only. The property of the landowners, independent of mineral, yields an annual rent of sixty-seven millions sterling, and is worth a capital value of two thousand millions. There is no other body of men in the country who administer so large a capital on their own account or whose influence is so widely extended and universally present. From them the learned professions, the church, the army, and the public services are largely recruited.

The tenant-farmers are the second class, and a much more numerous one. Their business is the cultivation of the land, with a capital quite independent of that of the landowner. They occupy farms of very various extent, 70 per cent. of them under 50 acres each, 12 per cent. between 50 and 100 acres and 18 per cent. farms of more than 100 acres each. 5,000 occupy farms of between 500 and 1,000 acres, and 600 occupy farms exceeding 1,000 acres. Many of them are men of liberal education, and some of these are found in most parishes and in every county. A spirit of emulation exists among them, elicited by county, provincial, and national exhibitions of agricultural stock, and by a natural desire, in a country where everything is open to comment, not to be behind their neighbours in the neatness, style, and success of their cultivation, or in the symmetry and condition of their live-stock. They are brought into the closest relations with their labourers, and although, occasionally, feelings of keen antagonism have arisen, there is generally a very friendly understanding between them. The farmer knows that it is for his interest that the labourers should find their position made so comfortable as to value it.

To the farmer is committed the management of the details of the parish, as those of the county to the landowner. His intimate knowledge of the condition of the labourer, and constant residence in the parish, fit him best for the duty of overseer of the poor, member of the Board of Guardians, churchwarden, and surveyor of roads. He is frank and hospitable to strangers, as a rule; in favour of the established political institutions of the country; loyal as a subject; generally available in case of need as a mounted yeoman; and constantly in requisition as a jurymen in the Courts of Law.

The farmers are six times as numerous as the landowners, there being 560,000 in Great Britain, and 600,000 in Ireland, the holdings there being on a smaller scale. They employ a vast capital in the aggregate, upwards of four hundred millions sterling, and, unlike that of the landowners, much of it is in daily use, circulating among tradesmen and labourers.

Between the landlords and farmers there is an intermediate class, the land-agents, to whom on most large estates the details of transacting business with the farmers, and looking after the cultivation and buildings and general condition of the property, are committed. These gentlemen, in most cases, are prepared by a course of special training and education for the very important and delicate duties thus entrusted to them. Where they possess such an amount of general knowledge as enables them to curry their employer with them in all equitable arrangements for maintaining the property in a state of high agricultural efficiency, they perform a most useful function, and add very greatly to the welfare and comfort of all connected with the estate which they administer. A very eminent living authority rests the tenure of property on the fulfilment of duty; and a most important part of that duty is to see that no good land upon it is suffered by neglect or mismanagement to remain unproductive.

The third class comprises the agricultural labourers, who are necessarily much more numerous than both landowners and tenants. They cannot be said to have any other capital than the furniture of their dwellings, their well-acquired experience in all the details of husbandry, and the bodily strength to use it. The English labourer, of the southern counties especially, has hitherto had but little education, except in his business. The Scotch have had their parish schools for three centuries, and the Irish a national school system for the last forty years. The legislation of 1876 has removed this blot on the English system by enacting that no

child shall be employed at any kind of labour until he is of the age of ten, nor above that age unless he can show a certain degree of proficiency in education. This excellent rule is a virtual compulsion of education, as parents and employers alike are liable to penalties for its infringement. And as it is now accompanied in all parts of the kingdom by the establishment of duly regulated schools, no child can avoid an elementary education.

The state of the agricultural labourer of the Southern counties has long been the subject of reproach, and, till a recent period, not without good reason. In many parishes the average rate of wages was below the means of maintaining a man's bodily strength adequate to good work, and the result was that two men at low wages were kept to do the work of one well-paid labourer. The employer was a loser by this; and though he might be aware of it, he could not help it, for there was a redundancy of labour seeking employment, and which had to be maintained either by wages or poor-rates. The labourer himself was uneducated, having little knowledge of any district outside his own parish, no means of moving beyond it, while he risked the loss of his legal right to the parish relief in illness or old age if he left it. In such circumstances it was hardly possible for the agricultural labourer to attain any degree of independence. There was no margin for saving, no surplus out of which an enterprising man could make the venture of moving his labour to places in which it would command a better return. And during the long period that this continued, his condition was low, and still shows itself in his small stature and slow gait. From the pressure of this system he was at last emancipated by the extension of his legal right of relief from the parish to the Union, a district much more extensive, and by the simultaneous increase in the demand for labour arising from the rapid development of the other industrial resources of the country. The great extension of steam-communication with America, and the encouragement thereby afforded to emigration, drew off rapidly the surplus agricultural population of Scotland and Ireland; wages in both countries quickly increased, and this soon extended its influence southwards. Agricultural labourers' unions were formed in the depressed districts just when this wholesome feeling was spreading throughout the country, and to their efforts much of the natural effect of other causes in producing a rise of wages has been ascribed. This increase of wages was attended by a most useful result, for it forced upon farmers the more extensive use of machinery, and, in the end, brought about a higher scale of wages to the labourer, while the additional cost to the farmer is met to some extent by superior skill and greater economy in application of labour. It is worthy of note that the increase of agricultural wages has been greatest in Scotland, where labourers' unions have not taken root.

The general condition of the agricultural labourer was probably never better than is at present. Compared with that of 300 years ago, in the time of Elizabeth, wages have risen sixfold, while the price of bread has only doubled. Two centuries later, in 1770, the farm-labourer's wages was 1s. 2d. a day, when the price of wheat was 46s. a quarter. In 1846, immediately before the repeal of the Corn Laws, wages were 1s. 7d. when wheat was 53s. At the present time wages have risen 60 per cent., while wheat has not increased in price. In other words, the labourer's earning power in procuring the staff of life cost him five days' work to pay for a bushel of wheat in 1770, four days in 1840, and two-and-half days in 1870. He is better lodged than he ever was before; though, in many parts of the country there is still much room for improvement in that respect. Compared with the labourer in towns, his position is one of greater comfort, he lives in a better atmosphere, he is more free from anxiety, and has a closer and more friendly relation with his employers, and with the schoolmaster and clergymen of his parish. He is kind to animals, understands how to manage them, and in his family shows a good example, on the whole, of sobriety and industry.

To these three classes are committed the agricultural interests and industry of the kingdom. The two first have duties entrusted to them by the constitution, for the management of the public and local interests of their counties and parishes, in addition to their special business as landowners and agriculturists. Each of the three classes is constantly being altered and recruited by changes and additions. Landed property of the value of several millions sterling a year changes hands, and

as there is necessarily a larger body of persons capable of competing for small properties, there is a natural tendency to sub-division on sale. In every county many farms change their tenants at Lady Day or Michaelmas, new men with new ideas being substituted for the old, some of whom have died, some retired from business, and some moved elsewhere. Labourers move about more than they used to do, and learn something useful in each change, and large drafts of them pass off to the other industrial pursuits of the country, and to the colonies. The feeling of being bound to the soil or the parish of his birth has lost much of its strength, and every facility is now presented to the unmarried agricultural labourer for improving his position if he desires to alter it.

In short, our system is that of large capitalists owning the land; of smaller capitalists, each cultivating five times more of it than they would have means to do if they owned their farms; and of labourers free to carry their labour to any market which they consider most remunerative. It has been the gradual growth of experience in a country of moderate extent, where land is all occupied, where capital is abundant and constantly seeking investment in land, and where other industries than agriculture are always demanding recruits from the children of the agricultural labourer, who finds, besides, a ready outlet in those British colonies where the soil and climate are not much different from that which they leave, and where their own language is spoken. And doubles this facility of language has greatly helped the people of this country in encountering the trials and difficulties of emigration. But the want of it may be successfully overcome, as the example of Germany has proved in the tens of thousands of her people who have gone to the United States. There, and in the vast continent of Australia there is room enough to take, with advantage, the surplus population of every country in Europe for many generations. Instead of struggling at home as cultivators of small patches of land, where nothing but the most sparing frugality enables them to live, the working men of all countries are invited and assisted by Australia to take a share on equal terms with our own people in the great enterprise of colonising a new continent, where liberty, order, and remunerative employment are offered to all comers, where the climate is pure and healthy for Europeans, and where every industry, agricultural, manufacturing, or mining, affords a field for enterprise.

A system is best tested by its fruits. Compared with all other countries, our threefold plan of landlord, farmer, and labourer appears to yield larger returns with fewer labourers, and from an equal extent of land. Our average produce of wheat is 25 bushels an acre, and against 16 in France, 16 in Germany, and 13 in Russia and the United States. We show a similar advantage in live-stock, both in quantity and quality. We have far more horses, cattle and sheep in proportion to acreage than any other country, and in all these kinds there is a general superiority. Our most famous breeders of live-stock are the tenant farmers. The best examples of farming are found in the same class. The improved breeds of cattle, the Leicester and Southdown sheep, and the extended use of machinery, manures, and artificial foods are chiefly due to them. And the neatness of the cultivation, the straight furrow, and the beautiful lines of drilled corn, the well-built ricks and docile horses, exhibit at once the strength and skill of the labourers. If that mode of husbandry which lessens the exchangeable value of bread and meat by an increase of production and supply is the best for the community, from whom a smaller proportion of their labour is required for the purchase of their food, then our system of subdivision of labour by landlord, farmer, and labourer, the three interests engaged in its production, will stand a favourable comparison with that of any other country.

There are characteristic features in the business relation between the landlord and farmer which deserve notice, in its application to the three countries, England, Scotland, and Ireland. In England the general system is tenancy at will, by which the connection may be terminated on six months' notice. The result is that the notice is rarely given, changes of tenancy are comparatively few, and systems of management are slowly altered. In Scotland there has long been tenancy on a nineteen years' lease. The certainty of the tenure up to a fixed time prompts immediate enterprise to make the most of that definite period, and changes of tenant at its conclusion have become frequent. There can be no doubt that this has been attended with a more hearty and ready appreciation of improved

processes on the part of both landlord and tenant, and a higher scale of wages to the labourer. It still needs, however, some equitable rules to secure continuance of the tenant's interest in good farming to the close of the lease. And the Scotch tenants are also hampered by an unreasonable law which prohibits them from transferring their leases even to a solvent and unobjectionable successor, and, still worse, from bequeathing the lease to their widows or any of their children except the heir-at-law. Ireland has a system of its own. Till a very recent period the tenant made all improvements, such as they were. He reclaimed the waste, built his own poor habitation, and he and his family occupied the land, and subdivided it amongst them. He thus tacitly acquired a hold on the soil much greater than in the sister countries, and which was generally acquiesced in by the landlords, many of whom were non-residents. These three systems were the natural growth of circumstances, and have become deeply intertwined with the habits and feelings of the agricultural classes in the several countries.

Three-fourths of the land in England have long been held by a comparatively small body of great landowners. From the Revolution in 1688 till the Reform Bill of 1831, all political power was in their hands. They were the patrons of agriculture, and their tenants, being accustomed to continue undisturbed, neither asked nor expected legal security of tenure. But habit and custom gave such security in reality, though not in law; and to this day there are families of tenants-at-will who can count back a longer period of unbroken succession in their farms than the great landowner at whose will they hold them. The first Reform Bill gave tenant farmers, paying a rent of £50 and upwards, the right to vote in the election of Members of Parliament, and thus strengthened their hold on the consideration of their landlord, but at the same time gave him an unfortunate interest in the continuance of a system which kept them dependent on his will. This continued for one generation more, until in 1867 the franchise was lowered to £12, and in 1871 vote by ballot introduced. By those measures the numbers and political strength of the tenant-farmer class were largely increased. Household suffrage in counties is believed to be not far off and thus the hitherto paramount political influence of the landowner in the counties is gradually being replaced by the wider basis of the representation of each of their varied interests. The first result of the latest extension of the constituency, and their protection by ballot, has been a strong agitation on the part of the farmers to obtain a legal right to be compensated, on removal, for their unexhausted manures and improvements. Simultaneously with it, a labourers' league has been formed in some districts to concentrate the latent power of the dispersed but numerous body of agricultural labourers. Both of these movements have been attended with a moderate measure of success. The Agricultural Holdings Act, passed two years ago, recognises for the first time a legal right in the English farmer to compensation for unexhausted improvements, embodied indeed with conditions which have made it unsatisfactory to both parties. A considerable step has however been gained, as all parties are brought to look carefully into their position, and thus the mutual connection, while losing something of sentiment, will in time gain more of business and enterprise.

In Scotland the necessities of the landowners prompted them, at a much earlier period, to seek relief from the embarrassments of entail by obtaining legislative power to borrow money for the improvement of their settled property. And, when the means were thus provided for executing permanent works, the energies of the tenant-farmers were wisely enlisted in carrying these into remunerative effect by the now well recognised form of a lease of nineteen years, at a fixed rent, to assure the tenants such a period of possession as should at once evoke their best exertions. This system has now been in practice for three generations, and its results are seen in a higher state of general cultivation than that of the sister countries; greater competition for farms and a higher scale of rent; more independence; and at least as keen an intelligence shown in adopting improvements. For a long period the Scotch landowners have been compelled to look into the management of their property in a different manner from those of England. Upon them the liability was directly placed of finding the money for the public establishments of their counties, the churches, prisons, and police. They had the determination of questions of road-making; and having

to contribute directly a large proportion of the county expenditure, they took an active interest in its administration. This brought them into closer business contact with the farmers; and recent legislation has tended to increase this connection by the principle of imposing all county rates in certain proportion directly on landowners and farmers, and giving to both a representation at the same county or parish board. There is thus a better fusion of the two interests than in England, and a readier appreciation on the part of the landowner of the outlays requisite on his part to enable his tenant to make the most of the land he farms. The time seems rapidly approaching when the Scotch system of equal valuation and rating, imposed directly upon both landowner and farmer, will be imitated in England, and lead to the principle of local administration in each county by representatives of every interest at a county board.

In Ireland the relation between landlord and tenant is altogether different from that of England and Scotland. Previous to the famine of 1846, the great landowners were non-resident, and the land was still in a great measure in the hands of middlemen on leases for lives, with leave to subdivide and sublet for the same time. These men had no permanent interest in the property; their business was to make an income out of it at the least cost, and their intermediate position severed the otherwise natural connection between landlord and tenant. The famine of 1846 prostrated the class of middle-men entirely, and brought the landowner and the real tenants face to face. But the hold which the latter had been permitted to obtain, led them to consider the landowner to very much as only the holder of the first charge on the land; and they were in the habit of selling and buying their farms among themselves subject to this charge, a course which, as a matter of practice, was tacitly accepted by the landowner. He had security for his rent in the money paid by an incoming tenant, who, for his safety, required the landowner's consent to the change of tenancy, and the landowner's agent then received the "price" of the farm (for that was the term used), and handed it over to the outgoing tenant, after deducting all arrears of rent. This suited the convenience of landowners, the most of whom had no money to spend on improvements, many of them non-resident and taking little interest in the country, and dealing with a numerous body of small tenants with whom they seldom came into personal contact. In the north of Ireland this custom of sale became legally recognised as Tenant-Right. The want of it in other parts of Ireland produced an agitation which ultimately led to the Irish Land Act, under which legislative protection is given to customs capable of proof. The custom of "selling" the farm, subject to the approval of the landowner, by a tenant on yearly tenure is rapidly gaining ground in Ireland; and so firmly are the people imbued with this idea of their rights, that the clauses of the Irish Land Act, which enable the tenant by the aid of a loan of Government money, on very easy terms, to purchase the proper ownership of his farm, are rarely acted upon from the belief that the farm is already his under the burden of a moderate rent-charge to his nominal landlord. Circumstances have thus brought about a situation in which the landowner cannot deal with the same freedom with his property as in England or Scotland, either in the selection of his tenants or in the fair readjustment of rent, and this has, in a great measure, arisen naturally from the neglect of his proper duties as a landlord in not himself executing those indispensable permanent improvements, which the tenant was thus obliged to undertake, and who in this way established for himself a claim to a co-partnership in the soil itself.

(To be continued).

SUTTON'S ROOT SHOW.—The 29th annual show of roots, potatoes, and other vegetables will be held at Reading on Saturday, Nov. 23rd, and will be open to the public without charge, from 10 till 4. The prizes, as usual, are on a liberal scale, and a new feature in the schedule is the offer of special prizes for sown and grown roots. Another new feature is the "Grand Prize," a gold cup, value £20, for the best 3 dozen roots of Sutton's improved varieties of mangels. A large show is expected. The latest day for receiving entries is Friday, Nov. 15th. The prizes at this show, and at others during the season, offered by Messrs. Sutton and Sons, amount to nearly £500 in value.

ECONOMY IN SEWAGE DISPOSAL.

At the recent Sanitary Congress Lieut. Col. Jones read a paper on "The paramount importance of considering economy in all measures undertaken for sewage disposal." He said:—

This may, at first sight, seem a strange heading for a paper intended to be read before a Sanitary Congress, which might naturally be supposed to regard sanitation as paramount rather than economy, but a little consideration of the lamentable failures in which the high hopes of many enthusiasts have ended, will, I think, tend to show that sanitary interests will be best promoted in the long run by a due consideration of economy at the outset.

At any rate I have always found that upon the answer to the question "Will it pay?" depends the continuance of any good work and its general adoption by other parties; and in this sense I have endeavoured to investigate the great sewage question.

The results of six years' sewage farming have been published,* in the belief that we shall never succeed in purifying our rivers until the farmers of the country at large recognise the fact, as it has been recognised by my neighbours at Wrexham, that town sewage can be utilised at a profit, and the point which I desire to urge on this occasion is that the profit is entirely contingent upon the exercise of due economy in the original outlay of capital, and at every stage of farm management.

Some ten years ago, public opinion was led by engineers and chemists to adopt theoretical views regarding the material value of sewage, which made Town Councillors positively reckless in their haste to acquire land for sewage farms, in the hope of paying for the sewerage of their towns and even reducing the future rates by the wealth which was to be acquired in the new municipal trade of applying sewage to land under the direction of the local surveyor, who had plenty of other work in the town, and was probably too old to learn his new trade of sewage farmer even if he could direct all his energies to the business.

The haste led to works of sewerage being undertaken before land was acquired, and the towns were thus at the mercy of the landowner adjoining an outfall already determined upon, probably without consideration of the ultimate destination of the sewage, and in consequence the sewage farm when acquired was overburdened with exorbitant purchase money, legal charges and compensations which rendered its failure as a commercial undertaking inevitable.

But the extravagance did not end here, for probably a great engineer fond of bricks and mortar, or the local surveyor was called in to "lay out" the farm and the services of either or both of those persons, paid for by commission on the estimate of works they might propose, while the ordinary farmer was put aside as one ignorant of the new business which was to be inaugurated by the building of great vaulted chambers or tanks and massive brick concrete or iron carriers going no where in particular, except as a rule just so as to leave inaccessible corners of land, and interfere as much as possible with the course of the plough and of drawing crops to the nearest road. Another and perhaps more fatal mistake was generally committed in the engineer's belief, that it was his business to make the surface of all land intended for irrigation rectilinear in all its slopes, whereas any farmer of sufficient intelligence to manage a sewage farm, might safely be trusted to be able to contour his distributing carriers round any curves on a sloping bank, and the only levelling required is that of reducing any natural hollows in which water might stagnate.

Now the expense of levelling is so great, that one is naturally tempted to do it in the shortest possible way, by casting the high ground into the nearest hollow, without regard to the preservation of the upper crust of a cultivated soil which the farmer alone knows how to value, but all his remonstrances against the interment of so much valuable top soil were put aside with the assurance that the sewage would soon make the bare barren subsoil, thus exposed, much more valuable than what had formerly been uppermost.

There are patches of subsoil exposed seven years ago by such ruthless Corporation levelling upon my farm, which, in spite of many cartloads of sludge and farm yard manure and constant dressings of liquid sewage, make me regret to this day that my predecessors meddled with a field or two before they handed over the farm to my care, which would have religiously preserved every shovelful of the good soil which they have buried.

Going back to consider the great square tanks, too often covered by massive vaulted roofs, and brick or concrete carriers, which have in many places been considered necessary, I have often been puzzled to think what end the first of these supposed requisites were designed to attain, for one can hardly think it desirable to imprison sewer gases which are chiefly harmful in such captivity, and comparatively innocuous when allowed to mix with abundant fresh air. Do we not contrive most costly means for pumping air into coal-pits for a similar purpose of ventilation, which would not be required if coal-pits were like quarries exposed to the eye of heaven? and why, therefore, should we take pains to imitate in our sewage tanks the unfavourable condition inseparable from our mines? The removal of sludge from such tanks becomes a very serious labour, which would be comparatively light if long narrow open tanks enabled men to cast the sludge with shovels and scoops at one lift upon the bank. I have been consulted by town authorities in dismay when they first found their great tanks full of sludge, and had been led by their great engineer without mechanical or other means of emptying them, and I have always recommended the removal of the costly roof.

It is of course desirable that the sewage should be conducted by permanent carriers to certain parts of the farm, but these may be made much more economically than engineers have been in the habit of constructing them, and in many cases simple trenches cut out of the soil will answer all purposes as well or better than any more costly construction.

The provision of roads and buildings suitable to a sewage farm is another point upon which a great deal of capital has been wasted; not that they can be dispensed with, but that a knowledge of the sewage farmer's requirements derived from practical experience can alone determine the requirements in these respects of each particular farm, and this practical knowledge has unfortunately been made conspicuous by its absence in nearly all the Local Board Sewage Farms, which have been so often quoted as proving the worthlessness of town sewage because they cannot show a profit to the ratepayers.

If the theoretical value of sewage (often stated at 2d. per ton or some 10s. per head per annum), were capable of being realised these considerations of economy might have been disregarded with comparative impunity; but as the practical value has turned out from experience to be so very different, we have been landed in this dilemma viz.,—that town authorities have rushed to the other extreme, and adopted the belief that sewage has no value, and that its application to land must inevitably entail heavy loss to the ratepayers, the advocates of chemical precipitation and of sea outfalls being always at hand to nurse and foster this delusion which, since the sanitary advantages of land purification have been conclusively proved constitutes their sole claim to attention for their theories.

The above considerations will, I think, he held to justify my use of the word "paramount" as I have applied it, because the general adoption of the best means of sewage disposal must be delayed by every example of financial failure which comes before the public; and because I know from practical experience that the greatest thrift and economy must be exercised in order to reap any satisfactory return from sewage farming.

Thrift and economy are, however, required in ordinary farming, and in every trade with which I have ever been acquainted, and I can affirm with the greatest confidence that town sewage has a value, and that with its aid a farmer can pay a high rent and make a good profit on his capital and labour.

More than this, it seems to me, should never be expected for sewage must be removed from towns as a sanitary measure, and the ratepayers ought to be well satisfied if they can get what is a nuisance to themselves disposed of when they have once delivered it in an unadulterated condition to their country neighbours.

* "Will a Sewage Farm pay?" 2nd edition, published by P. Potter, bookseller, Wrexham, 1878. Price 1s. 6d.,

Agricultural Table Talk.

Expenses of town sewerage, outfall sewer, and pumping where necessary, are, in my opinion, solely the affair of those who choose to live in a town, and should never be charged against the sewage farm, whether in municipal or private hands. If people want low rates let them fix their residence in a town on high ground commanding suitable land for sewage irrigation at short distance and by gravitation; but if it suits their purpose better to live in a hole surrounded by stiff clay land, let them employ engine power and a long rising main to some suitable land at a distance, and not seek to cast the accidental burdens of their own choice upon the cause of sewage irrigation.

But after all, the greatest departure from the rule of economy, which I maintain to be necessary in sewage disposal, consist in the rashness of engineers who have considered sewage a valuable commodity of which the farmer could not have too much, and have disregarded the real difficulties of nillising it, which really may be measured by *the dilution of an infinitesimal quantity of valuable matter, with an excessive proportion of water*. These enthusiasts have left quality out of sight altogether, and sought only to produce as large a quantity of dirty water as possible by taking into the sewers all the rain-water from roofs and streets, and as much sub-soil water as could be collected through the joints of sewer pipes, all of which water might be passed into the natural water courses in a comparatively clean condition if surface and under drainage were attended to in towns as it is in the agricultural land of the country.

The farmer who in these days expects his cattle to thrive upon undrained land is universally condemned by men who themselves consent to live in towns where the only under drainage is left to chance leakage into the sewers, which as a matter of principle are supposed to be impervious because it sub-soil water can get into sewers it is evident that sewage will get out by the same orifices to contaminate the sub-soil.

And yet so inconsistent are some people that the fact of the lowering the level of sub soil water under a town after works of sewerage have been defectly constructed has been often urged, as at Salisbury, as an argument in favour of sewerage; and I have known an engineer report to a Town Council that the special merit of a scheme of sewerage he brought forward consisted in the arrangement he had made for admitting not only the surface but the sub-soil water of the town, into his proposed sewers.

There appears to be no reason why the water supply which is brought into a town by pipes of definite capacity for the service should not be removed after it has been fouled by use, through close-jointed pipes of proportionate bore, but unfortunately, when systems of sewerage became popular, some thirty years ago, the engineers had little experience of the behaviour of foul water in a pipe, and jumped to the conclusion that surface-water would be useful for flushing purposes, forgetting that such a source of flushing power is absent just when most required, and having no time to spare for calculation, they thought it the safest plan just to make their sewers very large and trust to Providence. There were also old drains in most towns which it seemed economical to convert into sewers, and thus we have been landed in a combined mess of sewerage and drainage which is most unsatisfactory to all sanitarians.

The old engineers were warned very early of their mistake by Mr. Phillips, who held the position of Surveyor to the Commissioners of Sewers in the year 1849, and by the late Mr. W. Menzies, Deputy Ranger of Windsor Forest, who again and again explained the separate system; but it is only within the last few years that its advantages have been fully admitted, and nearly every town in the kingdom except Eton, Oxford, and Reading, has still to retreat as it best can from a system of combined sewerage and drainage, which, as stated in a letter by Mr. Bailey Denton to the *Times* the other day renders it "impossible to comply with the provisions of a Rivers Pollution Prevention Act."

Such is the result of a lavish disregard of economy in dealing with ratepayers' money, for if the old drains for surface-water had been left alone and a properly calculated system of sewerage proper laid down, many millions of money might have been saved, and we should not now have to face the impossibility of complying with an Act of Parliament without spending more millions in order to convert our "elongated cesspools" into self-cleansing sewers.

Mr. C. S. Read, M.P., at the dinner of the Blofield and Walsham Agricultural Society, said:—He regretted that agriculture was suffering from such protracted depression, but all the other industries of the country were also in a depressed state. We had had our financial panics and our monetary disasters every ten years—in 1848, in 1857, and in 1867, and people felt sure that in 1877 there would be another panic. Mr. Gladstone had said that the industries of the country were increasing by leaps and bounds, and that the riches of the country were accumulating at the rate of £100,000 per day. Now the same great statesman told us that all our profits had either gone to the dogs or to the Yankees. He did not quite believe in the whole of this statement, but he thought that a considerable amount of the depression which a present prevailed in trade was to be ascribed to bad and dishonest work. We had had what was called free trade for nearly 30 years, and we were told that if we adopted this policy the whole world would adopt it also; but had it been so? On the contrary, nearly every foreign country, and also our colonies, had adopted protective tariffs. While in the first eight months of the present year our imports were £250,000,000, our exports were only £125,000,000, while in the case of the United States precisely an opposite state of things prevailed, and the exports were double the imports. The United States, it should be remembered, had a protective and even a prohibitory tariff. With regard to the County Government Bill, which had been abandoned by the Government, he had been taunted on all sides with the fact that there was no very strong feeling in the country in favour of this Bill. Why should there be a strong feeling? Farmers had no grievances to complain of against the magistrates in Quarter Sessions, who did not waste their money, but, on the contrary, administered the county rates with economy. But he would ask farmers if they were prepared to allow Parliament year after year to pass Acts giving fresh powers to the great offices in London. If they were, then our boasted local self-government would soon be nothing but a sham and a delusion. He advocated county boards, because the system would give a strong representative body which would resist the centralising tendency of the present day, and draw to itself more and larger powers, so as to make local self-government a reality.

At the meeting of the Iverk (Co. Kilkenny) Farming Society one of the oldest in Ireland, at which the Earl of Bessborough presided, Mr. FISHER, F.C., of Waterford, in responding, on behalf of the *Monster Express*, to the toast of "The Press," said—I find, my lord, that the guests on such an occasion expect whoever responds for the Press to give some expression to the thoughts which arise from reading and inquiries spread over the year, and if I may do so I will say a few words upon current topics. I feel pleasure in congratulating you all upon the good harvests of this year, and upon the brighter prospects before you. I am aware that a good harvest is followed by low prices, and that a bad harvest is the occasion of high prices; but I believe the former is the best for the farmer, and I know it is best for the consumer. Abundant produce is the gift of a superior Being, and we must accept low prices as the complement or the supplement of the abundance which God gives. I rejoice to think that the present harvest is so much better than the last, as I believe it was the most severe ordeal which Irish farmers have passed through since 1818. We see signs of it on every hand. Dr. Neilson Hancock tells us the deposits in the Irish banks have diminished by about a million sterling. This is a large sum, and it was fortunate for those farmers who had such a resource to fall back upon. The stock returns show a considerable reduction in value. It is true that the total decrease in what is called cattle is not quite thirteen thousand, but when you look at the component parts of the tables they show a reduction in milch cows of over thirty-eight thousand, in two-year-olds of nearly three thousand, in yearlings of nearly

forty-seven thousand. This reduction in stock, which probably represents over one million sterling, took place because farmers were pressed for money, and had to lessen their stock. They are now, I am glad to say, in a more prosperous condition, and they show a desire to fill up the gaps caused by a bad harvest by rearing more calves this year than they did last year. There were 75,037 more calves in Ireland in 1878 than in 1877, and I sincerely trust next year's return will show the recuperative powers of Irish farmers. Our chairman has alluded to the small number of pigs in the show-yard, but I find that there is a reduction in the number of pigs in Ireland of nearly 200,000, and that in the county Kilkenny the falling off has been over 6,000. There is, however, I am happy to say, a diminution in the number of asses in the county. The yield of the cereal crops of last year was less than that of the previous year by one and a-half millions quarters, representing £3,000,000 sterling, and the yield of potatoes had fallen from 4,062,207 tons to 1,757,278 tons. As far as I can judge the money value of the crops of 1877 fell short of that of 1876 by fully ten millions sterling. Our noble chairman was so good as to allude to the prices which ruled in Ireland thirty-five years ago, and to contrast them with those now prevailing. Thirty-five years go back to 1843—to a period before the potato famine; but it was also before the time when gold was discovered in California or Australia. The effect of this has been to lower the value of gold, and it is shown by an advance in what is called "price!" I am not going to talk political economy at this hour of the evening—that would be a bad return for your kindness; but I may say as a matter of fact that a man cannot get as much for a sovereign now as he used to get for 15s.—perhaps 12s. 6d. in 1843. Rents have generally risen in the interim, and the cost of labour has increased. I do not grudge the poor man a fair day's wages for a fair day's work, but I must say that when we look at the increase in price we must consider the great increase in the cost of production, and labour is a very large item. I warmly admire what our noble chairman has done for his tenants. I look upon him with pride and pleasure as an Irish landlord, and I trust as he has shown himself a type of that which is great and generous in his past dealings with his tenants, he will give them that which will be the crowning glory of a noble career, complete security of tenure.

Sir Edmund Filmer, at a dinner given to his tenants at East Sutton, on Wednesday, Oct. 9, said twenty years had elapsed since he first met them as their landlord, and he could look back upon that period with satisfaction, as they had dwelt happily and pleasantly together. There had been many changes during the time, the system of cultivation had altered considerably, more machinery had been introduced, and the labour question had become a burning one. As to the latter point he believed it would find its own level, and having several years since commenced to erect better cottages for the labourers on the estate, he thought that from the better housing of the men, although it might not produce an immediate effect on the present generation, an improvement would result in the children. He had to thank many of his tenants for having joined him in the work. He was glad that, on the estate, they had a great many leases. If he wished to take a farm himself, and he had the capital to work it, he would not take it by the year, but he would ask for a lease, because he would then know best how to work the land. In all leases, and very properly so, they would find protective clauses for the landlords, but he believed that the tenant should be as unfettered as possible, for a man who wished to work the land to the best advantage for his landlord as well as for himself, ought not to have all cut and dried for him as to what he should grow. What an absurdity it was to say to a man who had perhaps spent hundreds or thousands of pounds upon manures, "You have sown straw!" What use was it fettering a man of that sort? All that was required was that the farm should be worked fairly for both landlord and tenant, and if that were done he could say the English landlord would be perfectly content. They were not always, and he supposed it never would be so, in happy circumstances. Trade got depressed, and he feared that he could not now congratulate the agricultural interest upon having a time of prosperity. But they must hope for better days, and when

they had had times they must not sit down and cry or grumble. That would not help them. They must think how they can better themselves. They should take the land as they found it, they should use their brains if they had any, and they should grow what paid them best. Among others the speaker of the House of Commons and Lord Carnarvon had been giving farmers suggestions. The former had recommended that the land should be given up to pasture, and the latter had proposed a more general use of machinery, and so forth. But it was no use telling them to do that; they must treat the land according as they found it. They could not afford to grow corn in that place because it brought such low prices, but they had to cultivate that which paid them better.

THE BOOTH MEMORIAL.

The sad and unlooked-for death of Mr. Thomas C. Booth of Warlaby, is not only a shock to all who knew him, but a loss to the agricultural world generally, and to stock owners in particular—not easily to be replaced. A general and, indeed, unanimous wish has been expressed that some Testimonial should be offered to the memory of one who devoted so much of his time and energy, to the furtherance of agriculture and for the benefit of all classes of his fellow-men. In accordance with this desire, a few of his devoted friends and admirers have taken upon himself the duty of organising a scheme for collecting subscriptions, which shall not in any case exceed five guineas.

The precise form which the memorial will assume cannot definitely be declared until the amount realised, and the wishes of the subscribers have been ascertained, but the following has been suggested:—

First.—A memorial (to be hereafter fixed upon) in the Parish Church, at Ainderby.

Second.—A handsome Granite Drinking Fountain in the Town of Northallerton.

Third.—A "Booth Scholarship" open to any School or College, to be invested in Trustees for the benefit of children of the family of Booth. To be enjoyed first, by the eldest son of the late Thomas C. Booth as long as required, then by the other sons in succession; afterwards by the nephews in seniority, and to return again to his grandsons in like succession.

The following Noblemen and Gentlemen will be glad to receive subscriptions, whilst many others have expressed their willingness and readiness to collect subscriptions in their localities:—

ENGLAND.—Lord Skelmersdale, Latham House, Ormskirk; Colonel Kingscote, C.B., M.P., Kingscote, Wotton-under-Edge; Hon. George E. Lascelles, Sion Hill, Thirsk; Mr. George W. Elliot, M.P., Langton Hall, Northallerton; Mr. John Torr, M.P., Carlett Park, Eastham, Birkenhead; Rev. T. Staniforth, Storrs, Windermere; Mr. Hugh Aylmer, West Dereham Abbey, Stoke Ferry; Mr. Frank Chapman, Thornton Rust, Bedale; Mr. H. Chandos Pole-Gell, Hopton Hall, Wirksworth; Mr. Charles Randell, Chadbury, Evesham.

SCOTLAND.—Mr. A. Mitchell, The Walk House, Albia; Mr. J. Clay, Kirchesters, Kelso; Mr. J. Melvin, Bonnington, Edinburgh.

IRELAND.—Mr. R. Chaloner, King's Fort, Moynalty; Mr. R. Welsted, Ballywalter, Castletownroche; Professor Baldwin, Glasnevin, Dublin, or Mr. Jacob Wilson, Woodhorn Manor, Morpeth, Hon. Sec., pro tem.

A COMFORTING ASSURANCE.—A Russian friend has sent me one of the Proclamations now being circulated throughout the capital by the Nikitski Committee. It is very coarsely printed on thin paper and runs thus:—"We publicly make known to the people of Russia that the Chief of the Gendarmerie, General Mezentsoff, was effectively killed by us, the Revolutionary Socialists of the Russian Empire, and that we have assassins in readiness for his successor."—*Mayfair*.

Autocracy is preparing for eventualities in Russia. All the policemen in St. Petersburg had revolvers served out to them, and revolver drill now forms part of their regular duty.—*Ibid.*

FREE TRADE IN LAND.

No. XII.

Mr. Joseph Kay continued his series of letters to *The Manchester Examiner* as follows:—

Sir,—In my letters Nos. IX, X, XI, published by you on the 6th, 21st, and 28th of August respectively, I have tried to explain the effect of the French system of land laws upon the yeomen and peasant farmers, not because I was in favour of those laws, but in order to show that those laws which are in force in France, Norway, Holland, the Rhine provinces of Germany, most of the cantons of Switzerland, and a great part of Italy were not causing the evils which the enemies of all reform of our laws were industriously, and I hope ignorantly, charging upon them.

On the one hand, these laws enable the large and small farmers to buy farms of their own, while they also enable the mechanic and the day labourer to buy their cottage, garden, orchard, or field, and to look forward with hope to becoming greater proprietors; while our land laws, by tying up the land in estates of 1,300,000, 100,000, 200,000, 100,000, and 50,000 acres, deprive the small farmers, the peasants, and the mechanic of all chance of buying either farm, field, garden, or orchard.

On the mere statement of these facts, which are only too painfully notorious, and which are shown in detail in No. I, which system, let me ask, is the most likely to promote the happiness and virtue of the people?

In this letter I propose (1), to answer another objection to the French system; and (2), to show what results the French system of land laws has produced in Jersey and Guernsey, a part actually of our own territory.

It is constantly urged in this country by opponents to reform of the land laws, and by men who ought to know better, if indeed they have ever given a serious thought to the subject, that the system of free trade in land would never succeed in our country on account of our changeable, cold, and uncertain climate, and that therefore it is better to tie up the land in estates of one million and four hundred thousand acres, and to farm them by tenants, who generally have not even the security of a lease. The objection has been urged over and over again, and even before a late committee of the House of Commons. But what are the facts? In the short summers and long, severe winters of Norway; in Holland, with its fogs and long winters; in Northern France, with a climate very similar to our own; in Southern France, with its sunny and hot climate; in the plains of Switzerland, with their short but hot summers; in the mountain cantons with their severe winters and short summers; in Italy, with its hot climate; in the cold climate of Northern Germany, with its severe winters; in the hot climate of Southern Germany, on the banks of the Rhine, with its splendid vineyards and orchards; in the Channel Islands, with a climate scarcely warmer than Devonshire; in fact, everywhere where free trade in land, or the French system, is being tried over the whole face of Europe, these laws are promoting the welfare, the happiness, and the morality of the people.

When the blessing of the abolition of the feudal laws has been once conferred no Government, whatever its political tendencies, has been found strong enough, or courageous enough, to attempt the repeal of these laws, and struggle as the landowners of our empire may, no sooner will the people understand the character and effects of our own land laws, than the day of their complete abolition will have come.

But let us turn to a portion of our own empire, which, strange to say, has for a long series of years enjoyed, spite of English landowners, a system of land laws almost precisely similar to the French system, and let us see how it works there. I refer to the Channel Islands. And certainly the first observation which strikes one is this: If the system of laws produces as many evils as the English landowners and their friends allege, why do not they, the most powerful party in this country, release the Islanders from the tyranny of these laws? The answer is here, just the same as everywhere else, the people of the Channel Islands are satisfied with them,

are wonderfully prosperous under and in consequence of them; as I will show, and no change could be effected in them, except at the cost of a rebellion in the Islands; and consequently the English landowners are compelled to endure the spectacle of a people, forming part of our own empire and close to our own shores, flourishing in an extraordinary way, by what is refused to our people here, viz., the abolition of the feudal land laws.

For nearly all the statistics and facts I am going to give about the Channel Islands I am indebted to a work I have often quoted, "A Plea for Peasant Proprietors," by William Thomas Thornton, C.B., and to a very interesting article by an experienced traveller and an able writer, the Rev. F. B. Zincke, contained in *The Fortnightly Review*, No. CIX., New Series, Jan. 1, 1876.

Both these gentlemen speak from their own personal and recent researches in the Islands, and I need hardly say both are witnesses above all suspicion.

Now it appears that the land laws of Guernsey require land to be divided among all the children of the last owner, daughters as well as sons, though it treats the latter in general more liberally than the former, and permits the eldest son, besides sharing with his brothers, to take in addition his father's principal dwelling house and about 16 perches of ground adjoining it.

The law in Jersey slightly differs from that in Guernsey. In Jersey the land law permits the eldest son not only to take the dwelling house and the curtilage, and a small portion of his own selection, equal to a little more than two English acres, but, in addition, one-tenth in value of the remainder of the property. He takes, besides this, a small portion of land *pour les usages*, that is, no mainly to enable him to furnish his contribution to an ancient assessment of militia. This contribution is, however, never exacted, as the War Department supplies the militia with rifles.

The rest of the property is then divided amongst all the children, including the eldest son, in the proportion of two-thirds among the sons and one-third among the daughters, but with this qualification, that no daughter shall take a greater share than a younger son. ("See Succession Laws of Christian Countries." By Eyre Lloyd, Barrister-at-law. Page 57.) So that it will be seen from the above statement that the Channel Islands have a law of compulsory subdivision very similar to that of France, but modified by some advantages in favour of the eldest son. But then it must be borne in mind that the French law permits the father to dispose by will, either to his eldest son or to any other person, of a certain defined portion of his estate, so that the land law of the Channel Islands will be found to be substantially similar to that of France, and to be open to all the objections so constantly brought against the much calumniated law of the latter country by our own naturally well satisfied landowners. Let us see how this obnoxious law operates in the Channel Islands. We have already shown what results it has produced in other countries.

But first let me state in the following table what the area and the population of the principal islands were in 1861.

Name.	Acreage capable of cultivation.	Population.
Jersey	25,000	56,000
Guernsey	10,000	29,750
Alderney	1,500	4,933
Sark	600	600

Mr. Zincke says, that the largest proprietors of land capable of cultivation own only about 100 acres in Jersey and about 50 acres in Guernsey. Mr. Thornton says that, whereas in England 30s. an acre would be thought a fair, and indeed rather a high, rent for middling land, it is only inferior land that in Guernsey and Jersey will not let for at least £1; while in Switzerland the average rent is £6 an acre. And, indeed, according to Mr. Le Queene, in his "Ireland and the Channel

Islands," p. 123, the average rent of good land in the Channel Islands may be estimated at £6 an acre.

There are, of course, in the Islands, and especially in Alderney, as in France and Switzerland, many small properties which are much smaller than the size I have mentioned, and which do not exceed one or two or five acres in extent. But the same remark applies to these as to the similar plots in France and Switzerland. They are generally not farms. Their owners do not pretend to be farmers. Some of these plots are kitchen gardens of shopkeepers in the towns. Some are the small plots or fields of cottagers, who earn their living by day's labour. Some are the gardens of market gardeners, who now carry on a large trade with London in early vegetables, &c.

And such is the enterprise and intelligence of these small proprietors and gardeners that they have, small as their population is and small as their resources would be expected to be, by those who expect to find countries where land is much subdivided, to be mere "pauper warrens," established a large trade with London in early vegetables, potatoes, grapes, apples, and pears. In 1873, as Mr. Zincke informs us, Jersey sent to London £300,000 worth of early potatoes, and Guernsey fifty tons of grapes grown under glass, an article of export, the amount of which increases every year. And as Mr. Zincke most truly adds, "without the division of the land, which obtains throughout these islands, these astonishing results could not have been produced. The temporary occupiers of other men's lands cannot plant orchards or build nurseries; and as to the potatoes, which must be forced into maturity by the middle of May, the culture they require is so costly—it amounts to about £40 an acre—that, as a general rule, it will not be applied on a large scale, or to land of which the cultivator is not also the owner." And this enterprise and intelligence of these small proprietors is shown in other remarkable facts. Guernsey contains only 10,000 cultivable acres in its whole extent—an amount of land which would in Great Britain and Ireland only constitute a respectable medium-sized estate—and yet this small island, with no large town, and only its yeomen and peasant farmers, is now spending £16,000 in building a covered market for vegetables and fruit. It has also, Mr. Zincke informs us, lately carried a broad street across the town of St. Peter's Port, from the harbour to the heights above the town, at a cost of £10,000.

But the great glory of this little island is its noble harbour, upon which it has from the resources of its inhabitants recently expended £285,000. Of this, at the time of Mr. Zincke's visit, 1875, £65,000 has been paid off, and the remainder of the outlay was being cleared off at the rate of £1,500 a year.

"No one," Mr. Zincke says, "can see without surprise the massiveness of the enclosing walls of the harbour, and the amplitude of space on the top of them for quays, carriage roads, and footways."

Jersey too, it appears, is constructing a new harbour in deeper water, for the accommodation of larger ships, as their old harbour was found too shallow. So much for the enterprise of these "pauper warrens."

Take another test of the prosperity of the two principal Channel Islands. Mr. Thornton says ("Plea," &c., page 40): "The agricultural population is more than four times as dense as in England, there being in the latter country only one cultivator to seventeen acres of cultivated land, while in Guernsey and Jersey there is one to about four. Yet the agriculture of these islands maintains, besides cultivators, non-agricultural populations, respectively twice and four times as dense as that of England. The difference does not arise from any superiority of soil or climate possessed by the Channel Islands, for the former is naturally rather poor, and the latter is not better than in the southern counties of England. It is owing entirely to the assiduous care of the farmers and the abundant use of manure."

Mr. Brock, a late bailiff of Guernsey, and therefore a person who ought to be competent to express an opinion on such a subject, says: "There are larger estates in England than the whole of this island." Mr. Brock might have said that there is one estate in England twenty times as large as the whole of this island, and several 10 and 15 times as great; and one in Scotland 130 times as great! Mr. Brock

continues: "Let the production be compared to any 10,000 acres kept in one, two, or three hands in Great Britain, and the advantage of small farms will be obvious." ("Guernsey and Jersey Magazine," October, 1837, p. 258; Thornton's "Plea," p. 41.)

But let us inquire what the condition of the yeomen farmers and small owners is. I shall again cite Mr. Thornton, who has both examined for himself, and who has examined the best authorities. "The happiest community," says Mr. Hill, "which it has ever been my lot to fall in with is to be found in this little island of Guernsey." ("Tait's Magazine" for June, 1834.) "No matter," says Sir George Head, "to what point the traveller may choose to bend his way, comfort everywhere prevails." ("Home Tour Through Various Parts of the United Kingdom"); and then Mr. Thornton gives the results of his own observations in the following remarkable passage:—

"What most surprises the English visitor in his first walk or drive beyond the bounds of St. Peter's Port is the appearance of the habitations with which the landscape is thickly studded. Many of them are such as in his own country would belong to persons of middle rank, but he is puzzled to guess what sort of people live in the others, which, though in general not large enough for farmers, are almost invariably much too good in every respect for day labourers. The walls are often completely hidden by rose-trees, geraniums, and myrtles, which reach up to the ledge of the roof, and form an arch over the door. Every window is crowned with pots of choice flowers, which are sometimes to be found also in the little front garden, though the latter is more commonly given up to useful than to ornamental plants. Such attention to elegance about a dwelling has always been held to signify that the inmates are not absorbed by the cares of life, but have leisure and taste for its enjoyments. But beauty is not the only nor the chief recommendation of the Guernsey cottages. They are always substantially built of stone, and being generally of two storeys contain plenty of accommodation. The interior is not unworthy of the exterior. In every room pulley-windows, with large squares of glass, take the place of leaded casements, with diamond-shaped panes. Equal attention is paid to comfort and to neatness in the fitting up. There is abundance of all needful furniture and of crockery and kitchen utensils; and fitches of bacon—those best ornaments of a poor man's chimney—are scarcely ever wanting. This picture is not drawn from one or two select models, but is a fair representation of the generality of the dwellings of the peasantry. Literally, in the whole island, with the exception of a few fishermen's huts, there is not one so mean as to be likened to the ordinary habitation of an English farm labourer. . . . The people of Guernsey are as well clad as lodged. The working dress of the men, who wear a short blue frock over their other clothes" (a similar dress to that worn by the Swiss, French, and many of the German farmers and peasants, which washes easily and well, and which keeps the under garments clean, but which is so short as not to interfere with the free action of the limbs), "is not indeed very becoming, but is never ragged; and on Sundays they don a suit of broadcloth, while their wives and daughters make an at least equal display of the outward symbols of respectability. What makes the evident affluence of these islanders a still more gratifying spectacle is its almost universal diffusion. Beggars are utterly unknown. . . . Pauperism, able-bodied pauperism at least is nearly as rare as mendicancy. There are two so-called 'hospitals' in Guernsey, one for the town and the other for the country parishes, which, in addition to the purpose indicated by their name, serve also as poor-houses and houses of industry; yet the inmates of all descriptions in the town hospital at the time of my visit were only 80 men, 150 women, 55 boys, and 39 girls, and I was assured that everyone of the adults was incapacitated from earning a livelihood by some mental or bodily defect, or by bad character. No one fit for employment had been compelled to take refuge there by inability to procure work. The same remark applies to the country hospital, in which I found 18 men able to work, but who were either habitual drunkards, or otherwise of such bad character that no one would employ them. The average number of inmates of both sexes and of all ages and classes was 146." (See Thornton's "Plea," p. 100.)

Writing of the houses and cottages of the farmers and peasants in the islands generally, Mr. Zincke says:—

"All that one sees in them speaks of sufficiency, ease, and prosperity throughout all classes. The number of substantial houses in the environs of their two towns surprises one who calls to mind the smallness of the islands of which they are the capitals. In the country parishes, too, good houses abound. One accustomed to the uninhabited look of so large a proportion of the rural parishes of England wonders how the possessors of so many good houses as he sees here can find the means to live in them. So with the better class of houses. The same is observable with respect to the houses of the peasantry and of the artisans. A month's search for something of the mean and dilapidated kind, not unknown among ourselves, was quite unsuccessful. I went into several cottages, all of which I found well built, roomy enough, and in good repair. This was very remarkable in the houses of the peasantry. As to the clothing of their inmates, I nowhere saw the dirt and rags which so frequently shock us here at home, as signs both of actual pressing want and of the decay or extinction of self-respect. But to the eye of one who may be visiting these islands indications of the well-to-do condition of the people are presented on every side. The churches I saw were large for the acreage of their respective parishes, and were well kept, so much so, indeed, in most cases, that one could not but notice their dimensions and condition. They evidently belong to large congregations, who take a pride in them. The churchyards told the same tale. They are as carefully kept as the churches, and contain what to English eyes is an unusual proportion of solid tombs and massive tombstones. It is plain that here there are few so poor as to be obliged to bury their dead in unnamed graves.

"In accord with the testimony of the churches, and of the churchyards, is that of the village schools, judging by what a passer-by can see both of the building and of the little scholars. So also, particularly in Jersey, is the excellent condition of the roads, and the dressiness, almost everywhere, of the roadside margins. These generally consist of stone walls, or well-trimmed hedges, or earth banks, upon or beside which are rows of trees, sometimes fruit trees, all of which, whether fruit-bearing or timber trees, are carefully tended. This dressiness of the roadside in rural districts is again something new to English visitors, and adds much to the pleasure of a day's walk or drive in the interior of Jersey. To the thought it is even more pleasing than to the eye, for it intimates that every cultivator loves and is proud of his land, and is desirous that it should present a fair appearance to his neighbours and to the casual passer-by. It shows, too, that with the careful attention which is found only in small cultivators who are at the same time owners of the soil, he is making the most of his opportunities; for these trees, which he plants on his roadside boundary bank, will some day send down their roots into the roadside margin, and even extend them into what soil there may be beneath the road itself, and will find space for expansion above the road, without detriment to grass or corn. With such cultivators nothing is lost."

Mr. Thornton says of the dwellings of the farmers and peasants in Jersey: "As the estates of the peasantry are larger than in Guernsey, so also are their dwellings, a much greater proportion of which are of sufficient size to be styled farm-houses. Some of them, indeed, have so much architectural pretension that they might almost be mistaken for the residences of independent gentlemen, if the fields of corn, parsnips, or cabbages, lying close under the parlour windows, did not show that they really belong to farmers. On the other hand, the mere cottages are very inferior in outward appearance to those of Guernsey, being commonly built of rough stone, and sometimes apparently without any cement. Their inferiority, however, is probably," as Mr. Zincke shows certainly, "only external; for though I did not myself enter any of them, the well-dressed people whom I saw leaving them on Sunday were evidently not prevented by want of means from making themselves comfortable." (See Thornton's "Piea, &c." p. 102).

Mr. Zincke remarks that in the countries where small properties, the result of free trade in land, exist, or, as he says, "everywhere in the world, except in our own country, we find general markets for the general accommodation of the middle and working classes flourishing." All who have travelled among the French and German country towns must have noticed this. The wives of the small farmers and market gardeners come in with vegetables, fruit, flowers, eggs,

fowls, and all the produce of the season. In the smallest country towns, as was once the case with us, these markets are to be found flourishing. They are of the greatest value both to the small farmers, labourers, and general inhabitants of the locality, and they are also great incentives to the careful production of many vegetables and fruits which would otherwise be neglected.

The prosperous condition and good supply of these markets is often a very fair index of the condition and prosperity of the farmers and market gardeners in the district around. These markets also enable the labourers to obtain what they used of garden stuff and of eggs, bacon, and poultry much more easily, much cheaper, and much better than in our country.

The Rev. F. B. Zincke complains of the decay of such markets in our country, and attributes it to the disappearance of our ancient class of yeoman farmers, who owned their own small properties, and he might have added, as he seems indeed to infer, to the miserable and paperised condition to which we have reduced our peasantry. He says, see his Essay, p. 4:—

"The people who supply a market of this kind are not extensive cultivators, but peasant proprietors. Of these, each does all that ingenuity and labour can to turn every square foot of his little estate to the best account. Every scrap and corner of it, and what they are producing, and what they can be made to produce next year or a dozen years hence, are constantly mapped in his mind's eye. Here is a bit of wall, or an angle in a back yard, where there is room for a fig or a plum tree. The fig or the plum tree is planted before this bit of wall, or in this angle, and is carefully tended. This little bit of grass land will support a few apple trees. The apples before long will be ripening above the grass. Before his potatoes are out of the ground, beet or broccoli is set between the rows. No leaf of this beet or broccoli will rot on the plant, but, as soon as it has done its duty to its parent, will be culled for the cow. The cow will supply milk and butter or cheese for the market. Cows and pigs and poultry are each kept in part as save-alls, and all alike for the market. These are the people who supply the market. Every week the good house-wife herself brings to the accustomed stall all that she has ready for sale. This ensures that everything the locality can produce (and under this system every locality can be made to produce a great variety of good things) should be exhibited in the market place: in great abundance, and at very moderate prices. In the Guernsey vegetable market I counted upwards of a hundred of these peasant women in their stands at one time, many of them exhibiting upwards of twenty baskets of garden and dairy produce. Those who have any familiarity with the growing difficulty experienced in this country, possibly a result of our present system of land tenure, in supplying the working classes in our towns" (and, he might have added, in many of our richest rural districts) "with vegetables, fruit, eggs, butter, and milk, will regard such a market as that of Guernsey as of no small advantage to a locality."

But, as Mr. Zincke says, another cause which contributes to maintain these general markets is that they are to a very great extent supported by the yeoman and peasant proprietors, who learn by their own interest to raise whatever their land can be made to produce, and also how to make the best use of every good thing they raise. They know, he says, in what way poultry may be cooked, as well as how to make soups of herbs and other simple but nourishing ingredients. Haricots and onions are much used by them. Cabbages are a valuable part of the household supply. Apples and plums are dried and stored for future use. All this is traditional lore in the small landowner's home. A varied, abundant, and cheap supply of vegetables and fruit is as necessary an ingredient in the dietary of adults as milk is in that of children. And yet in our rural districts it is often difficult, and sometimes impossible, for the labourer to buy any of these articles of food. And I have known cases where milk has been refused to the labourers, except on the application of influential landowners.

As to meat, how often do our rural labourers see it on their tables, unless it be a slice or two of bacon mixed with their bowl of potatoes on the Sunday?

But in the population of small landowners in the Channel

Islands there are many who are able to buy meat, as is proved by the fact mentioned by Mr. Zincke that in the meat market of St. Peter's Port, which is alongside the vegetable market, in Guernsey, there are 36 well-supplied butchers' shops, "a large number," as Mr. Zincke says, "for so small a place." The contiguous fish market, too, contains forty fishwives' marble stalls, on which, one morning in September, 1875, Mr. Zincke counted twenty-two species of fish and crustacea.

The homes, the cottages, the farms, and the gardens of these prosperous islanders are their own. And how much is summed up in that fact! Is it not obvious, as the Rev. Mr. Zincke most truly and wisely says, that among the peasant and small farmer classes there can be no true home unless the house in which the family lives is its own property? What a vast difference there is between the cottage in which the English labourer lives by sufferance, liable to be turned out any month or year, and the cottage which the Channel Islander and the foreign farmer or peasant has acquired as his own by his own exertions! If our small farmer or peasant has no lease, if the peasant may be turned out of his poor cottage at any moment, what motive is there to care for the shell of the cottage, except as a temporary shelter, of which he knows not how long the poor enjoyment may be spared to him? Such peasants will not repair; they will not beautify in many ways, which would otherwise be their pleasure; they will not try, by hard labour, to add to its conveniences. Why

should they love to add to the beauty of their humble porches by training over them gay flowers; why should they bestow every spare penny on their garden and its productions; why should they spend their extra time and labour on its fences; why should they carefully prune and graft their fruit trees; why should they spare from their savings to buy new shrubs and trees, which next year or month may be their landlord's? What is there, in short, to create in their breasts that healthy and happy love of their cottages which the small owners of the Channel Islands, Switzerland, Germany, and France feel towards their own little homestead, hardly acquired, it may be, by much toil and self-denial, but when acquired, their own, safe from the greed or uncertain or tyrannical will of anyone?

And is not this a great moral lesson for the people, worth, if necessary, the sacrifice of some portion of the net produce of the soil?

But it is not necessary to pay even this price, for nations who have promoted just laws, and repealed, no matter by what labour, these selfish and class feudal laws, have found themselves repaid by a just Providence, by the increased, and still increasing, industry, self-denial, temperance, conservative feeling, contentment, and prosperity of the rural classes.

Would to God that all Englishmen had had the opportunities which I have enjoyed of studying the results of abolishing these unjust, oppressive, and truly demoralising feudal land laws!

AGRICULTURAL TABLE TALK.

Mr. GORSE, Q.C., M.P., attended the annual gathering of the Waltham Cottage Gardening and Ploughing Society, near Chelmsford, recently, and addressed a large number of farm labourers and others. He said that if he were to speak to them upon most country subjects they would laugh at him for his ignorance; but gardening, which their Society stimulated and promoted, brought all down to a common level, because every man could have his garden, and every man could take enjoyment and pleasure in it—the artisan with his window garden as well as the squire with his park and conservatory. Even in the working town of Chatham, which he had the honour to represent in Parliament, there were two cottage garden Societies, with shows as good as the one they had had at Great Waltham that day. In their care of gardens they were carrying out a work in which the whole country could sympathise. The produce of cottage gardens was an evidence of what working men had done in their spare hours and besides and beyond their usual daily work. He did not know whether the hours which had been spent in those gardens might not otherwise have been wasted in the public-house or in idleness. Every hour spent in garden work was an hour well spent, and an hour upon which every man might look back with pride and satisfaction, because this country depended for its greatness upon the character of its working population. The working population constituted the great mass of the country, and unless that working population were sound and honest and virtuous the country at large could never long continue peaceful, happy, or great. He looked with satisfaction, as a lover of his country, upon what he had seen that day, because it showed him there was sterling virtue among the labourers of the district. He hoped they might long continue to flourish, and whether they gained prizes or not they might depend upon it that the time they spent in their gardens would be about the best and happiest time of their lives.

Mr. ABEL SMITH, M.P., presided a short time ago at the ploughing match luncheon in connection with the West Herts Agricultural Society, held at St. Albans. Responding to his health, he said he wished the times were more cheerful for agriculture, which was not very prosperous. Farmers were suffering from the low prices of corn in consequence of foreign competition, but he did not think corn could be continued to be sent from abroad at present prices, and advised farmers to increase their grass land and stock, for flocks and herds would always bring good prices. He had hoped that the Bill passed last Session would clear the country of that disease which had been imported from abroad.

Sir THOMAS AGLAND, M.P., speaking a few weeks ago at a large gathering, at the Witheridge Farmers' Club, referred to several topics of public interest. In the course of his speech he said that no doubt the legislation of England had of late years been a course of easy-going law-making. There was at the same time, something to be said for this mode of procedure if a Government could get the public to go with them, for if a Ministry had not made up their minds as to what the public really wanted, but still wished to do something, it was no doubt rather convenient to say to the people, "You may do it if you like," for by this plan they found out what the country really did want. A more statesmanlike course, however, and one which had been the practice of those with whom he had been accustomed to act, was to exert oneself by laborious and earnest inquiry to get information as to what the country really needed, and to stand or fall by the determination arrived at. Although this was the higher order of statesmanship, yet there were certain conditions of the political atmosphere which might lead people to conclude that the other course would produce more good in the end. Magistrates were, by the favour of their fellow countrymen, placed very much in the fore front in all local affairs. For many years the justices of many counties had imposed upon them very great public duties, not merely as magistrates, but as the administrators of local public affairs. The day for that was passing away, and it was of the utmost importance that the question of local administration should be thoroughly fought out. He hoped that when this was dealt with it would not be by permissive legislation, for the country had had quite enough of that. He trusted that before many years were over we should arrive at a thorough solution of the question of the administration of our local public affairs. There were many questions of enormous importance that had to be considered in connection with any scheme of local self-government. Local government did not mean simply giving the ratepayer a voice in the spending of 2d. in the pound or thereabouts, which was now nearly all that was left to quarter sessions in the days of these wonderful subsidies given by a kind and bountiful Government. What he meant by local self-government was a really strong and powerful body for every great district in the kingdom, whether it was a county, a half county, or two counties put together, and he was convinced that no local self-government could be strong if it did not, in some form or other, include the town as well as the country population. The County Government Bill was this year introduced by Mr. Selcher-Booth, the head of the Local Government Board. No doubt that was a piece of sensational legislation. It was a trying it on to see what could be done. He hoped

that shortly the time would come when they would be able to crack the nut that would solve the question. Let them, however, as farmers, landowners, and inhabitants of the country remember that they had nothing to gain by setting up town against country, or country against town. They might congratulate themselves that by the fair dealing of both sides in Parliament the Contagious Diseases Bill had been passed in a tolerably fair and reasonable form, and they had escaped what would have been a most fearful disaster to people in the country—a thorough town agitation against them. Of this they might be quite certain, that the public feeling of England would never allow the food of the people to be seriously raised in price, or its abundance imperilled by any class whatever. The voice of the masses, who were the best customers, would compel the Government to give every freedom to the admission of food to this country so far as it was consistent with the safety of the English people. More than that the farmers could not wish for. An Act with a simple title, but very important in its effect, was the Public Health Amendment Act, which did not come into operation until Christmas, but into which he advised all boards of guardians to look carefully. It was a piece of compulsory legislation, and by it every house in England in an agricultural district was obliged to be furnished with a reasonable supply of water. Its operation was not limited to cottages, but applied to every house in a rural sanitary district, and the only exception was in a case where physical peculiarity rendered compliance impossible. It was a most important Bill, reflecting great credit on Mr. Brown, the member for Wenlock, who introduced it, and whose name deserved to be handed down to posterity as a benefactor of the English people. Various other topics, including highways, were alluded to by the hon. baronet.

Mr. ROUND and Colonel BRISE, the Conservative member for East Essex, spoke upon agricultural and foreign questions at the annual meeting of the Braxted Agricultural Society held recently. The Chair was occupied by Mr. C. P. WOOD, who has been looked forward to as the Liberal candidate for this division of the county at the next election. He had given special interest to this gathering by insisting upon having added to the toast of the Bishop and Clergy the words, "and ministers of all denominations." Several clergymen absented themselves from the meeting in consequence. In proposing the toast of the evening the Chairman said: Some years ago it was his good fortune to preside at a dinner, somewhat similar to the present, and on that occasion he delivered a speech which became in reality a kind of Jeremiah upon the woes of the British farmer, and he believed that in a certain sense that speech would be more or less applicable to the present day. True they had not now, as then, the same tribulation with their live stock—they had not now to contend with the *philaria bronchialis*, which was not only a desperate name, but a desperate disease from which friends around him had lost large sums of money; they were not now as then troubled with foot-and-mouth disease; they had not to contend with the Cattle Plague; but in this strictly arable and corn-growing district they had had a succession of poor crops, unrelieved by high prices, although for the master of that, in his opinion, high prices could never compensate for poor crops. Englishmen—and farmers were included—could take one or two knock-down blows and regain their feet and resume their warfare, but when blow followed blow, or when poor season followed poor season without intermission, one required more than ordinary fortitude to hold up one's head and wear a cheerful countenance. His own opinion was that the present crop was an indifferent one. There might be exceptions. The wheat crop might be a fair one, but they had been accustomed to look upon barley as their mainstay, and he thought that would prove a very poor crop this year. He hoped he might be wrong; but he was satisfied that farmers had come to this state that they required a bumper to recoup them for their past losses, and this bumper they should not, in his opinion, attain. When farmers came to a difficulty what were they to do? Were they to fall back on their landlords, a course which has been suggested by the generosity of such men as Lord Rosebery, who had returned a certain per centage upon the rental? He (the Chairman) could not concede that this was a right principle, unless under exceptional circumstances. It was the business of a tenant farmer to make the best bargain he could with his landlord when hiring the farm,

and having made it he should stick to it like a man. At the same time no landlord was wise who attempted to extort the last shilling from his tenant. The landlord had a temptation to do this, or he had some years ago, when farmers outbid one another and taught him to put a fictitious value on his land. But in his opinion the landlord could not look upon the possession of land as a source of income. They had seen instances in which gentlemen had purchased land on a rental showing only 2 per cent. on the purchase money, which seemed to be an argument to prove that there was in the possession of landed property an enjoyment that far exceeded the sweet simplicity of the Three Per Cents. A large landowner assured him the other day in the presence of Sir Charles Du Cane that in his opinion the owner of 5,000 acres should also be possessed of £100,000 in cash. This was an endorsement of his view that a landowner could not look upon money invested in land from the same point of view as investments in other securities. He thought the remedy for the hard times they had lay nearer home—it rested with themselves. They should pay more attention to the cultivation of thrift and frugality, or the art of not spending money. He did not desire that they should be so parsimonious as to make themselves miserable, but he put it to them whether it was not possible for them to make any saving in their present expenditure. He had no desire to enter into the interior economy of the house-hold, but there were certain items of outdoor expenditure which came especially within the province of the farmer. He referred especially to the expenditure for agricultural implements and artificial manures, in both of which cases he urged that great care and discretion should be displayed, much money being absolutely wasted from the want of more knowledge with reference to them. Mr. WOOD went on to remark that the tenant farmers were but poorly represented in the House of Commons. He might be told there were several landowners in the House and that the interest of the landowner and the occupier were the same, and that therefore the latter were represented, but he was reminded of the answer of the tenant, who told his landlord that though they might be rowing in the same boat they did not always pull in the same direction. He (Mr. WOOD) did not consider the landowner altogether represented the occupier. He should like to see a few more tenant farmers in the House, for it would in certain cases be of the greatest possible advantage to their good and able representatives, Mr. Round and Colonel Brise, to be able to turn round in the course of a debate, and fortify their own opinion by the opinion of a practical man—a tenant farmer. He found that magistrates were represented in the House by 286 members, the legal interest 122, bankers 20, railway directors 115, brewers 20, newspaper proprietors 10, coal owners 16, merchants 34, tenant farmers 5. He trusted something would be done to rectify this sad omission for he could not conceive that the interests of the tenant farmers were properly represented in the House. He trusted not one would misinterpret his words or impute to him such an act of indecency as advocating the claim of any individual to the honour of representing the tenant farmers, for he assured them he did not at the present moment know any tenant farmer who would be willing and able to enter the House of Commons.—Mr. ROUND said that he could not deny that if the tenant farmers were better and more personally represented it would be for the benefit of the country. At the same time he could not admit that it would be a good thing if tenant farmers made it their object specially to return members of their own class, any more than he could appreciate any attempt on the part of the doctors to get special representation in the House. But it should not be forgotten that the tenant farmers possessed in Mr. Clare Sewell Read one of the best representatives which the House contained, and he hoped in the interest of the tenant-farmer class, Mr. Read would long live to represent them. After congratulating his hearers upon the change which had come over affairs in Eastern Europe since he last addressed them, he said he much regretted the cloud which now appeared on the Asiatic horizon. For some time the policy of this country in regard to Afghanistan had been a policy of "masterly inactivity," and some seemed to think that ought to be our policy now. But lately Russia had made great strides in Central Asia, and she was now approaching too closely and too craftily to Afghanistan. When a house was burning at a distance from our own, and

the wind was keeping it from us, we could afford to be indifferent as to our safety; but when the fire was close to us, and the wind was blowing it closer, we had great reason for alarm. That was the present position of Russia and ourselves in regard to Afghanistan. He and his colleague were of course not behind the scenes in the Cabinet, and therefore did not know what was occurring there, but they must leave the interests of the country and of our vast Indian Empire to the wisdom of the Government at this critical juncture. Colonel BRISE regretted that the hopes of the agricultural community had been so completely dashed to the ground by the low prices of corn which had prevailed since the ingathering of an indifferent harvest. Prices at Mark Lane for the last two Mondays had been simply ruinous in consequence of our great importations of wheat. Touching upon the legislation of the past session, he said he considered the passing of the Cattle Diseases Bill was an act of the greatest value to the agricultural interest. Although not all they asked for, they had got a good deal very much in the same way as the Agricultural Holdings Act. He was firmly of opinion that although the Agricultural Holdings Bill was laughed at by some, it was a great boon to the tenant-farmers, inasmuch as it altered the presumption of the law and said that all improvements made on the land were the property of the tenant, and not of the landlord, which was a step in the right direction. The Cattle Bill was some what similar. Henceforth the presumption of law was altered and all foreign cattle were supposed to be diseased, and as such were to be slaughtered at the port of debarkation. They wanted a more stringent law, and that cattle should be slaughtered at the port from whatever country they might happen to come, but exception was made as to America, Spain, and other countries, and it was thought advisable, he thought wisely, that henceforth the law should not be laid down to slaughter, but merely that all foreign cattle were diseased, and should be slaughtered unless a clean bill of health could be produced from the countries from whence they came. The Chairman had asked, when farmers came to a great difficulty, what were they to do? No doubt many farmers were in great difficulty at this moment. Some laid all the blame on the landlords, and some tried to get down the rent, and others the labour, but there were difficulties in both cases, both rent and labour being regulated by the law of supply and demand. The Chairman suggested that thrift was the remedy, but he could not agree with that, for nothing in the cultivation of land paid so well as a liberal outlay. No doubt the rent of some inferior farms had been reduced, but in the best farms there had been no material reduction. It did not follow, however, that landlords had not been crippled in their incomes by the successive bad seasons, for they had not been able to let without a large outlay, in the shape of buildings, cottages, &c., which were equivalent in some way to a reduction of rent. As to what the Chairman and his own colleague had said about the representation of tenant farmers, he confidently denied that the tenant farmers could be better represented by men of their own class than they were now. For the last ten years during which he had represented his hearers in Parliament he could conscientiously say that he had never given one vote in favour of the landlord class. He could conscientiously say he had given many votes in favour of the occupiers as against the landlords, and he had given more votes in favour of the working classes than he had recorded for either the tenant farmer or the landlord class. He did not believe that the labouring classes could be one bit better represented by men of their own class than they were now. The House of Commons were very jealous of class legislation. It would listen to class men if it believed they had any valuable information to give, but still it listened with suspicion. Mr. Clare Sewell Read was a specially exceptional man. It had been stated by the Chairman that there were five tenant farmers in the House, but he only knew of two—Mr. Read and Mr. Barclay—and these two men were invariably found in opposite lobbies.

At the annual meeting of the Cuckfield Agricultural Association, held a few weeks ago, the Chairman, Mr. CHARLES LENNOX PELL said:—I have been somewhat interested in the Cattle Diseases Act, which comes into operation next week, and, with your permission, I should like to make a few observations upon that important measure. I have heard it said

that Government was induced to legislate in the matter, in consequence of the panic which seized the agriculturists of the country in consequence of the visitation of the cattle plague last year; but a greater mistake could not be made than to imagine that the Act was the result of a cattle plague panic. For years past the Privy Council offices had been besieged by persons interested in the question urging that strong measures should be taken to prevent cattle disease being brought to England. And then, in addition to this agitation, last year we had another attack of the cattle plague, and, remembering the devastations among our flocks and herds from the same cause 13 years ago, the Government took advantage of the opportunity, and entrusted the whole question to a Select Committee. But in the meantime the cattle plague was dealt with in an energetic manner, and it was soon seen that the measures adopted were effectual, and that there was no great cause of alarm, much less a panic. It had been ascertained beyond question that the only effectual mode of dealing with cattle disease was to relentlessly destroy not only every animal affected with the disease, but also every animal that had been in contact with those affected. If we look at the returns relating to the visitation of cattle plague during the four months of its prevalence in 1877 we find that there were 47 outbreaks, that 283 animals were actually attacked, and that 835 animals which had been brought in contact with those suffering from the plague were also slaughtered. Therefore, it may be taken, in round numbers, that 1,100 beasts fell victims to the disease, and the visitation was got rid of at a cost of £13,000. But now turn to the destructive effects of other diseases; take, for instance, pleuro-pneumonia. In 1877 there were no less than 2,077 outbreaks, and in consequence, 5,330 animals either affected or brought in contact were slaughtered and died, and the cost to the Local Authorities amounted to £38,513, without making any calculation as to the losses sustained by the owners of the stock so destroyed. And yet the disease was not stamped out as the cattle plague was. Foot-and-mouth disease was not so prevalent last year, owing, probably, to the measures taken to prevent the spread of the cattle plague; but look at the ravages, as shown in the returns, effected by that disease in previous years, and the enormous losses sustained by the owners—losses far exceeding even those suffered from the cattle plague itself. The committee, after making full inquiry was of the opinion that the strongest restrictions should be placed upon the removal from place to place within this country of diseased animals, and that all foreign animals imported into this kingdom should be slaughtered at the point of landing, because it had been distinctly proved before them that cattle diseases came from abroad. It is true that pleuro-pneumonia and foot-and-mouth disease have become naturalised amongst us, but if these complaints among cattle are not re-imported there is reason to believe they can be stamped out, and the country be well rid of these destructive maladies. Based upon the result of the committee a Bill was brought into the House of Lords by the Lord President of the Council, and I think it was fortunate for the country to have had, when such a question was under consideration, at the head of the Privy Council a Sussex farmer, the Duke of Richmond and Gordon. That the practical knowledge which his Grace brought to bear upon the matter was of the greatest service, and the time and attention he devoted to preparing the measure and carrying it through Parliament, notwithstanding all the other avocations he has, no one is, perhaps, better aware, from the position I have the honour to hold, than myself. The Bill was carried through the Lords, and was sent down to the House of Commons, through which it also passed after a great deal of discussion, into the merits of which it is not necessary for me to enter. If I said that my noble friend, the Lord President, liked the Bill when it came from the Commons as well as he did when it left the Lords you would not believe me; but this I am sure you will believe, that the noble Duke spared no pains to make it a successful measure. I believe that even now it is a good measure, and that if it had been less misrepresented by some it would have been better understood by others, and less dissatisfaction would have been created than has been expressed in some quarters. The object of the Act has in view throughout is to abolish disease by isolation, to interfere as little as possible with the general trade of the country, and at the same time to ensure uniformity of action. As an instance of what I allude to,

Ireland had about ten Acts of Parliament bearing upon the question, and our own did not affect that country at all. Now all the Irish Acts had been repealed, and one Act has been passed that I hope will be effectual for the whole kingdom. It would not be necessary to have imposed these restrictions at home if disease had been imported from abroad, and it will be the duty of the Privy Council, loyally accepting the decision of Parliament, to see that the law is carried out, and that all foreign animals are slaughtered at the point of landing, except those with reference to which satisfactory proof is furnished that they came from countries not affected by disease; but nothing we can do will be effectual unless we are assisted by those entrusted with local authority, the owners of stock, and farmers generally, in carrying out a measure which I hope will be found to confer blessings on the whole community. I venture to say that nothing was further from the thoughts of those who framed the Bill than to favour the farmers and breeders of stock at the expense of other classes, and restrict the supply of meat; the object in view was exactly the reverse. The only object was to increase the supply of meat by preventing disease; and we say to the foreigner, "Send us as much meat as you like, but do not send us disease"—that is all we ask. And now, turning from a subject in which I have taken some interest, and another equally interesting to us all, I am glad to be able to congratulate you on the prosperous state of the Society. I see from statistics which my friend Mr. Clarke has supplied me, that the entries of ploughs at the annual meet has increased from 27 in 1875 to 39 to-day. The entries of produce do not show so marked an increase, but they are very satisfactory. I venture to think that in drinking "Success to the Cuckfield District Agricultural Society" we are toasting an institution the prosperity of which we intend to do our best to promote. I couple with the toast the name of Mr. Tulloch, who will no doubt, make some valuable remarks upon agriculture.

Mr. TULLOCH, of Slaughan Park, in responding, said he had listened with great interest to the remarks of the Chairman, particularly those relating to the Cattle Diseases Bill, and he believed the noble Duke would find that the measure would not lack support in the district of the county of Sussex; he thought he might assure their worthy Chairman that all classes would do their best to carry out the provisions of the Bill. The Chairman had stated that the Act in question had been misrepresented, and he (Mr. Tulloch) had to make a similar complaint against the Chairman, for having led them to suppose that he (Mr. Tulloch) would make some remarks upon the state of agriculture, whereas he did not feel capable of doing anything of the sort. He was certainly interested in farming, he hoped long to continue to be so interested; and he knew he was speaking to thoroughly practical men, and if he could say anything that might act as a key note, and animate others, he should be very glad. He had listened with interest to the observation of Mr. Noel, when he said that this country should raise as nearly as possible all the food needed for home consumption, but he wished the hon. gentleman had gone a little further, and told them how to do it. He went diligently into farming, but he must say he should be better pleased if more pay attached to his little holding than he found at present. As to the rotation of crops it was hopeless for a farmer to look forward and say what would be the best paying crop next year. Some years ago it was thought almost impossible for foreign growers to send in more than 10 millions of corn and flour, but the fact was that the foreign supply had increased from 10 to 15 millions, and at the present time if they grew a large crop of wheat they got a very low price, and if a small crop the price was very little better, for there were always people ready to send large quantities of corn. And then as to oats, he saw some the other day in London, and very fair ones they were, from Riza, which were being sold at 18s. 6d. a quarter! Could English oats possibly be produced to yield a profit at a price like that? And then they were told "Why not go in for cheese?" But a friend who was largely engaged in cheese-making in Staffordshire told him that the Americans were sending in cheese at 4d. and 5d. a pound—which was 3d. or 4d. a pound lower than he could make it in that county. Therefore, with these drawbacks to contend with, he thought the only thing the farmers could do would be to go in for economy in labour, and breeding as much stock as they could. With

regard to labour there were many difficulties, and as the Vicar had reminded them, there was not so much good feeling between employer and employed as existed formerly, when men used to earn their living by the sweat of their brow; he was afraid there were very few of that class to be met with now. The Speaker when he offered to let his labourers have a share in the profits of his farming, rightly thought it would be a good thing to give the men the idea that they were working for themselves as well as for their master, and, as an instance of that, he (Mr. Tulloch) had seen a man at piece work do as much as three at day work. Therefore he recommended piece work where it could be applied. As to breeding stock, it was with all diffidence that he advised them to use good-framed cows, and carefully-selected sires, with a view of producing stock that would attain maturity early. He did not think they need fear foreign competition in stock, the percentage of meat brought into the country as compared with that grown here being very small, probably not more than seven per cent., and the trade in foreign cattle must always be more hazardous than that in foreign corn.

Speaking on Wednesday, Sept. 2, at the annual dinner of the Wokingham Agricultural Society, Sir CHARLES RUSSELL, M.P. (who is President of the Association for the year) said that he could hardly conceive it possible that any one could argue that we should limit our production in order to keep up the prices of articles of commerce. It was as much as to tell the farmers to grow half a crop of wheat instead of a whole one, in order to keep up the prices, whereas they knew that the moment they attempted to do that they would have fresh imports of corn, and they would lose half their crop. If we attempted in any way to relax our energy there were plenty abroad who would take advantage of it to our injury. During 1872 and 1873 there was an inflated commerce from the enormously high prices of coal and other material, and Professor Fawcett had made the calculation that the fall in the prices of coal had benefited the consumers of England in one year alone to the extent of half the interest on the National Debt. A fact which he thought to a certain extent solved the meat question was that never, he believed, in the history of England had freights been so cheap as they were now. In India lately there had been three million pounds' worth of shipping doing absolutely nothing at the ports, and there was scarcely a port in which English ships were standing in which they were not begging for freights. If the threat which had been held out to them, that they were to be superseded in meat-growing, was to be carried out, now was the time for it. His friend, Mr. Pell, M.P., had informed him that he had seen two ship loads of animals which had arrived from America, and that they were in very nice condition; but he further informed him that as they stood they had cost nearly £30 per head. If that were the case, and they could, with the Cattle Diseases Bill, put heart into the producers so as to encourage them to keep larger stocks than at present, he believed it would have the effect, if any, of cheapening the meat, which would be to the benefit of the farmer, and they would have nothing whatever to fear in regard to foreign competition.

At the dinner of the Oswestry Agricultural Society, held recently, Mr. Stanley Leighton, M.P., said: He thought, as an agricultural member addressing an agricultural gathering, it might not be out of place if he alluded to some of the conditions of the ownership and cultivation of land in England, because strange theories respecting them were sometimes advanced, and expressions of misleading sound were sometimes used. One of such expressions was the demand often asserted before popular audiences for free land. The expression carried with it an idea that there was some crafty barrier of legal creation which prevented the people of England from buying land in the open market. Well, they knew that the true cause and potent reason why small landowners did not become great ones, and why those who had none did not buy land, was the want of money to pay for it. An Act of Parliament had not yet been devised which would put money into everybody's pocket without work. But notwithstanding the common want, it was well to be reminded of the fact which the publication of the list of landowners some three years ago had made manifest, namely, that every seventh man among them was

a landowner. During the last 20 years he could remember his own county land sold in large estates to the value of four millions sterling—and he supposed during the same time the value of land sold in small quantities was enormously greater. Closely connected with that question was the theory vehemently maintained in some quarters that the best system of cultivation was when the occupier was the owner of the land which he farmed, or, in other cases, when the area of the farm was so small that the tenant could not afford to employ hired labour upon it. He should be sorry to see small holdings abolished. He should be very sorry indeed to see one uniform plan adopted without regard to circumstances throughout the length and breadth of England. He admired the elasticity of their mixed system. But in the main with plentiful exceptions they knew that English agriculture was conducted through the co-operation of three classes, the owner, the occupier and the labourer. No hard line of separation happily divided these classes, the owner was almost always an occupier, the occupier was frequently a landowner, and the labourer was often a free holder, and often the occupier of a small holding. That three-fold system produced for the English public an average crop of twenty-eight bushels of corn to the acre, as against sixteen bushels in France, and thirteen bushels in the United States. It justified itself by its results, and so the practical freedom of the land which they enjoyed seemed better for the public than an attempt to create a visionary freedom by Act of Parliament. Judged by its fruits their English system appeared to cheapen the cost of bread and meat to the consumer by constant and successful efforts to increase production and enlarge supply. He never failed to be reminded when he attended an Agricultural Show of the boundless competition which farmers were not afraid to promote amongst themselves. They heard a selfish cry raised by those engaged in other industries that production should be limited in order to keep up prices. Their rule of business was precisely the opposite, and as Sir Watkin had said, they still blessed the man who made two blades of corn grow where one blade grew before. That absence of selfishness, belonging perhaps of necessity to the onward march of agriculture, gave a special dignity to the occupation, and made it worthy to be the lifelong work of a tenth of the population. They knew that he was no optimist, that he had little sympathy with the motto "Rest and be thankful"; he thought they should be thankful to work. Changes and reforms, as the years rolled on, must come. But surely the efficacy of those reforms which came from within was greater than those which were forced upon them from without. Those who were most intimately acquainted with practical agriculture, those who knew best what were the relations and conditions of agricultural life, were the most competent to point out the best methods of improvement. The prosperity of agriculture depended upon the prosperity of each of the three great classes which conducted it—the owner, the occupier, and the labourer. It could not be well with one if it were not well with the other two; one could not be discontented without danger to the other—only when each had its full share of prosperity did they form the treble-woven cord which was not easily undone.

EUCALYPTINE—A new drink has been on exhibition at the Paris Exhibition, made from the *Eucalyptus Globulus*. The *Lancet* in reporting on it says: "The sample of this liqueur which we examined was manufactured by Messrs. Bessède et Fils, of Marseilles. When a small quantity of it was mixed with water the latter became white and opalescent, from the deposition of resinous matter contained in the preparation. It is claimed for it that 'the Eucalyptine is a drink not merely hygienic in the highest degree, but also aperient, febrifuge, alterative, refreshing, tonic and digestive, economical and agreeable.' What more could be desired? We only demur on the present occasion to the word 'agreeable,' and would merely observe that a person in health scarcely requires a drink possessing so many active, even if valuable, qualities, the catalogue of which we have not, however, as yet exhausted. Eucalyptine 'quenches thirst, rouses appetite, facilitates digestion, and awakens the intelligence and the memory by producing a general feeling of health.' Eucalyptine in taste and colour resembles absinthine—that is to say, it is equally abominable; but hear again the eloquent author in its praises: 'The first glass surprises, the second pleases, the third conquers.' Surely here is the long sought-for *elixir vite*."

SALE OF THE MIDDLE PARK STUD.

The following is a complete list of prices, with the names of purchasers at the great sale of the thoroughbred horses:—

FIRST DAY.

	Gs.
Ingratitude—Mr. H. S. Constable	195
Braquet and her chestnut filly—Mr. Garvey	500
Duchess of St. Albans and her colt—M. Andre ..	110
Majestic—Mr. Banks	30
Majestic colt—Mr. Joseph Dawson	20
Mother Carey's Chicken—Mr. W. Burton	80
Mother Carey's Chicken filly—M. Andre	95
Excalibur—Marquis de la Mina	180
Excalibur filly—Mr. Garvey	50
Rosalie—Mr. Trimmer	30
Miss Letric—M. Andre	150
Mirza—Mr. W. Burton	85
Marcelle—Mr. Parr	150
Lucretia—Mr. Aladro	90
Pyrenees—Mr. Oldacre	145
Whinnie—Mr. Dorling	35
West Kent—Mr. W. Burton	85
Lemouade—Mr. Aladro	30
Queen of Naples—Mr. J. Fisher	500
Queen of Naples filly—Mr. Doubleday	45
La Naine—Mr. J. Fisher	500
La Naine colt—Mr. W. Gilbert	140
Mrs. Wolfe—Bonehill Stud	250
Mrs. Wolfe filly—Mr. Oldacre	150
Miss Winkle—Mr. Oldacre	300
Miss Winkle filly—Mr. Oldacre	190
Consort—Mr. Banks	100
Consort filly—Sir R. Sutton	220
Creole—Mr. W. Burton	130
Creole filly—Cobham Stud	200
Ribbon—Mr. Aladro	60
Ribbon filly—Mr. Hume Webster	120
Blonde—M. Andre	120
Blonde colt—Mr. B. Elam	110
Grand Duchess—Bonehill Stud	200
Alberta—Lord Ellesmere	420
Ahne—Lord Cawdor	450
Hibernica—Mr. W. Burton	370
Finesse—Mr. Chaplin	250
Pitteri—Mr. Carew Gibson	380
Pitteri colt—Mr. Carew Gibson	150
Princess—Mr. Trimmer	125
Princess colt—Mr. Doubleday	50
Lady Mary—Count de Luderf	350
Lady Mary filly—Mr. W. Burton	85
Sweet Galingale—M. Andre	400
Sweet Galingale filly—Captain Davidson	150
Cracovienne—Mr. Samuda	310
Cracovienne colt—Cobham Stud	300
Touch-and-Go—Mr. A. Burton	110
Touch-and-Go colt—Mr. W. Burton	250
Adeliza—Mr. J. Fisher	260
Adeliza filly—M. Andre	40
Kapunda filly—Mr. Dorling	55
Lassie—Mr. Farmer	210
Stockdove—Mr. Chaplin	500
Betty—Mr. Garvie	220
Spellweaver—Mr. Barry	500
Sissy—Mr. Aladro	150
Bergere—Mr. W. Burton	100
Palmetta—Mr. Hampden	260
Ragnan Rid—Mr. Green	135
Promenade—Mr. Aladro	70
Fatti—Mr. Allen	45
Fleuriste—Bonehill Stud	300
Clytemnestra—Mr. W. Burton	140
Little Coates—Mr. Alexander	55

Total of first day of sale

11,975

SECOND DAY.

	Gs.
Sophi-He (1874), by Brown Bread—Lady Sophia, covered	300
by Victorious—Mr. Hewitt ..	300
Br e, by Sautererer—Sophiette—Mr. Oldacre	95

Entremet (1859), by Sweetmeat—Crystal, covered by Vespasian—Mr. Cloete 100
 B c, by Vespasian—Entremet—Mr. Andre 59
 Moss Rose (1868), by West Australian—Muria, covered by Scottish Chief—Mr. Martin 300
 Che, by Lingerer—Moss Rose—Mr. Weatherby 105
 Wild Beauty (1863), by Wild Dyer!!—England's Beauty, covered by Scottish Chief—Mr. Robinson 230
 Maypole (1866), by Skirmisher—May Morning, covered by Dutch Skater—Mr. Oldacre 270
 B f, by Speculum—Maypole—Mr. Alexander 145
 Miss Sawrin (1869), by Colsterde—Lady Abless, covered by Vespasian—Mr. Smith Barry 460
 B f, by Thunderbolt—Miss Sawrin—Mr. Banks 150
 Imogene (1862), by The Cure—Fertile, covered by Vespasian—Mr. Moon 190
 Bohemia (1860), by Weatherbit—Cossack Maid, covered by Vespasian—Mr. Farmer 270
 Baroness (1858), by Stockwell—Ecadale, covered by Victorious—Major Barlow 180
 Jeannie Deans (1873), by Scottish Chief—Maydower, covered by Dutch Skater—Mr. Waring 460
 Touche-a-Tout (1872), by Blair Athol—Touch-me-not, covered by Dutch Skater—Mr. Andre 420
 Junnita (1865), by St. Albans—Junnita Perez, covered by Dutch Skater—Marquis de la Mina 200
 Beewing (1864), by Knight of Kara—Honey, covered by Vespasian—Viscount Gandarinha 100
 Peggy Dawdle (1871), by Saunterer—Recluse, covered by Victorious—Mr. Banks 230
 Everlasting (1865), by King Tom—Eva, covered by Dutch Skater—Mr. Farmer 390
 Modena (1864), by Rutaplan—Ferrara, covered by Victorious—Mr. James 610
 Mistake (1873), by Rutaplan—Miss Dyerell, covered by Scottish Chief—Mr. Griffith 500
 Ch f, by Kingcraft—Mistake—Major Barlow 200
 Bawbee (1873), by Bandsman—Wee-wee, covered by Scottish Chief—Mr. Wolfe 320
 Ch f, by Favonius—Bawbee—Mr. Wolfe 320
 Helen (1872), by King Tom—Agnes, covered by Scottish Chief—Mr. J. Fisher 1030
 C f, by Donester—Helen—Mr. Moon 350
 Czarina (1871), by King Tom—Mrs. Lincoln, covered by Scottish Chief—Mr. Oldacre 700
 C f, by Donester—Czarina—Mr. Oldacre 260
 Pandora (1867), by Newminster—Caller Oa, covered by Scottish Chief—Mr. Oldacre 1600
 B f, by Thunderbolt—Pandora—Wartford Stud 600
 Zenobia (1862), by Nutbourne—Diadra covered by Vespasian—Mr. Banks 300
 B f, by Vespasian—Zenobia—Mr. R. Peck 300
 Gold Dust (1860), by Newminster—Nuzget—Mr. Green Price 230
 Bl c, by Dutch Skater—Gold Dust—Lord Rosebery 500
 Seclusion (1857), by Tadmore—Miss Helen, covered by Scottish Chief—Mr. Moon 760
 Bl c, by Victorious—Seclusion—Mr. Moon 850
 Fenella (1869), by Camuscann—La Favorita, covered by Scottish Chief—Mr. Cavaliero 2000
 Brown Sugar (1871), by Brown Bread—Defamation, covered by Scottish Chief—Mr. Banks 520
 Tails (1869), by Stockwell—Blondella, covered by Scottish Chief—Captain Hardy 800
 Vengresse (1871), by Cecrops—Nemesis, covered by Dutch Skater—Mr. Robinson 720
 Handicraft (1872), by King Tom—Woodcraft, covered by Scottish Chief—Mr. Moon 950
 Brown Agnes (1870), by Gladiator—Wild Agnes, covered by Scottish Chief—Mr. Oldacre 850
 Gamos (1867), by Saunterer—Bess Lyon, covered by Scottish Chief—Mr. B. Peck 1000
 B f, by Dutch Skater—Gamos—Sir R. Sutton 300
 Rinderpest (1860), by Alarm—Adine, covered by Victorious—Mr. Hume Webster 200
 B c, by Kingcraft—Rinderpest—Mr. Carew Gibson 400
 Lady Sophia (1867), by Stockwell—Frolic, covered by Scottish Chief—Mr. Carew Gibson 1490
 Ch f, by Victorious—Lady Sophia—Mr. E. R. Cox 220

Anderida (1871), by King Tom—Woodcraft, covered by Scottish Chief—Mr. Lupin 2500
 B f, by Victorious—Anderida—Mr. Oldacre 470
 Bas Bilen (1858), by Stockwell—Vexation, covered by Scottish Chief—Mr. Moon 570
 Hilda (1866), by Prime Minister—Ebel, covered by Scottish Chief—Mr. Oldacre 1300
 Dora (1868), by Westarbit—Ada Mary, covered by Scottish Chief—Mr. Banks 610
 Ch Elham (1867), by Thunderbolt—Icicle, covered by Scottish Chief—Mr. Cavaliero 800
 Francesca (1860), by Newminster—Lady Frances, covered by Henry and Saunterer—Mr. Cloete 100
 L'Indet (1874), by Knight of the Garter—Progress, covered by Henry—M. Gervais 120
 Fainy Grey (1874), by Wild Moor—Cockehafer, covered by Henry—Mr. Frazer 140
 Mazuka (1863), by Fandango—Leon's dam—Mr. Farmer 30
 Pisa (1876), by Parmesan—Mrs. Wolfe—Mr. Read 175
 B m (1876) by Vespasian—Travizta—Mr. Farmer 110
 Contessa (1876), by D'Estournel—Electra—Mr. Read 55

BLOOD MARES.

Canzonette (1860), by Fazzoletto—Calista—Mr. Cartwright 55
 Irish Church (1864), by Newminster—Irish Queen—Mr. Aladro 75
 Gem (1862), by King of Trumps—Amethyst—Mr. Farmer 50
 Bessie (1872), by Antocrat—Dora—Viscount Gandarinha 30
 Apache (1867), by Saunterer—Curse Royal—Mr. Farmer 85
 Miss Johnson (1862), by Newminster—Boarding School Miss—Mr. Cloete 40

STALLIONS.

St. Stephen's (1875), by King John—Her Grace—Mr. Ward 30
 Rowland Hill (1875), by Victorious—Queen's Head—Viscount Gandarinha 135
 Challenger (1872), by Duke—a Lifeboat mare—Mr. Wright 85
 Broadside (1873), by Brown Bread—Jane Eyre—Mr. Aladro 70
 Echter (1878), by Bel Demonio—Hilda—Mr. Read 300
 Vespasian (1863), by Newminster—Vesta—Mr. Oldacre 400
 Victorious (1862), by Newminster, dam by Jeremy Biddler—Mr. Oldacre 300
 Scottish Chief (1861), by Lord of the Isles—Miss Ann—Mr. T. Blenkiron 5000
 Total of 2nd day's sale, 36,229 gs.: grand total, 18,195 gs.

SALE OF THE HOPTON SHORTHORNS AND CLYDESDALE HORSES.

Among Shorthorn breeders few names are better known than that of the owner of Hopton, Derbyshire. Mr. H. Chandos Pole Gell has not only been an ardent promoter of agriculture, but has made Shorthorn breeding his special study, and his small but select herd, which was on Sept. 25 dispersed by Mr. John Thornton, was a proof of the excellence of his judgment in obtaining sires, and showed that the theories he has propounded in respect to the breeding of Shorthorns have been most successfully put into practice by himself. The herd consisted of six tribes, the animals being in direct descent from several of the oldest and best families of modern days, and full of the choicest Booth blood. Breeders and other buyers knew that cattle of exceptional quality would be disposed of, and they came in large numbers, and from all parts of the country. There were several from Scotland and some from Ireland. No doubt many had been attracted by the projected sale of Clydesdale horses, in the breeding of which Mr. Pole Gell has also taken great interest. The Clydesdales were as select as the Shorthorns. They had been selected with the greatest care from the studs of the most eminent breeders in the West of Scotland, and bred from prize strains. Hopton Hall is situated five miles

from Matlock Bath and high among the hills. The drive was accomplished amid incessant rain, which also continued during the greater part of the afternoon. At twelve o'clock there was a parade of the horses, and many of the visitors spent a short time in inspecting the Shorthorns.

The Clydesdales realised 1,235 gs., or an average of £159 12s.; the total realised by cows and heifers was 1,496 gs., or an average of £71 8s.; and the bulls averaged £42. The total result of the sale was £3,210 19s.

COWS AND HEIFERS.

Strawberry Maid, roan, calved May 24, 1867; sire Prince Patriek—Mr. Slater	28
Maid of the Forth, white, calved March 16, 1869; sire Lord Blythe—Rev. T. Stanforth, Windermere	50
Zephyr III., roan, calved September 4, 1869; sire Wolfraan—Mr. T. I. Birkin	31
Leopoldine IV., red and a little white, calved July 18, 1871; sire King Charles—Mr. Waldo, Kent	60
Primrose IV., red roan, calved August 17, 1871; sire King Charles—Mr. Philips, Heybridge	100
Violet Gwynne, roan, calved January 3, 1873; sire Valorous—Mr. F. B. Greenwood, Swarcliffe	43
Strawberry Cream, roan, calved April 23, 1873; sire Prince Christian—Mr. Darby, Shropshire	100
Roulette, roan, calved October 25, 1873; sire Favourite—Mr. Philips, Heybridge	140
Strawberry Leaf, roan, calved February 17, 1874; sire Prince Christian—Rev. T. Stanforth, Windermere	160
Maid of the Desert (twin to lot 11), white, calved October 12, 1874; sire Prince Christian—Mr. A. Mitchell, Scotland	51
Maid of the Dove (twin to lot 10), white, calved in October 12, 1874; sire Prince Christian—Mr. J. Torr, M.P. Liverpool	40
Princess Franziska, red and a little white, calved March 6, 1875; sire Prince Christian—Mr. Hugh Aylmer, Norfolk	80
Strawberry Lass, roan, calved January 8, 1876; sire Royal Benedict—Mr. Waldo, Kent	150
Fair Wind (twin to lot 16), roan, calved February 22, 1876; sire Favourite—The Hon. G. E. Lascelles, Thirsk	50
Balmey Gale (twin to lot 15), red and a little white, calved February 22, 1876; sire Favourite—Mr. Fawcett, Bramhope	53
Leonora, red and white, calved March 13, 1876; sire Favourite—Mr. Claude C. Hamilton, Ireland	40
Maid of the Shire, white, calved September 20, 1876; sire Knight of the Shire—Mr. J. B. Booth, Killyby Lettuce, roan, calved February 12, 1877; sire Iron Duke—Mr. R. White, Derbyshire	35
Clara Gwynne, white, calved September 7, 1877; sire County Member—Mr. Duncombe, Ashbourne	25
Maid of the County, white, calved November 4, 1877; sire County Member—Mr. Andrew Mitchell, Scotland	50
Strawberry Bud, roan, calved December 10, 1877; sire County Member—The Rev. T. Stanforth, Windermere	170
Celia Gwynne, white, calved August 10, 1878; sire County Member—Mr. T. I. Birkin	12

BULLS.

Valiant Knight, roan, calved August 19, 1876; sire Knight of the Shire—Mr. R. Blythwater, Burton Fields	50
Frost King, white, calved March 14, 1877; sire Iron Duke—Mr. Wain, North Derbyshire	26
Campaigner, roan, calved March 27, 1877; sire Iron Duke—Mr. Knowles, Nottinghamshire	22
Veteran, red and little white, calved June 14, 1877; sire Iron Duke—Mr. G. Dawson, Sheffield	54
Sir Hugh, roan, calved August 17, 1877; sire Sir Wilfred—Mr. Philips, Heybridge	47
Gamester, roan, calved February 21, 1878; sire Iron Duke—Mr. McKenna, Manchester	33
Freebooter, roan, calved May 10, 1878; sire County Member—Mr. Bolland, Buenos Ayres	46
Hantboy, roan, calved March 25, 1875; sire Prince Christian—Mr. Duncombe, Ashbourne	46

CLYDESDALE HORSES.

Chieftain, bay entire horse, three years old, 16h. 3in.; sire Sir George Grey, dam Young Darling by Lochfergus Champion—Bought in	110
Sally, brown mare, nine years old, 16h. 2in.; sire Keir Horse Byron, dam Young Sally—Mr. Thomas Kelso	110
Maggie, brown mare, nine years old, 16h. 3in.; sire Lochfergus Champion—Mr. Robert Loder, Northampton-hire	300
Colt foal, sire Mr. A. Montgomery's Farmer, dam Maggie—Colonel Hutton, Lincolnshire	100
Bonnie, dark brown mare, nine years old 16h. 2in.; sire Hercules, by Rob Roy—Mr. Ormond, Berkshire .....	.....
Jeanie, bay mare, five years old, 16h.; sire Gladstone, dam Jean—Lord Arthur Cecil	200
Young Sally, bay, two years old; sire Lochfergus Champion, dam Sally—Mr. R. Loder	240
Bessie, brown, two years old; sire Mr. A. Montgomery's Farmer, dam a pure Clydesdale mare—The Rev. T. Stanforth	120
Brown gelding, one year old; sire Dandy Jim, dam Bonnie—The Rev. T. Stanforth	150

—Notts Guardian.

THE HOLKER SHORTHORNS.

We give below a complete list of the prices realised at the important sale of the Duke of Devonshire's Shorthorns.

COWS AND HEIFERS.

Lily, white, February 11, 1867—Colonel Kingscote, Gloucestershire	61
Lady Ellen Barrington, roan, May 27, 1868—Mr. George Ashburner, Kirkby Lethelth	155
Lady Laura Barrington, white, November 11, 1870	withdrawn
Grand Duchess of Oxford 19th, red, November 14, 1870	855
—Major Challin, Wiltshire .....	.....
Oxford Rose 5th, roan, March 4, 1871—Lord Danmore, Stirling Castle	205
Lady Bright Eyes 3rd, roan, May 12, 1871—Lord Skelmersdale, Ormskirk	305
Grand Duchess of Oxford 21st, roan, August 22, 1871 .....	.....
—Lord Penryn, Wales	1550
Musical 2nd, white, February 28, 1872—Sir Greville Smith, Ashton Court, Bristol	160
Grand Duchess of Oxford 22nd, roan, July 27, 1872—Mr. William McCulloch, Victoria, Australia	2100
Oxford Rose 10th, roan, April 20, 1874—Mr. L. Standish Northampton	150
Countess of Barrington 7th, roan, May 24, 1875—Lord Danmore, Stirling Castle	505
Oxford Rose 12th, roan, September 23, 1875—Lord Danmore	350
Baroness Oxford 5th, red and white, October 17, 1875 .....	.....
—Mr. Macintosh, Haverzang Park	2660
Blauche 15th, red and white, December 20, 1875—Mr. Jefferson, Thackett Priory, York	110
Dainty 2nd, red, February 5, 1876—Mr. Forse, Killohme, Wigton	240
Countess of Barrington 9th, roan, May 11, 1876—Mr. W. Ashburner, Ulverston	390
Lily 2nd, roan, May 22nd, 1876	withdrawn
Winsome 20th, roan, July 20, 1876—Lord Beehive, Kirby Lonsdale	805
Grand Duchess of Oxford 35th, red, August 9, 1876 .....	.....
Grand Duchess of Oxford 38th, roan, February 4, 1877 .....	.....
—Sir John Symburne, Capheaton Castle	1450
Grand Duchess of Oxford 40th, roan, November 30, 1877 .....	.....
—Mr. Forster, Killohme	1600

BULLS.

Fifth Duke of Wetherby, red, September 28, 1871—Earl of Lonsdale	705
Duke of Oxford 44th, red and white, September 2, 1877 .....	.....
—Mr. Brasey, M.P.	1650
Duke of Oxford 45th, red and white, September 27, 1877 .....	.....
—Lord Fitzhardinge, Gloucestershire	1500

Duke of Oxford 46th, roan, February 4, 1878—The Earl of Ellesmere, Worsley Hall.....	660
Duke of Barrington 4th, red and white, May 4, 1877—Major Webb, Northampton.....	160
Wetherby Winsome 2nd, red and white, October 13, 1877.....	withdrawn
Duke of Barrington 5th, white, October 22, 1877—Duke of Roxburghe, Floors Castle.....	63
Duke of Barrington 6th, red and white, November 5, 1877—Sir W. Lawson, Brayton Hall.....	105
Baron Winsome 5th, roan, November 17th, 1877—Sir Greville Smyth.....	130
Duke of Barrington 7th, roan, December 24, 1877—Mr. Blezard.....	185
Baron of Raby 6th, red, January 16, 1878—Mr. E. T. Gell, Isle of Man.....	70
Musician, roan, March 24, 1878—Mr. Robinson.....	30
Wetherby Winsome 3rd, roan, May 17, 1878—Admiral Challowner.....	89

It will thus be seen that 18 cows averaged £794 11s. 2d., equal to £14,302. The 12 bulls averaged £468 7s. 9d., equal to £5,620 13s. The 30 head averaged £664 1s. 10d. The total of the sale was £19,922 14s.

THE GORDON CASTLE SHORTHORNS AND LEICESTERS.

On September 23 the annual sale of Shorthorn cattle and Leicester sheep belonging to the Duke of Richmond and Gordon, K.G., took place at Gordon Castle, Lechlade, in presence of a very large number of agriculturists from all parts of the North. The weather was exceedingly disagreeable, rain falling copiously all day. Shorthorns have been maintained at Gordon Castle for thirty-eight years, and during the time the herd has fulfilled the purpose of its founder, in promoting improvement among the stock owned by the tenantry on the extensive dual estates. Including the selection offered, the herd prior to the sale numbered exactly ninety, and, notwithstanding the damp state of the pastures, the matrons were inspected with interest by the visitors. The stock comprises representatives of eleven families, most of which have had a long and satisfactory trial. Among the finest of the cows was the five-year-old red Lustre 15th, first prize winner at the Royal Northern last year. After Baron Colling, the 300 guineas purchase from Colonel Towneley, which was got by the Oxford sire Baron Oxford, and was from a dam by the Duchess bull Sixth Duke of Airdrie, she is out of the eighth of the Lustre family, the foundress of which came from Mr. Boswell, of Kingessie, being descended from General Simson's Rolla, by North Star, bred at Ketton. Lustre 15th was dam of the very fine heifer Chief Lustre, which carried so many prizes at the shows this season. Another magnificent cow is Interlude, the red and white five-year-old by Royal Hope, and out of Harmony 3rd, of the tribe of that name in the herd, the foundress of which, Sontag, a well-bred animal with Cradock, Booth, and Masou blood, was purchased from Captain Spencer. Interlude was second prize heifer at the Highland Society's show at Inverness in 1874, and first at the Royal Northern meeting in 1875. Another valuable dam is Flirt 11th, a red roan four-year-old, after Royal Hope and maternally of a strain the foundress of which was Queen, bought at the sale of Captain Barclay's Shorthorns at Ury in 1847. The Queen had crosses by two of the in-bred Ury bulls. Her grandsire was Mahomed, out of Lady Sarah, the highest priced cow at the Chilton sale in 1829, Mahomed being after Monarch, also a son of Lady Sarah. From Mahomed is descended some of the best Shorthorns that have been seen in the north of Scotland. Queen was got by Pacha, a son of Mahomed. There was also in the park a beautiful specimen of the Peach Blossom tribe, which was founded by the purchase from the late Mr. Grant Duff, of Almond Flowers, by Mr. Bates Holkar, and out of a dam from the stock of Mr. Crisp, Doddington. Another handsome descendant of Queen is the nine-year-old Destiny, which was got by the Keavil bull Felix Booth, and out of Mystery.

The stud sires were also examined in their boxes. They are all of the finest Booth blood, and are worthily headed by the seven year-old Royal Hope, looking blooming as ever. He

was bred by Mr. Pawlett Beeston, at whose famous sale he was acquired for 250 guineas. Of the Killerby Mantalini sort, through the prize-winning Rose kind, so renowned in the hands of the late Mr. Douglas, of Athelstaneford, he is got by Royal Booth, and has left a large number of excellent stock at Gordon Castle. The second of the stock bulls is Chief Officer, a red three-year-old bred at Sandwith, after Borough Member, and representing the fashionable Warlaby Fame strain. The third is the celebrated White Duke, eight years old, also of the Mantalini tribe, and got by Mr. T. C. Booth's King Richard. White Duke had some grand calves at Peep, where he was for some years in service.

The flock of sheep has long been carefully bred. The young stock exposed yesterday were of great promise, and were after a top bred at Gordon Castle, whose sire was bred at Castle-mains, and won the first prize at the Highland Society's show at Inverness in 1871; a top bred by Mr. Hunter, Dipple, and a top bred by Mr. Ferguson, Kinlochtry, Compar-Angus, all of which gained prizes at the local shows.

Previous to the sale the Duke of Richmond and Gordon, Prince Edward of Saxe-Weimar, the Earl of March, Lord Francis Gordon Leunox, and Colonel Greville visited the ground.

The first animal exposed was a two-year-old bull, R.A.D., after the Fame sire Borough Member, and out of Queen Esther, a cow strong in Booth blood, which was obtained at the Sandwith sale. He was knocked out at 38 guineas to Mr. Lippe, Haddoch. The other bulls sold were yearlings or calves. King Jim's was a thick roan of splendid quality, out of Queen Esther, and got by Royal Hope. He was secured at 32 guineas by Mr. Watt, Craignisherty. A neat edit, out of Lustre 15th, referred to above, and after Chief Officer, being a full brother to Chief Lustre, was a bargain to Mr. Morrison, Lochned, for 2s guineas. Mr. Fortune, Little Forgue bought the red and white Homer, out of Flirt 11th, and after Chief Officer. For 30 guineas Mr. Garden, Mains of Tannachy, got Royal Prince, a stylish calf after Royal Hope, and out of the capital cow Rosewood 6th, dam of the prize bulls Royal Prince and Fairfax Royal. Royal Duke was a roan son of White Duke and Peach Blossom. A lengthy, promising calf Eclipse, after Royal Hope, and out of Destiny, being thus a half-brother by his dam to the prize heifer Lady Killerby, fell to the bid of Mr. Fortune, Broom, at 26 guineas. Mr. Adam, Brae, was the purchaser of Baron Gordon, after Royal Hope, and out of Lustre 8th.

Eight females were offered. The seven-year-old cow Prelude went cheaply at 26 guineas to Mr. Thomson, Tynet. Flirt 7th, a well-shaped six-year-old cow of the Flirt family, and after Baron Colling, was introduced to the ring with a particularly stylish heifer calf at foot, the latter not being for sale. The evidence thus afforded of her good breeding qualities assisted her sale, and she became the property of Mr. Watt, Stynie, at 35 guineas. The others were heifers, one after Montrose, five by White Duke, and one by Royal Hope. They were of nice shapes, good quality, and fetched fair prices.

The eight bulls averaged £26 12s. 10½d.; nine cows and heifers £26 12s.

The sheep met a brisk sale. The ewes and gimmers brought very good prices, and the highest class of tups was also in great favour. The top price for a tup was £13, given by Mr. Baillie, Braes, for the animal that won the second prize at the Morayshire show, and which is after the ram bred at Gordon Castle, got by the Castle-mains first prize Highland Society winner. Major Smith, Minmore, gave £10 10s. for a massive well-woolled tup by the same sire, and another was taken out at £9 for Mrs. Kinloch Grant, of Arndilly. Major Smith bought a nice shearing after the prize top bred at Dipple for £8 10s., and Mr. Cantlie, Keitimore, gave a like figure for one after the Dipple tup.

The ewes averaged £2 18s.; the gimmers £2 19s. 1d.; and the 44 shearing tups £5 9s. 8½d.

Mr. Findlay, Huntly, performed the duties of auctioneer in an efficient manner, and Mr. Wiseman, Lechlade, was clerk of sale.—*Banffshire Journal*.

A MISTAKE.—Old Lady (emerging wrathfully from Cabmen's Shelter): "I say, Conductor! if you don't send this 'ere Tram on directly, I'll report you! 'Arl a' hour I've been settin' a-waitin' a'ready. Ain't you ashamed of yourself!" —*Punch*.

AGRICULTURAL SOCIETIES.

MONTGOMERYSHIRE.

The eighth annual show of this Society was held at Montgomery on Friday, September 20. The cattle occupied a large proportion of the ground, and as might be expected the Herefords were the strong feature of the show. Generally speaking, this section was very creditable, and there was an improvement noticeable both in the animals themselves and in their condition as compared with previous shows. Class 1, for Hereford bulls, was a fair class. Of the 6 entered, the first prize was taken by a "Prizeman" (4063), red with white face, belonging to Mr. Robert Richards, Green Hall, Llanfyllin, but more noted for scale than any other special feature. Class 2, for young bulls, was a short one, and the winner was a very promising young animal, a son of the noted bull "Horace" (3,877). He also took the special prize, the gift of Mr. P. Wright, for the best bull in the yard. The animals entered in Class 3 varied so much in age that they were a very difficult lot to judge. Nothing entered, however, was possessed of any extraordinary merit. Class 4 for cows in milk was a very good one indeed. The winner a six-year-old, tracing her pedigree to "Star" and "Sunbeam," was an animal of sweet character, of good quality and great scale, and was in fact a grand breeding cow. To her was awarded the special prize of £10, given by Mr. David Davies, M.P., for the best female Hereford in the yard. Mr. P. G. Hughes, Cwmearl, who was highly commended in Class 4, took the second special prize of £5, and was also one of the 3 animals highly commended in Class 10. The first prize for heifers in calf or milk was awarded to a nice pair by "Valour 2nd" (5098), Mr. Thos. Williams, Trwstllewelyn, being a good second. Class 6, for a pair of heifers, not exceeding two-years-old, was commended as a class, Mr. Ed. Pryce, Henfron, Llandyssil, taking first, and Mr. Thos. Williams second, and this gentleman also took the first for a pair of heifer calves not exceeding 12 months old. The first for the best pair of bullocks above 2 and not exceeding 3 years was awarded to a nice even pair, exhibited by Mr. Ed. Morris, Gweruygoe, Newtown, and the same pair took the 5 guinea cup offered by the Montgomery Local Committee for the best pair of bullocks, of any age, in the yard. In the extra class for bull under 18 months, open to the kingdom, Mr. Evan Jones, Gate Farm, Buttington, was awarded the first prize of £10, for the animal which took the first prize in Class 3, but he was beaten for the special cup offered by Mr. P. Wright, Mellington, for the best bull of any breed or age in the yard, by Mr. Morgan's "Bredwardine," the winner of the 1st prize in Class 2. Mr. John Crane was second in the open class.

The Shorthorns were not a strong lot in numbers, but there were some splendid animals exhibited. For the best bull above two years Mr. Edward Jones, Bank Farm, Pool Quay, was first with a pedigree bull, tracing his descent from the Blanches, Lupin, Tulip by Lancaster (360), Miss Hutcheson, and Strangle. To this bull was awarded the five guinea cup, given by the Hon. F. S. A. Hanbury Tracy, M.P., for the best Shorthorn bull of any age in the yard. Mr. William Evans, Wernllwyd, Welshpool, was second with a good-looking two-year-old roan, bred by Mr. Timothy Hiles, Meole Brace, Shrewsbury, Mr. Edward Pryce, Caersws, was first for a bull under two, and Captain Mytton was second and highly commended, occupying exactly similar positions to Mr. James Whitaker in Class 14 for cow calf or milk. For a pair of heifers under three years old he was awarded first prize for a very promising pair by Constantine 2nd (33439 in Stud Book), both under two years old.

The Welsh were not a strong lot in numbers, but amongst the "any breed" of cows and heifers, which were more numerous lots, there were many wonderfully useful and promising animals. The first for a pair of bullocks in this section went to a pair of Herefords exhibited by Mr. Thomas Williams, Trwstllewelyn.

The sheep, especially the Shropshires, were a capital lot, and the honours of the section confined to the last-named variety undoubtedly belong to Mr. Thomas Williams, Stalloe, who rather remarkably took all the first prizes.

There was an extensive show of wool.

There was a very numerous entry of horses, and the show on the whole was a creditable one, if there were no remarkably excellent exhibits. The draught horses were a very good lot, the animals being of a class such as would be useful not only for farming or agricultural purposes, but for drays or town work, for which work horses bred in the county we believe are much sought after. On the whole the draught horses were an improvement upon those shown last year, both in point of numbers and merit.

There was but a small show of pigs, a very small one considering the extent of the district, and there was no very particular merit attached to any of the classes, the competition not being very keen.

The roots were very good altogether.

There was a nice show of cheese, many of the samples being excellent, and the show of butter was very large and good, as might be expected in a district like this.

Of grain there was not a large show, but there were some very good samples of wheat and barley.

PRIZE LIST.

CATTLE.

HEREFORD.

Bull, three years old and upwards.—First prize, R. Richards Llanfyllin (Craftsman); second, T. V. Roberts, Dollas, Berriew (Young Tom).

Bull, eighteen months and under three years.—First prize, R. Morgan, Newton (Bredwardine); second, S. Miller, Abermule.

Bull under eighteen months.—First prize, E. J. Jones, Buttington; second, P. G. Hughes, Kerry (Cyprus).

Cow in calf or milk.—First prize, J. and H. Meredith Rockley Farm (Spangle); second, T. Mallinson, Welshpool.

Pair of heifers in calf or milk, and not exceeding three years.—First prize, S. Miller; second, T. Williams, Garthmill.

Pair of heifers above one and not exceeding two years old.—First prize, E. Pryce, Henfron; second, T. Williams, Trwstllewelyn.

Pair heifer calves, above six and not exceeding twelve months old.—First prize, T. Williams, Trwstllewelyn; second, Lawton L. Moore, Newtown.

Pair bullocks, above two and not exceeding three years old.—First prize, E. Morris, Newtown; second, T. Williams, Trwstllewelyn.

Pair bullocks, above one and not exceeding two years old.—First prize, E. Morris, Sara; second, E. Pryce, Henfron.

Bull, cow, and offspring.—First prize, R. Richards; second, E. Pryce, Henfron.

Extra prize (open to all England); bull under eighteen months old at time of show.—First prize, E. Jones, Gate Farm; second, J. Crane, Shrewsbury.

SHORTHORNS.

Bull, two years old and upwards.—First prize, E. Jones, Pool Quay; second, W. Evans, Welshpool.

Bull, under two years old.—First prize, E. Pryce, Maesmawr (The Chief); second, D. H. Mytton (Caesar).

Cow in calf or milk.—First prize, J. Whitaker, Shrewsbury; second, D. H. Mytton, Welshpool.

Pair heifers under three years old.—First prize, D. H. Mytton; second, P. Williams, Montgomery.

WELSH.

Bull, over two years old.—First prize, E. Vaughan, Llanerfyl; second, T. Vaughan, Llanerfyl.

Cow in calf or milk.—First prize, J. Bickerton, Welshpool; second, T. Vaughan.

Pair of heifers not exceeding three years old.—First prize, E. Vaughan; second, T. Vaughan.

Pair of bullocks not exceeding three years old.—First and second prize, J. Powell, Buttington.

ANY BREED.

(Not included in the above.)

Cow in calf or milk.—First prize, E. Humphreys, Slop; second, T. Williams, Stalloe.

Pair heifers, not exceeding three years old.—First prize, E. Jones, Pool Quay; second, T. Williams.

BULLOCKS.

Pair bullocks, any age or breed.—First prize and commended T. Williams; second, E. Morris, Newtown.

COTTAGER'S COW.

Cow, exhibited by a cottager keeping one cow only.—First prize, R. Vaughan, Newtown; second, E. Rhese, Newtown; third, J. Grist, Montgomery.

SHEEP.

SHROPSHIRE.

Ram, any age.—First prize, T. Williams; second, R. and H. E. Morris, Forden.

Shear ram.—First prize, T. Williams; second, R. and H. E. Morris.

Ram lamb.—First prize, T. Williams; second, E. Pryce, Llandyssil.

Pen of five ewes, bred by exhibitor, and having had lambs in 1878.—First and second prize, T. Williams.

Pen of five yearling ewes, bred by exhibitor.—First prize, T. Williams; second, R. and H. E. Morris.

Five theave lambs, bred by exhibitor.—First prize, T. Williams; second, S. Miller, The Court.

EXTRA PRIZE.—(Open to all England.)

Shear ram.—Prize, T. Williams.

HILL SHEEP.

Ram, any age (confined to the parishes of Buttington, Chirbury, Churchstoke, Hyssington, Kerry, Leighton, Rhosgoch, Sneed, and Trelystan).—First and second prize, L. Moore, Newtown.

Shear ram.—First prize, L. L. Moore; second, C. Pryce Jones, Kerry.

Ram lamb.—First and second prize, L. L. Moore.

Pen of 5 ewes, bred by exhibitor, and having suckled lambs in 1878.—First prize, L. L. Moore; second, T. W. Pryce.

Five yearling ewes, bred by exhibitor.—First prize, L. L. Moore; second, T. W. Pryce.

Ram, any age (confined to the parishes of Aberhafesp, Bettws, Cast'c'ereinion, Llanidnam, Llanwydde an, Llanallugan, Llanfair, Llanfyllin, Llanfaiad, Llanwnog, Llangynog, Llanfhangel, Llangyniew, Manafon, Meifod, Moughtre, Penstrowed, and Tregynon).—First prize, E. Pryce, Caerwys; second, R. Colley, Welshpool.

Pen of five ewes, bred by exhibitor, and having suckled lambs in 1878.—Prize, R. Colley, Welshpool.

Ram any age (confined to the parishes of Carno, Cemmaes, Darowen, Garthbeibio, Hirnant, Llanidloes, Llanwrin, Llangadfan, Llanwhilyo, Llanerfyl, Llangurig, Llanbrynmar, Machynlleth, Mallwyd, Penegoes, Pennant, and Trefeglwys).—First prize, H. Pugh, Aberangel; second, T. Hughes, Trefeglwys.

Pen of five ewes, bred by exhibitor, and having suckled lambs in 1878.—Prize, T. Hughes, Trefeglwys.

Extra prize (open to all England).—Hill shear rams.—Prize, L. L. Moore, Newtown.

HORSES.

AGRICULTURAL.

Stallion having served mares in the district this season.—First prize, M. Griffiths, Tynywern; second, A. Williams, Welshpool.

Mare with foal.—First prize, E. Green, Welshpool; second G. Evans, Moelygarth.

Pair draught horses or mares, not exceeding six years old.—Prize, T. W. Pryce, Kerry.

Draught gelding.—First prize, A. Thomas, Pool Quay; second, W. Davies, Churchstoke.

Draught mare.—First prize, E. Green, Welshpool; second, E. Jones, Pool Quay.

Mare or gelding under two years old.—First prize, R. Groves, Court Calmore; second, L. L. Moore.

Colt or filly under two years old.—First prize, R. Morgan, Newtown; second, S. Miller, Abermule.

Colt or filly under one year old.—First prize, E. Jones, Pool Quay; second, J. and H. Meredith, Ruckly. Whole class commended.

SADDLE OR HARNESS.

Stallion, having served mares in the district this season.—Prize, R. Evans, Cenfeue, Llangel'ho.

EXTRA.

Mare with foal.—First prize, E. Elwell, Newtown; second, E. Morris, Newtown.

Mare, not exceeding six years old, and not under 15 hands.—First prize, C. Naylor, Kerry; second, D. Davies, Welshpool.

Mare or gelding, over three years, and not exceeding 15 hands.—First prize, E. R. Morris, Newtown; second, E. Green, Welshpool.

Mare or gelding under three years old.—First prize, T. V. Roberts, Dolla; second, C. Naylor, Kerry.

Colt or filly, under two years old.—First prize, T. Williams, Stalloe; second, L. L. Moore, Kerry. Whole class commended.

Colt or filly, under one year old.—First prize, L. L. Moore; second, E. Morris, Sarn, Newtown.

Pony mare or gelding, not exceeding 14 hands.—First prize, R. Morgan, Newtown; second, W. Alderson, Kerry.

Pony mare or gelding, not exceeding 12½ hands.—First prize, P. Wright, Churchstoke; second, S. Miller, The Court.

Mare with foal, not exceeding 13 hands.—First prize, S. Davies, Welshpool; second, J. Powell, Buttington.

HILL PONIES.

Stallion, not exceeding 13½ hands, and used on the hills this season.—First prize, L. L. Moore; second, R. Morgan, Newtown.

PIGS.

LARGE BREED.

Boar, any age.—Prize, R. Morgan, Newtown.

Sow in pig, or having pigs with her.—First prize, J. and H. Meredith, near Montgomery; second, J. A. Talbot, Newtown.

MIDDLE BREED.

Boar of any age.—First prize, P. Wright; second, L. L. Moore.

Sow in pig, or having pigs with her.—First prize, Rev. G. O. Pardoe, Churchstoke; second, R. Morgan, Bahallion, Newtown.

SMALL BREED.

Boar, any age.—First prize, Col. Herbert, Glanhafren, Newtown; second, A. Davies, Montgomery.

Sow in pig, or having pigs with her.—First prize, Colonel Herbert; second, R. Morgan.

ANY BREED.

Pen of five store pigs, not exceeding six months old.—First prize, W. Alderson; second, T. Williams, Trwstlewelyn, G'rthmyl.

COTTAGER'S PIG.

Pig, any age.—First prize, J. Edwards, Montgomery; second, J. Williams, Burnt House, Lymore; third, C. Williams, Chirbury.

SPECIAL PRIZE LIST.

Silver cup, value £5 5s., best bull in the yard (any breed or age).—Prize, R. Morgan, Bahallion.

Silver cup, value £5 5s., for the best pair of draught horses or mares, not exceeding eight years old.—Prize, E. Green, Pool Quay.

Silver cup, value £5 5s., for the best hunter in the yard up to thirteen stone, not exceeding eight years.—First and second prizes, W. Davis, Montgomery.

Silver cup value £5 5s., for the best cob, not exceeding 11.3, and the property of tenant farmer residing within the Society's district.—Prize, Lawton L. Moore, Newtown.

Silver cup, value £5 5s., for the best mare with foal at foot, by donor's horse Strafford.—Prize, Lawton L. Moore, Kerry.

Silver cup, value £5 5s., for the best draught gelding in the yard not exceeding eight years old.—Prize, A. Thomas, Pool Quay.

Silver cup, value £5 5s., colt or filly foal by "England's Wonder."—Prize, E. Jones, Bank Farm, Pool Quay.

Silver cup, value £5 5s., pen of five wether sheep, the owner to be a user of Phoenix pure feeding stalls.—Prize, E. Pryce, Henfron, Landyssil.

Silver cup, value £10 10s., four breeding cows, in or with calf of any distinct breed.—Prize, P. G. Hughes, Cwmearl, Kerry.

Silver cup, value £5 5s., fifteen sheep, being a pen of five from Classes 27, 28, and 29.—Prize, T. Williams, Stalloe, Montgomery.

Silver cup, value £5 5s., fifteen sheep, from Classes 34 and 45, and including five ewe lambs.—Prize, L. L. Moore, Glanmihely.

Silver cup, value £5 5s., draught mare, with foal at foot, previous winners of the Society's prize can compete.—Prize, E. Green, Pool Quay.

Silver cup, value £5 5s., best and quickest walking draught horse (mare or gelding), distance half-mile.—Prize, W. Anderson, Newtown.

Silver cup, value £5 5s., pair of bullocks, in the yard, any breed.—E. Morris, Newtown.

SPECIAL SHORTHORN PRIZES.

(Open to all England.)

Silver cup, value £5 5s., bull of any age.—E. Jones, Bank Farm, Pool Quay.—*Oswestry Advertiser.*

CARMARTHENSHIRE.

The annual exhibition of stock in connection with this Society was held in the Cattle Market Yard, Carmarthen, on Sept. 20th. The *Carmarthen Journal* says:—We have had several larger shows. Last year, for instance, there were about 100 more animals entered. The falling off in numbers was observable in the cattle, and still more in the sheep and pigs, but we have scarcely ever had a larger collection of horses at the Carmarthen show. If the exhibits were less numerous than formerly, this deficiency was to a great extent made up in the quality, for most classes in the yards were as good and even in quality, as at any former meeting of the Society. In more than one department, indeed, beasts which have hardly ever been equalled in this part of the country were shown.

The judges of black cattle and pigs said that on the whole they had seen a better turn out of blacks here, although they had never seen in Carmarthen or any other place in the district such a fine collection of bulls and heifers, and they made particular mention of some excellent calves belonging to Mr. Davies, of Capel-dewi, and Mr. R. Waters, of Sarnau. Neither did they remember having seen anywhere such good two-year-old blacks as they were called on to judge here on Friday. As to the cows the well-known Moelfre beast appeared to be in far better condition than ever, certainly better than when she took second at the Royal Agricultural Society's Show, and first at Haverfordwest. The yearling blacks were not so good as on some previous occasions, but the calves have never been so good or so numerous. The judges thought the show poor in quality, and the entry was also unusually small. They spoke highly, however, of one shown by Mr. Laubert.

The judges of coloured cattle and sheep spoke in laudatory terms of both divisions of their department. Some of the cattle that came from Glamorganshire, particularly those belonging to Mr. Thomas of St. Hilary, had advantages over the others, in regard that they had taken numerous prizes elsewhere, and were specially prepared for showing. A cow and calf, the property of Mr. Thomas, St. Hilary, which took first prize, were greatly admired by the judges, and they gave almost equal praise to the second prize cow and calf, belonging to Mr. A. Morgan, of Llwyn. Some of the calves in the coloured classes were really excellent, and it augurs well for the prosperity of the district in future to find that nearly all the calves at this show, black and coloured, were so good as to show a marked improvement on former years. The judges regretted that they could not give first prize to the second prize bull calf, for though it is not yet up to the mark, they considered it would turn out a magnificent beast at no distant day. There was a capital lot of bulls, but hardly anything which the judges would call prime. Mr. Thomas, of St. Hilary, showed a bull which had taken second prize at the Royal and first here, and also a cow which has taken several prizes at the

Royal and elsewhere. The judges pronounced the sheep a very prime lot, more especially the shortwools, but though there were a few excellent longwools shown the entry in their case was deplorably small. We have also had a meagre supply of longwools in former years. It is said that almost every one is afraid to show in this class against Mr. Thomas, of St. Hilary.

We may be brief in our general remarks concerning horses, seeing that the judges have criticised this part of the show pretty elaborately at the dinner. The entry, as we have said, was large, and with the exception of the few poor classes referred to by the judges the quality was good all round. As, always happens, a few of the classes were indifferently filled, but the hackney yearlings and two-year-olds were largely represented. The aged cart horses and mares made a splendid show.

We are unable to find space for the prize list.

FROME.

The eighth annual exhibition of cheese and butter, in connection with the Frome District Agricultural Society, was opened on September 25. The entries of cheese we not so numerous as last year, which was regarded at the time as quite exceptional, but those of butter were rather in excess. The numbers were 159 of cheese, as compared with 264 last year, 175 in 1876, and 161 in 1875; while the butter entries were 84, as compared with 81 last year, 89 in 1876, and 61 in 1875. The opinion of the judges was that the cheese generally was inferior in quality and texture to that at previous shows; that while there were some very fine lots shown there was a larger proportion of poor cheese. The butter was pronounced to be of the highest excellence, and in these classes there were three high commendations and four commendations. Of the cheese prizes Somerset carried off 20, Dorset 11, and Wiltshire none. Mr. John Willis, of Dorchester, won two first and two second prizes; Mr. Parrott, of Frome, two thirds and a fourth; Mr. E. J. Hoddinott, Witham Hall, two firsts; and seven other competitors received two prizes each. There were only four competitors in the cheese fair class. About 200 tons of cheese were pitched, including a very large proportion of cheddars. Trade opened very slow, and prices were rather lower than last month, and from 10s. to 25s. per cwt. lower than at the last September fair. The following were the quotations:—Cheddars, 63s. to 70s.; Somersets, 50s. to 66s.; doubles, 35s. to 50s.; half skims, 35s. to 40s.

PRIZE LIST.

JUDGES.—CHEESE: P. Thompson, Reading; J. Lewis, Bristol; A. Mullins, Baltonsborough; R. H. Sykes, Bristol; S. S. White, London; and J. Allen, Shepton Mallet. BUTTER: W. Hatcher, Marlham; E. Phillips, Okeford Fitzpaine; and W. Goddard, Gillingham.

CHEESE.

Four cheeses, of not less than 56lb. each; open to the counties of Gloucester, Somerset, Wilts, and Dorset.—First prize, £20, E. J. Hoddinott, Frome; second, £15, W. Burfitt, Somerset; third, £10, H. Cannon, Sherborne; fourth, £5, H. Pitman, Castle Cary; fifth, £2, J. Wilcox, Shepton Mallet.

Four cheeses (loaf excepted), not exceeding 84lb. each; competition restricted to dairies of thirty cows or under; open to the counties of Gloucester, Somerset, Wilts, and Dorset.—First prize, £10, J. Willis, Dorchester; second, £6, J. Bartley, Dorset; third, £4, A. Gulliford, Everceceh.

Four cheeses, of not less than 28lb. each, of any system of make; open to the United Kingdom.—First prize, £20, J. Bennett, Frome; second, £12, H. Cannon, Sherborne; third, £7, J. Hoddinott, Bath; fourth, £5, E. Parrott, Frome; fifth, £2, W. Corp, Somerset.

Loaf cheese competition.—Ten cheeses, of not less than 10lb. nor more than 20lb. each; open to Somerset, Wilts, and Dorset.—First prize, £10, J. Willis, Dorchester; second, £6, J. Butt, Weymouth; third, £3, A. Hiscock, Gillingham.

Thin cheese.—Six cheeses, not exceeding 30lb. each; open to Somerset, Wilts, and Dorset.—First prize, £5, J. Bartley, Shaftesbury; second, £3, J. Willis, Dorchester; third, £2, E. Parrott, Frome.

Two cheeses of any size.—Prize, a presentation cup, value £3 3s., H. Pitman, Castle Cary.

Four cheeses, of not less than 56lb. each; open to the county of Somerset.—First prize, £10, W. Burfitt, Evercreech; second, £5, C. T. Stallard, Pensford; third, £2, E. Parrott, Frome.

Four cheeses, of any make or size; a sweepstakes open to all the world.—First prize, £8, A. Hiscock, Gillingham; second, £4, T. Candy, Frome; third, £2, J. Willcox, Shepton Mallet.

Cheese made with rennet manufactured by S. J. Vissier, not less than 5 cwt.; open to the world.—Prize, £5 5s.—No award; not sufficient merit.

Cheese made with "Hanson's" rennet, not less than 5 cwt.; open to the world.—First prize, £5 5s., E. J. Hoddinott, Frome; second, £2 2s., J. Willis, Dorchester.

CHEESE FAIR COMPETITION.

Cheese pitched for sale by a farmer or dairyman, not less than 1 cwt. for every cow in the dairy.—First prize, £6, and a silver cup, value £5 5s., Mrs. F. J. Croon, Frome; second, £4, C. Crees, Beckington; third not awarded.

BUTTER.

Cured butter, not less than 25lb.; open to the United Kingdom.—First prize, £7, J. F. Horner, Frome; second, £4, G. Bull, Somerset; third, £2, E. Neale, Sherborne, fourth, £1, E. Courtenay, Waterford, Ireland.

Fresh butter, not less than 6lb., made in dairies where no cow nor heifer in milk of any Channel Island or Norman breed is kept; open to the United Kingdom.—First prize, £5, J. L. Brake, Chantmarle, Dorchester; second, £3, J. Miller, Wineanton; third, £2, H. Beauchamp, Frome; fourth, £1, G. Bailey, Holt, Trowbridge.

Fresh butter, not less than 6lb., made from the produce of cows of any breed; open to the United Kingdom.—First prize, £5, Lord Chesham, Latimer, Bucks; second, £3, C. F. Holland, Hurserspout; third, £2, J. Miller, Wineanton.

RICHMOND SHIRE.

The ninth annual show was held at Bedale on Sept. 24, and in general excellence fully sustained the reputation it has gained. The total entries were, we believe, in excess of any previous year, and were 150 more than two years ago, the last occasion when the exhibition was held. A year ago, it ought to be explained, the show was to have been at Bedale, but owing to an outbreak of typhoid fever in the town, it was deemed prudent not to hold it. The entries for the present and previous show were, 1876, 449; 1878, 609. Cattle were in wonderful force, and embraced some of the finest animals, both males and females, in the whole country, including several Royal and Great Yorkshire winners. From the immediate locality Mr. Thos. Willis, Manor House, Carperby, and Mr. T. H. Hutchinson, Manor House, Catterick, sent the pick of their splendid herds; from a short distance (Sheriff Hutton, York) Mr. William Linton contributed, and the Yorkshire animals had to do battle against two or three grand specimens of the Burgley Park herd (Marquis of Exeter). One would not expect to see in a small village in North Yorkshire two such famous rivals as the Marquis of Exeter's Telemachus 6th and Mr. Linton's Sir Arthur Ingram fighting their old battle over again. But so it was. Both bulls were in the aged class. The days of Telemachus 6th's supremacy are over, however, and he was again placed second to the rival which two or three years ago he invariably beat. Sir Arthur Ingram also got the cup as the best animal in the first twelve classes. The class also included Mr. Thomas Willis's Rear Admiral, and was altogether a fine class. The aged cow class included Mr. Willis's Lady Aelia and Grateful, the awards going to those two animals in the order named. In the yearling heifer class a very handsome daughter of Telemachus 6th (Coralina), from the Burgley herd, was placed first. She took first honours this year at Doncaster and at Norfolk. In the family class, the Marquis of Exeter, Mr. T. H. Hutchinson, and Mr. Thomas Willis contested, the prize being a £10 cup, the gift of Sir H. B. Pierce, Bart., and Mr. J. B. Booth. Mr. Hutchinson was the winner. Horses

were a very good show all through. None of the hunting classes fell below par, whilst brood mares and yearlings were worthy of special mention. In the brood mare class and in the three-years-old geldings, Mr. J. T. Robinson, of Leekby, Asenby, Thirsk, came to the front with Go-to-Head in the former class, and Fox Cover in the latter, both great prize winners. In the latter class Mr. George Lancaster's (Morton Grange, Northallerton) bay gelding, which was first at the Manchester, and was the reserve number at the Great Yorkshire, was passed over by the judges. Roadsters were rather inferior, eaching horses good, and agricultural horses excellent, particularly the brood mares, which were of extraordinary merit. The £12 silver cup, given by Mr. H. Roue for the best four-year-old hunter which had not previously won a prize, and which was the property of a member of the Society resident within ten miles of Bedale, brought only three entries, the restrictions being to the detriment of the class. Mrs. D. Harcourt, of Sinton Park, Masham, came off first with Patriek. There were a splendid lot of sheep on the ground, including a number of large prize-takers. A cup given by Mr. George Lancaster, of Moreton Grange, Northallerton, for the best animal in the first six sheep classes was taken by a long-woolled ram belonging to Mr. John Styan, Monnt Park, Wensley, an animal which was first in its class at the Yorkshire and Craven Shows. The prizes for new milk cheese were taken by Margaret Brown, West Witton; and W. Robinson, Melmerby, Coverdale; and for butter by Mary Buckle, Bedale; and William Raw, High Ellington, Masham. Awards for implements were made to Mr. H. Bushell, York; Messrs. G. Russell and Son, Kirbymoorside; Mr. Wm. Waule, Leeds; and Mr. E. Sherwood, Kirkbridge, Bedale. The day was fine, and there was a large attendance on the show ground. The following were the judges: Cattle, Leicester sheep, and pigs—Mr. J. R. Singleton, Givendale; Mr. Metcalf, Rivenstonedale. Long-wool and cross-bred sheep—Mr. B. Wilson, Crookrise. Hunters, roadsters, and special prizes—Mr. Jno. Outhwaite, Baines; Mr. R. Nelson York. Coaching and agricultural horses—Mr. J. S. Stowell, Darlington; Mr. Grayson, Puckeridge. *Yorkshire Gazette.*

SWIMMING—A GOOD EXAMPLE.—Probably at no time like the present has public feeling been so thoroughly aroused to the importance of everyone learning how to swim, and with the fate of the Princess Alice acting as a warning to us we are always glad to welcome either public or private enterprise when directed to help our friends to keep their heads at all times above water. There are many firms, for instance, if they turned their attention seriously to the subject, could with the exceptional opportunities at their command erect upon their premises baths for the benefit of their employes, and which in a very little time might become self-supporting. Mr. Valentine Lovibond, brewer, North End, Fulham, has erected at the small cost of £150 a handsome little bath, 40ft. by 18ft. wide, for the use of his workmen. The water is warmed by surplus steam, of which there is a plentiful supply from the brewery. Erected in June, the Club numbers forty or fifty of the employes, and although few could swim at first the majority have now acquired the art. Mr. Lovibond, a great enthusiast in the movement, having instructed many of the men himself. The bath will be self-supporting, and a *pro rata* subscription is charged according to each one's earnings, the payment extending over a term by which the expense individually is absolutely nominal. With the view to induce his workmen to become good swimmers Mr. Lovibond invited to the bath the members of the London Swimming Club, who attended on Saturday afternoon, and gave an excellent display of their natatory skill, several ladies being present on the occasion. The programme consisted of plunging, six lengths' handicap, swimming and floating on the back—the best method of saving life—ornamental swimming, and tea-drinking in the water by Mr. and Mrs. Gamp and their irrepressible juveniles, the entertainment winding up with a duck-hunt, which caused great amusement, the ladies especially enjoying the fun. Subsequently the members of the London Swimming Club adjourned to Mr. Lovibond's house, and sat down to a handsome cold collation. During the afternoon and evening the band belonging to the works played some appropriate music. We may mention that Mr. Lovibond and his courteous manager, Mr. Yendell, will always be pleased to show gentlemen the bath or accord information which may be of service to others desirous to follow his example.—*Sporting and Dramatic News.*

LIVE STOCK NOTES.

I read in the *Times* that under improved management the meat-producing aptitude of New South Wales could be tripled; that there is only need to "give the squatters a reasonable fixity of tenure," and "within a very few years 'back' country would be made equal to the frontages, and many a station fully stocked now with 20,000 sheep will easily be made to carry 60,000." Water is greatly wanted. In the name of common sense why don't they probe the plains everywhere with that simple, quick, and efficient implement, the Abyssinian pump? I read next (over my one pipe, yet unexhausted), in a letter from California, communicated to the *Pacific Rural Press*, "For these reasons I would say to beginners, First of all get the best blood you can to begin with—old blood, and stick to it." The writer adds that in this year's great sales on either side the Atlantic "there is some encouragement to us Californians who are breeding in a small way, and for comparatively small prices, to 'keep up our pluck,' as they say, and plod on, ever remembering that we can only achieve success by deserving it." This is exactly what I have ever preached. In the face of this how can we possibly despond? Prices are low; we cannot afford to go on buying and breeding, you observe. Prices have been lower, I would venture to respond, between the time when "Princess" made seven hundred and "Comet" a thousand guineas and the hour that is passing as I write, notably when R. Booth's matchless cattle were sold at Studley for an average, if I remember aright, of some where about 24 guineas. Cows have thus been lower priced in the general market than they are now, and yet since that how frequent and how great a rebound we have known! Corn, again, is low, you answer; we must sell something, and we must retrench somehow, to enable us to get through at all. Well, let me tell you how. Difficulties generally thicken upon the eve of relief: or perhaps we may put it better that our energy, penned as a cat in the corner, acquires a new stimulus from desperation, and forces an unlooked-for and successful exit. Anyhow, there is ever "light behind the cloud!" For the present foggy time thin out and pick, reserving the best within your fold and fields. Fatten all you disapprove. Keep continually selecting. The day will come when you shall have your ample reward for this. And to meet the difficulties that encumber the corn market, to my mind the machinist will shortly give us considerable assistance. Already what an astounding aid is this three-furrow plough—so huge to look at, and yet so light in its work! I have been watching mine well-nigh half the afternoon, drawn with ease up and down a stiffish bank of good loam, in a furrow four inches deep at least, over a stable, doing excellent work, turning readily as a hay-rake at the end, and managed, whilst I watch it, by a mere lad, who is incapable of "opening" for himself, and has, therefore, for the nonce changed his ordinary wheel-plough to follow this, whilst his more accomplished *confère* is doing that necessary service for him. With four small Welsh horses, a man to follow, and a small "nipper" to walk beside the leaders, it has swiftly done all, the ley ploughing to boot. Now in this behold a considerable saving of labour and horseflesh, which will go far to cover the default of many bushels of corn and many shillings of an "in favour of buyers" price. I am so thankful to have found one, and if the machine-maker can invent a few such grandly efficient implements besides, old England may yet hold its own in agriculture. All things must change continually. To meet such changes successfully is the art of life.

A friend who has gone into farming not so many years, but who with the true pluck of the real

agriculturist selects for his experiments the best of every thing he can procure, writes me a remonstrance that I could have said in my last article what I did about Shropshire sheep, "just now that he has gone in deeply for the sort." I make my answer public. The Shropshire sheep is a most successful invention, the result in the first instance of a cross between the Southdown and the Cannock Chase breed—an excellent sort the issue, and which the *exposant*'s keep to a superb level of size, quality, and soundness. But it is, as with pelargoniums, you must knock the elements of the early mixture, in order to keep up their excellence, when new vitality is wanted. The Shropshire sheep goes, in unscientific hands, *more rapidly to pieces* than any breed of domesticated (or "improved") animal that I know. Hence the tremendous prices the great breeders' rams fetch. Men give anything to be safe in their breeding practice. I would therefore advise my friend, and through these columns the public, whose mind I may have disturbed, to note the names of the most celebrated breeders of this fashionable sort, and to keep continuously buying ram after ram—not sparing price—from them; you will thus, supposing you have had the sense to commence with decent ewes, obtain gradually a fine and profitable flock for yourself. Mess about without method, and your fall is certain. And this applies equally to the much-discussed Short-horn. One Californian paper, on this very subject, observes: "It has been proved by experience that a more fixed type or family character can be depended upon by sticking tolerably close to bulls of the same strain of blood." Hence the success of the Bates party in crowding on Oxford, Duchess, Winsome, Durlington, Fuchsia, &c., bulls in turn upon the same material. It is only ringing changes with a new fillip of invigoration each time, and for the variety you may effect thereby you have only to consult the algebraic law of "permutations." For instance, "In how many ways may seven persons seat themselves at table?" (Ans. 5,040). Again: "On how many nights may a different guard be posted of four men out of a company of thirty-six?" And on how many of these will any particular soldier be on guard?" (Ans. 58,905 and 6,545). Briefly, there is another question calls for comment. There is a certain feeling of unreasoning panic amongst the possessors of good herds, not positively in the first rank of fashion. All the papers, parrot-like, keep repeating the unison remark that it is an "unhealthy" symptom in the market this paying of immense figures for a few favoured tribes, whilst good ordinary sorts go for a song. There are heaps of Short-horn sales which the auctioneers tell us are a loss to them personally. But are they always, or even often, a loss to the seller? When an average of 30 guineas occurs, including a lot of calves and yearlings, descended from a few cows picked up at about £30 a-piece, and simply accumulated on ordinary keep up to a sufficient number to make an auction, can you tell me that the owner has made no money? He may have *expected* to sell as those do who have staked hundreds and thousands in the purchase of their dams. But was the expectation reasonable? And, taking all things into account—risk, interest, &c.—has his remuneration been on a lower scale? We should not hear of these many small average sales if it were not a profitable business to the owner, though the poor auctioneer may growl. And, again, such sales give a certain stimulus to blue blood prices, for *good males* they must have to succeed. Keep up your pluck, then, and persevere. Breed good bulls and you will win. There are new and spirited buyers coming on every day for both Bates and Booth blood; and if you don't get the fabulous prices Lord Falmouth's stud would with good reason sell for, you may still attain the profitable Sledmere average.—VIGIL, Oct. 5.

DISEASED ANIMALS AS HUMAN FOOD.

At the recent meeting of the British Medical Association, in the section Public Medicine, the question "How far may the flesh of diseased animals be used for food," was introduced for discussion by Dr. Samuel Drew, of Sheffield.

Dr. DREW, stated as the result of his inquiries, that in rare cases only is there any ground for believing the flesh of diseased cattle to be at all injurious if eaten; and that, if thoroughly cooked—that is, raised throughout to a temperature of 212 degrees Fahr.—probably it is never noxious. He divided the diseases of cattle into three classes: (1) The ordinary local or constitutional diseases, as enteritis phthisis; (2) contagious or epizootic maladies, as pleuro-pneumonia, rinderpest, glanders; (3) parasitic diseases, as trichinina, measles. He alleged that no evidence whatever had been adduced showing that the flesh of animals affected by diseases of the first class was in any degree injurious as food, whether the animal had died of the disease or had been slaughtered while ill. He stated that animals found dead of disease are habitually eaten by the shepherds and labourers on the sheep farms of Scotland, and are frequently consumed by English labourers, without any known ill effects. From the report of the late medical officer of the Privy Council he quoted: "During my inquiries into the diet of the Highlanders, I had reason to believe that neither the nature nor the duration of the disease is very carefully inquired into, and that a sheep found dead without marked evidence of long-continued disease is eaten. It is also a part of the ordinary food of the farmer in those localities, and also of his men, whether fed singly or on the bothy system. I made the most careful inquiries, but could not learn that any disease or disorder of the human system had been known to follow the use of this food, and it is almost universally believed to be in good flavour and wholesome in quality." With regards to distinctly contagious epizootic disease, Dr. Drew stated that, although the use of cattle dying of such maladies as food might not unnaturally be regarded as a dangerous experiment, yet the actual evidence is very strong that no evil result has followed on the use of such food, if sufficiently cooked. He quoted Coze who stated that "at the siege of Paris in 1814 about a thousand oxen, sick to the last extremity of cattle plagues, were consumed as food, and that no malady was caused by this food." The report of the Cattle Plague Commission said:—"During the occurrence of rinderpest in England in 1865, large quantities of the meat of animals killed in all stages of the disease were eaten without ill-effects;" and "in Bohemia also, in 1863, the peasants dug up the animals dead of rinderpest and ate them without bad result." Parent du Chatelet writes that during the siege of Paris in 1870, the flesh of glandered horses was in large quantities used with impunity; and that "on another occasion the flesh of three hundred glandered horses was eaten without injury." M. Renault (Directory of the Veterinary School, of Alfort,) asserts that he "for many years made experiments, and that there is no danger from the cooked flesh of cattle, pigs, or sheep dead of any contagious disease, however much may be the natural repugnance these substances inspire." Of the third class of malady—the distinctly parasitic—Dr. Drew said that the use of flesh of animals so affected would be decidedly dangerous unless great care were used in cooking the food. The practical inference drawn by the writer was that it was impolitic and wasteful to prevent the sale for human food of the flesh of animals which had been affected by disease of the first class; that in but few cases of the second class was the destruction of the flesh of diseased animals necessary; that the flesh of animals affected by trichinosis or measles should never be used as food. He, however, stated that, although the flesh of diseased animals was not noxious, yet inasmuch as it, in common with underfed meat generally, was distinctly less nutritious than that of fat cattle, its sale should only be permitted as avowedly "inferior meat;" and its substitution for first-class meat be treated as a fraud.

Dr. TRIFE (Hackney) said that in the course of his experience, extending over twenty-two years, at Hackney, he had frequently ordered the destruction of diseased meat. It was not a fact that infected meat, if well cooked, was innocuous. Dr. Tripe instanced a case coming under his observation, in which sausage meat had poisoned several who had partaken of it.

Dr. CARPENTER (Croydon) wished very much that he could support the views of the reader of the paper, regretting the loss. He remarked on certain cases of poisoning from meat pies, and mentioned that he had, out of water used in boiling potatoes affected with the blight, reproduced the rotting. He thought, therefore, that on either theory (volatile or germ) it was possible that, after being subjected to the boiling temperature, the poison might remain unaffected.

Mr. SISSONS (Barton-on-Humber) stated that some Blue Books issued by the United States Government supported Dr. Drew's views; but he did not think medical officers would care to eat the flesh of diseased animals, whatever theory they might hold as to its harmlessness.

Dr. BOND (Gloucester) was willing to take up the challenge of Mr. Sissons. Except in the case of a very few diseases, such as malignant pustule, and the parasitic disease commonly known as "measles" in pork, he would eat the flesh of diseased animals, if properly cooked. The instance cited by Dr. Tripe, where sauzage meat poisoned, and the case of poisoning due to baked pies referred to by Dr. Carpenter, proved nothing. Similar effects had occasionally followed eating shell-fish. Legislation had undoubtedly advanced beyond actual knowledge in the matter of diseased meat. Dr. Bond thought people ought to be allowed to purchase the flesh of animals affected with pleuro-pneumonia and like diseases (of course at a reduced price, and the character of the meat being stated), just as they were now permitted to buy butterine or adulterated coffee.

Mr. VACHER (Birkenhead) did not believe that any analogy existed between groceries mixed with harmless adulterants and diseased flesh. As medical officer at a port of debarkation of stock from America, Mr. Vacher was frequently called upon to inspect large quantities of meat. He was in the habit of condemning sheep or oxen affected with epizootic pleuro-pneumonia, rinderpest, blackquarter (including under this term splenic apoplexy, malignant pustule, and carbuncular erysipelas), acute rheumatism, and influenza; and pigs affected with pleuro-pneumonia, typhoid fever, scarlatina, anthrax, quinsy, and the parasitic cysticercus. He frequently passed animals suffering from tuberculosis, and did not consider the presence of foot-and-mouth disease sufficient to warrant the condemnation of the carcase. In proof that cooking did not necessarily destroy the poisonous properties of diseased meat, Mr. Vacher mentioned an experiment made by Dr. Davies, who had successfully vaccinated with the contents of a tube of lymph buried in a leg of mutton while it was roasting.

Mr. NUNN (Bournemouth) considered any argument based upon the fact that animals could eat diseased meat with impunity carried very little weight, as animals were in the habit of eating offal and many kinds of food not fit for man.

Dr. BRABAZON (Bath) stated that, having himself been a sufferer through eating meat infested with the cysticercus, he condemned all meat visibly affected.

Dr. GRIFFITHS (Sheffield) thought it was not safe to pass the carcase of an animal affected with tubercle except when the disease was recent. When one lung was fully affected and the disease had begun in the other he refused to pass the carcase.

Mr. BALDING (Royston) hoped the onus of judging what was wholesome meat and what was unwholesome would not be thrown on the buyer.

Dr. CAMPBELL (Calne) found it difficult to decide in cases where the animals were only slightly affected, and asked how far medical officers were justified in condemning mild forms of pig typhoid.

The PRESIDENT said that if, as Dr. Drew contended, diseased meat were a matter of no importance, the Government had been grievously misled by medical men. He thought that two subjects had been a little mixed up—the fitness of diseased meat for human food was one question, and whether it had been or might be used with impunity was another.

[As long as doctors disagree on such points as that above discussed, we had better be on the safe side, and waste a little possibly harmless food rather than run the risk of contracting disease by eating the flesh of diseased animals.]

L I F E I N N E W Z E A L A N D.

No. III.

THE JOURNEY CONTINUED.

Our ultimate destination being New Zealand, we left Melbourne after a short but exceedingly pleasing and enjoyable stay, and again embarked on the lower end of our former landing-place, Landridge Quay, on board the superb steamship Arramatta. Just as we went down a steamer was getting ready to start for London, or "Home" as it is here styled by nearly everybody one meets, and the passengers were crowding down from the railway station in mad haste, as if life and death depended on their exertions, and it is no exaggeration to say that on every countenance there rested an expression of joyous exultation, which told plainly that the prospect of again seeing the Old Country, and old friends, filled every breast with happiness inexpressible. However good a place the colonies may be for young people to push their fortune and attain a position of more or less independence according to their station in life, it is nevertheless a fact that "Home" is the goal to which all look forward with the most ardent desires when they have obtained a competency on which they can retire, and, although of course all who have the means of doing so do not return, their children being settled in the land of their adoption, yet few cease to yearn after the scenes of their youth, the friends of their early manhood, and the old associations endeared to them doubly by the years of absence. Moore's glorious lines slightly altered truthfully describe the feelings of many an exile from home, the feeling being none the less intensified on account of his having improved his position, but rather the contrary, as if he remains poor he has other things to think of than mere sentiment:—

Thus shall memory oft in dreams sublime,
Catch a glimpse of the days that are over,
And sighing look through the waves of time
For the long faded friendships they cover.

The peculiarly hopeful and enthusiastic expression so vividly displayed on the countenances of the homeward-bound is not by any means correspondingly reflected on the faces of the new arrivals, who step out on the Quay for the first time with rather a shy and anxious look when thus suddenly thrown amongst a crowd of strangers, all intent on some pursuit, whether business or pleasure, and all most decidedly preoccupied. It is not until a man's future prospects begin to develop themselves, and assume something of a definite and tangible form, and promise a certain amount of success, that the careworn look wears off the face of the new-comer, and his self-esteem beginning again to assert itself, he carries himself more boldly, and falls gradually into the position amongst the community of which he now forms a part, to which his talents, energy, character, and worldly possessions entitle him.

Passengers and cargo all on board, the moorings are cast off, and we are shortly steaming down Hobson's Bay, and in something like three hours pass through the Heads of Port Philip, on to the bosom of Old Ocean, this time however turning to the left, and not crossing in any way, but resuming our old course of nearly due east. The ocean was as calm as a mill-pound, and the weather magnificently fine, giving the passengers an excellent opportunity of remaining on deck to get a view of the coast, an amusement in which they indulged to their hearts' content. The sight was singularly uninteresting, as nothing could be seen but the usual ranges of sandy hillocks, which seem to be the peculiarly

distinguishing feature of the Australian coast. This occupation of trying to make out the coast and prominent features of the land, whether leaving a port of the old country, or the far distant new, is the unfailling resource of all travellers, and if they cannot make much out of it, as they seldom can, from the distance the ship must keep to ensure her safety, it has the good effect of drawing them into groups and thus forming an early acquaintance-ship. The passing of telescopes and other glasses from hand to hand—for at sea most people are obliging in this way—greatly assists in breaking down the icy wall of etiquette and promotes sociality and an easy flow of conversation. Our steamer was crowded with passengers, so much so that the lounges and seats had to be improvised for the time being into couches, and still the accommodation was insufficient. Every class of society was represented—merchants, farmers, graziers, squatters, miners, and many nationalities rubbed shoulders; English, Scotch, Irish, American, Colonial, Chinese, and what one seldom sees even here, half caste Chinese—and most interesting children they were; but although the mother was from some part of the United Kingdom, the young people all had the unmistakable features of the Chinese, and noticeably the almond-shaped eyes. Great numbers of people were going to New Zealand to judge for themselves the capabilities of the country as a field for agriculture or pastoral enterprise, being driven to look for a change by reason of the enormous losses sustained by the lengthened drought of the past season. There were young men amongst them who had been educated at Eton, and mixed probably in the best society, but who, thinking to make an easy fortune, and probably allured by stories of the semi-wild and somewhat free-and-easy life—the reality, however, being considerably different from the description as read in a fashionable drawing-room—had come out to Victoria some years before, and largely engaged in pastoral pursuits. With the stamp of gentlemen as strongly and unmistakably marked on them after all their hardships, as was the peculiar type of their countrymen on the faces of their Chinese fellow-passengers, many of them were at the same time worn to skin and bone by the harassing cares and wearing toil incidental to such a trying season, and the loss of so much property. Indeed this worn and leathery appearance seems to be a peculiar trait in the appearance of the Victorian and New South Wales bushmen, induced in the first instance by lengthened exposure to the tanning and drying-up influence of a nearly vertical sun, long journeys, and incessant movement on horseback, and the want of refreshing sleep during the height of the dry season, from the stifling atmosphere and the buzzing of insects. Some were the sons of distinguished English and Scotch agriculturists, and one particularly fine young fellow was the son of a man whose name and writings and agricultural abilities were for years familiar as household words to every reader of the *Mark Lane Express*. Notwithstanding the severity of their recent losses all carried themselves with a jaunty air, and in the happy-go-lucky style which seems to attach itself to bush life, and which it must be admitted is a good aid in blunting the edge of misfortune, or at least hiding its effects from the eyes of the world, which of itself is no small matter. Next morning we found ourselves running through Bass's Strait at a good 13 miles an hour, leaving the Atlantic, on whose

heaving bosom we had so long rested, and emerging into the waters of the Pacific Ocean with the coast of Australia still well in sight on the left, and the north-west coast of Tasmania, better and more familiar known to people newly out from the Old Country as Van Diemen's Land, stretching away to the right, the latitude at this point being 41 deg. south, and longitude 149 deg. 10 min. east, quite near enough the land to distinguish the lighthouse and prominent objects near the shore, but too distant to form any idea of the interior, which, as we were not to call at any port in that colony, was accounted by us all as a great deprivation. Tasmania has the reputation of being the garden of the Southern colonies, and being so long settled, and having had the advantage of a large expenditure of Government money for many years, approaches more to the appearance of England than any of the others in its roads, fences, and agriculture. The climate and soil seem highly favourable to the growth of all English fruits, and preserved in tins they are largely exported to Australia and New Zealand, and stand deservedly high in the estimation of the public.

Instead of rejoicing over the stoppage of transportation to their country, the bulk of Tasmanians one meets with heartily regret it, as the large sums spent on keeping up the Government establishments, and in the payment of the officials, gave an impetus to trade and commerce highly beneficial to the interests of the colony and the prosperity of the inhabitants generally; and when this influx of hard cash ceased there at once ensued a period of commercial depression and stagnation of trade, from which it has even now barely recovered. The facility with which the convict system afforded employers of labour an opportunity of procuring cheap workmen and servants increased the regret experienced at the break up of the system, free labour being so much more expensive, and the men and women who performed it ever so much more ungracious and independent in their manner than the poor convicts. It sounds strange to hear even ladies defending and praising the latter for their usefulness in domestic service or at farm-work, and urging in sober earnestness as an apology for their delinquencies, early neglect, evil associations, and the temptations incidental to extreme poverty, particularly during the period of youth. Listening to such narratives, and particularly to the devotedness and singleness of purpose in their employers' interest shown by so many of the convict servants, one begins to wonder where all the bushrangers came from, and why it is necessary to keep up such a staff of expensive officials, from the Governor downwards, at all the penal establishments.

Speeding on without a moment's cessation of the onward progress of the ship, or the horrible grinding of the enormous shaft which supplies the force by which it is sustained, and continually followed by the usual tenants of the Southern Ocean, albatrosses and molly hawks, in greatly increased numbers, we at last, after four days steaming, touch the first point of New Zealand, 1,220 miles from Melbourne. This is well named the Bluff, being bold and striking, but at the same time a more uninteresting, barren, or inhospitable-looking spot could scarcely be met with in any country. It is a port of some importance, however, as being the outlet and inlet for the commerce of Invercargill and surrounding district, with which it is connected by railway which runs direct on to the wharf, loading and unloading direct to or from the ships, as at Saundridge, though on a humbler scale. Approaching this part of New Zealand the voyage became unusually interesting to the youngsters, at all times ardent admirers of and devoted students of Captain Cook and his voyages. Here, with chart spread out before them, they could trace his course, marking how he crossed and recrossed it, in his search for

the land which was so near him, but so troublesome to find, when there was nothing to aid him but his own instinctive genius for discovery. The Solander's Islands, which we passed quite close, calls up a familiar name to all who have read Cook's voyages (and who has not?) with many other names equally interesting, and rendered classical by their connection with the great circumnavigator. Passengers and cargo landed and received, we at length turn our backs on Faveaux Straits and Stewart's Island, the latter although sometimes included in descriptions of New Zealand as a third division, being unimportant, and only about the size of a small English county, and inhabited mostly in a few sheltered nooks round the coast to the present, forming a refuge for whalers and other shipping. Running on 150 miles on the east coast, we reach Port Chalmers, which is situated at the head of an arm of the sea, in its configuration and surroundings so exactly like the Scotch Highland lake scenery that every one on board is struck with admiration, and all keep the deck to pick up every new point, as the steamer forging quickly ahead reveals new beauties to their eager gaze. Port Chalmers is closely surrounded by hills, and affords admirable protection for shipping, and large vessels from all parts of the world load and discharge for Dunedin, of which town it is the sea-port, and goods are forwarded from the slips' side by road, railway, or steam launch, the distance being about eight miles. Dunedin—so named at the suggestion of one of the Messrs. Chambers of Edinburgh, being the ancient name of that city, and forming a more appropriate and more pleasant sounding name than New Edinburgh, as was at first proposed by its founders—is, in its own way, nearly as wonderful in its growth as Melbourne, and is at once the largest and most important town, not only in the Southern Island, but the entire country of New Zealand north and south. Founded only 30 years ago by a Scotch association, its progress has been remarkable, brick and stone buildings and broad asphalted streets having rapidly replaced the wooden erections which were first put up in its reclamation from the wilderness, and now 30,000 inhabitants are engaged in all the grades of manufacture and commerce. The progress of Melbourne exceeded that of Dunedin simply because it was the natural outlet of the trade and commerce of the great back country. When the extent of surface which supports the trade of Dunedin is taken into consideration, it will probably be found to come very close to the marvellous growth and prosperity of the former. Manufactures flourish, and already in many things rival the old country, the quality of the "tweeds" manufactured at Mossiel even excelling the home production in quality of finish, and more particularly for durability of wear. Agriculture flourishes in Otago in many districts in much the same style as it is pursued in the United Kingdom, and farm steadings, with abundant shed-room for winter feedings on turnips, are plentifully distributed throughout the province. Leaving Port Chalmers somewhat regretfully, the settled appearance of the inland districts having strongly tempted us to remain, we again started on our journey, and entered the harbour of Lyttleton, 200 miles distant, by as pretty an arm of the sea, hemmed in by hills to the very water's edge, as the eye of mortal could wish to dwell on, and the town and port itself is closely surrounded by very high hills, which had to be tunneled to form the railway connection with Christ Church, and by which an immense quantity of agricultural produce comes down for shipment from the far-famed Canterbury Plains, a splendid view of which is obtained from the ridge through which the railway now penetrates. From this point to the foot of the distant mountains three million acres of gently rolling, or almost level land, lie between, all well watered, the whole forming a district highly desirable for either

the agricultural or pastoral farmer, there being abundant scope and highly suitable positions for both. Again joining the steamer, we start for Wellington, 180 miles distant, and soon crossing Cook's Straits, the sheet of water which separates the country and forms it into two great divisions, while at the same time forming an invaluable highway through which the commerce of the country can be conducted, without having to go the great round of north or south, we reach the empire city of New Zealand, and here we break our journey, and take our final leave of the Arramatta with the intention of getting some slight knowledge of the neighbourhood of Wellington before going farther north.

Wellington is essentially a wooden city, there being very few brick or stone structures, the great pile of buildings used as the seat of the Legislative Council and House of Representatives being all wood, and forming probably the largest building constructed of this material in the whole world. Churches and other public buildings, shops, and warehouses are all built of wood, and being for the most part of handsome and even elegant design have a light and tasteful appearance, not at all unpleasant to the eye, but very much the contrary. Wooden erections are preferred in this province, on account of its liability to shocks of earthquake, which when experienced cause greater injury to the more solid erections of brick and stone. The town surrounds the harbour, much in the form of a horseshoe, its extensions being all lateral, on account of its being hemmed in by precipitous hills, which force the buildings in a measure to the very edge of the water. It is easy to see that the city of Wellington, as it is now styled, owes its rise and present prosperity to its central position between the two islands, its accessibility from Cook's Straits, and the splendid advantages afforded to shipping by its magnificent harbour, which, although of course an arm of the sea, yet is so protected by the surrounding hills as to be almost as safe as a Highland lake, while the scenery is quite as beautiful. The weather in Wellington is proverbially unsettled, windy almost at all times, and subject to heavy falls of rain at all seasons. This is endeavoured to be explained by the near neighbourhood of so many hills, gullies, and mountains, a feature which probably in a great measure also affects the temperature, which is extremely variable, and positively wintry at times even in early autumn. No agricultural work is carried on outside of the city; just a few cows, horses, and sheep graze on the hills, which are much too steep for cultivation, and are a good deal incommoded by dense thickets of furze and other scrub, through which the stock, and more especially the sheep, find some difficulty in forcing their way, this belt of alternate hill and ravine extending back probably from twelve to twenty miles, when good soil, practicable for cultivation, begins to present itself. It will thus be seen that the town can get but little aid in developing its commercial prosperity from the soil, and that its immediate vicinity offers little inducement for the farmer to settle, its more sheltered nooks being by their limited extent only fit for the small dairy farmer, to whom the production of milk and butter for the daily supply of the town is a material object, and by which an industrious hardworking man can, with the assistance of his family, always live comfortably, hired labour on small sections of this kind being quite out of the question. Giving up the idea of settling in the neighbourhood of Wellington for the above-mentioned reasons, and not willing to go far into the interior on account of educational disadvantages, we again started for the North, and embarked on board the steamer Waanaka, Clyde-built and Scotch manned and officered, both elements, the building trade and the men, being largely represented in New Zealand in the coasting

trade, and also in the Melbourne and Sydney Lines. Still keeping on the East Coast, and so closely as to get an excellent view of the scenery in-shore, which was singularly rugged and grand—almost too much so for newcomers, as they find it somewhat disheartening when they can see nothing but barren mountains, many of them snow-capped, and the eye by-and-by tires of dwelling simply on scenery which has nothing to recommend it but its solitariness and grandeur. Some of the mountains here seen from the deck of the steamer are 6,000 feet in height, but we missed Mount Egmont and its ranges, rising to an altitude of 10,000 feet on the opposite coast, and Province of Taranaki. After a run of 200 miles we arrived off Napier, the chief town of the Province of Hawkes Bay, a place with which every one on board was delighted, being beautifully situated, and the fine level land covered with rich herbage being such a change from the barren and desolate coast scenery. The soil of this province is admitted by every one capable from their practical knowledge of the subject to form a correct conclusion to be the best in New Zealand, and probably exceeded, either for its productiveness in the growth of cereals or fattening capabilities for stock, by no country or section of country in the whole world. It may be compared to the best feeding districts of Lincolnshire and Leicestershire, or the magnificent pastures of Meath and portions of Limerick and Tipperary Counties in Ireland, where intersected by the Great Southern and Western Railway, familiarly known as the "Golden Vein," but with this remarkable difference, that the number of stock the best land at home carries during the summer months that of Hawkes Bay carries all the year through. When cleared, worked up, and laid out with English grasses some of the districts carry eight sheep to the statute acre all the year through, and cattle of course in proportion; but sheep has been the favourite stock till very recently, and the wool possessing great uniformity of fibre, from being continually well fed, commands the highest price in London, and is much sought after. Lincoln and Leicester sheep grow to a great size, and breeding animals are in great demand for other Provinces, and large sums given for the rams, as they are highly prized. There are also some very fine herds of Shorthorn cattle, good blood of this breed having been early introduced both from Victoria and New South Wales, as well as from the Old Country. The cows, which, from the luxuriance and excellent feeding qualities of the herbage, grow to an enormous size, run out summer and winter, suckling their calves at foot, and thus give their progeny size, stamina, and early maturity. From information received subsequent to our visit regarding this Province, it would appear to be one of the best for a farmer in the whole colony—probably the very best—as if he has a little capital he can lay it out to great advantage, and with ordinary luck, soon be not only in comfort but independence. The formation of good roads and the introduction of the railway and telegraph have done wonders in opening up this Province and aiding its settlement. Scarcely more than a dozen years ago it took more time to go a journey of fifty miles inland in some district than to go to Melbourne and back; now these very localities have been opened up, and the land increased so much in value that many men who previously were leading a life little better than just from hand-to-mouth, have been enabled to sell their holdings at an enormous increase, and actually retire altogether from business and live as country gentlemen. The premium received by some men on blocks purchased from Government, before they had gone to the slightest trouble or expense in improving them, was in itself a fortune, putting them at once in a position of independence. Hawkes Bay was one of Captain Cook's favourite localities, and

the description he gave of it as a suitable district for colonisation has been amply realised. Continuing our journey we reach Gisborne, the leading town of Poverty Bay, so called by Cook on account of his being unable to get the urgent necessities of the ships supplied through the unfriendliness of the natives. Although the name is historical, and given by one of the shrewdest and most far-seeing of men, it has proved a misnomer, as it is now a rising district, and according as it has become developed by good roads, farming and commerce have alike progressed in a ratio which undoubtedly mark out for it a highly successful future. Proceeding on our journey we follow Cook's track, and reach his Bay of Plenty, which is simply a Bight or indentation of the ocean, 120 miles or so in length, and 40 at its greatest breadth, with a large number of islands dotted on its surface, amongst them being the famous White Island, which continually emits volumes of sulphurous smoke, and where now a considerable sulphur manufactory is carried on. We put into Tauranga, the port of the district, and took a short excursion into the country, which here is very pleasing, and although a favourite resort, presents nothing remarkable to the attention of the settler on land, its principal feature being that it is the nearest point of sea communication with the famous boiling springs, a series of natural phenomena which is attracting tourists from all parts of the world, and to which Tauranga owes most of its fame and prosperity. So rapidly is this becoming developed that at a recent sale of Government allotments that on which the Hotel at the top of the wharf is built made at the rate of considerably over £6,000 an acre, an astounding sum in a country so recently reclaimed from actual barbarism. The graves of the numerous British officers, soldiers and sailors who were massacred by the natives in this vicinity amply testifies to the difficulties which had to be overcome before the colonists could enjoy the peace and comfort necessary to civilised life, and the monument to the gallant though ill-fated men on a point of land jutting into the sea shows the gratitude of those who benefited by their services, and the respect and esteem in which they were held by their comrades and companions in arms, who shared the dangers of this cruel war with them. Again steaming northwards, and sighting some splendid coastal scenery, we at last pass under the island of the Great Barrier through the Hauriki Gulf, and with the Volcanic Island of Rangitoto on our left, probably as desolate a spot as could be found so close to the busy haunts of men in the wide world; the Wanaka, dipping her flag to the guard-ship, steams proudly into the beautiful harbour of the Waitemata, a word which in the language of the Maori signifies "the country of sparkling waters," and lands her passengers in safety at the Wharf of Auckland. J. S.

MEAT IMPORTATION AND STORAGE.

From the report of the Directors of the London Meat Importation and Storage Company we extract the following particulars:—In respect to Cold Storage, which is a unique feature in this Company's wharf, the agency of the successful patent process by Monsieur Tellier has been offered to the Company, and in connection with this agency the French Company owning the Frigorifique steamer has made a firm offer of their vessel to this Company, on terms which the Directors think should also be accepted. Too much importance cannot be attached to the acquisition of this steamer, as it can be made to form a most efficient and permanent link in our traffic arrangements, on which so much depends for the successful working of the business. The vessel is fitted with the "Tellier" Patent Refrigerating Apparatus, &c., at great cost, to carry meat from South America to France, and, in fact, is the first ocean steamer that successfully carried a full cargo of fresh meat through the tropics. She is, therefore, well adapted to run from Continental ports to our own wharf

on this Company's business. Contingently upon this transaction being completed an offer has been made to the Company to load the vessel, throughout the year, at a Continental port with prime, first-class fresh meat, either on account of the shippers, on joint account, or on account of the Company, at our option and at prices which would leave good results. Apart, however, from this, there is the regular carriage of the Company's shipments from Antwerp, for which a steamer is at present chartered. In either of these trades the Frigorifique could be employed with great profit, it is believed, to the Company, and the Board lay much stress upon this process and the steamer, being satisfied with the great value of this system of refrigeration, of which the arrangement will give them the entire control.

The most laborious task which has devolved upon the Directors has been their personal inspection of various districts in North Germany, Austria, Hungary, Transylvania, Bohemia, Galicia, and other portions of Eastern Europe, in order to decide as to the qualities of meat suitable for the British market, to provide the necessary slaughter-houses and chill-room, and to appoint trustworthy agents, overseers, &c., it being of the highest importance in a business of this kind to exercise the greatest care in all these particulars. The Company's refrigerator railway cars are on the verge of completion. In the meantime experimental shipments of mutton have been made in two forms, namely, in a live state from Eastern Europe to London direct, via Podwolsky, Oswiecim, and Geestemunde, also via Antwerp, where they are slaughtered in the municipal *abattoirs* and shipped in carcass to the Company's wharf. The meat procurable in the districts fixed upon is both finer in quality and cheaper in price than was anticipated, and the Directors are satisfied that the system proposed by this Company will be found the best in every point of view, namely, to slaughter as near to the source of production of the live stock as possible, and the Board therefore considers that in devoting time and care to the accomplishment of this object the interests of the Company are being well served. Arrangements have been made by which the meat imported can be purchased in the Central Market Hall of the Company's premises, and the Board propose considering the advisability of arranging for its sale in various parts of London.

Mr. Tullerman, the Managing Director of the Company, informs us that the Roll Call arrived at the Cold Storage Wharf on Friday with the carcasses of 458 sheep in good order and condition, from the Crimea, via Galicia and Antwerp, thus opening up another source of supply of fresh meat

EXPERIMENTS WITH FOWLS.—Some time ago Mr. Isaac Lynds, of Ohio, published in the *Poultry World* the result of his experiments with ten pullets of each five different breeds for six months. They being about six months old, giving each breed a comfortable house and a yard 40ft. by 40ft., he kept an exact account of eggs and feed, and gave the following as the result:—The Dark Brahmas ate 369½ quarts of corn, oats, and wheat screenings, laid 605 eggs, and weighed 70lb. The Buff Cochins ate 406 quarts, laid 591 eggs, and weighed 73lb. The Grey Dorkings ate 300½ quarts, laid 524 eggs, and weighed 59½lb. The Houdans ate 214½ quarts, laid 783 eggs, and weighed 45½lb. The Leghorns ate 231½ quarts, laid 807 eggs, and weighed 36½ lb. To make this experiment more complete, and to show which lot gave the most profit, including both eggs and flesh, we have supposed the fowls to be dressed and sold at the end of six months at 20 cents per pound; also, that the eggs were worth 24 cents a dozen (two cents each), and that the cost of food was 2½ cents per quart or 80 cents per bushel. The figures would then be:—

	Feed cost.	Value of eggs.	Value of meat.	Total value.	Total profit
	dols.	dols.	dols.	dols.	dols.
Brahmas.....	9 22	12 10	14 0	26 10	16 88
Cochins.....	10 15	11 82	14 60	26 42	16 27
Dorkings ...	7 72	10 48	11 90	22 38	14 63
Houdans ...	5 35	15 68	9 10	21 76	19 41
Leghorns ...	5 77	16 14	7 30	23 44	17 67

The greatest profit on the investment is thus in favour of the Houdans, with the Leghorns next, and the Dorkings least.—*Country.*

THE DAIRY SHOW.

The third annual show of the British Dairy Farmers' Association was opened on October 10 in the Agricultural Hall, Islington, and closed on Oct. 14. It has been by far the most successful show yet held by the Association as far as the exhibits are concerned.

The stock classes were very well filled, there being but few entries which were not in their places. The general tone of the show was not very high set, although some of the classes were really excellent; nevertheless, a careful inspection of the animals gave us the impression that in point of utility the exhibition was completely successful. The great majority of the entries represented the working stock of town and country dairymen, and the awards of the judges were undoubtedly on lines which placed milking capacity as first factor in the scale of merit. This was right, and it was refreshing to see, for once, animals of note, got up in all the pride and glory of show form, but possessing no merit for the dairy, passed over without notice by the judges. A dairy show affords an excellent opportunity for judges to express their disapprobation of the practice of showing animals in such condition as to render them useless as breeding stock, by withholding prizes and honours; and we should be glad to see a crusade against useless fat in ordinary breeding stock shows, although we can scarcely see where any definite line is to be drawn. A fat animal actually in-calf or in-milk is an unanswerable argument so far as it goes, yet all are agreed that the practice is detrimental to the stock and to their descendants. If judges at breeding stock shows are unable to lay down a definite rule as to superfluous condition, they are nevertheless able to act concertedly on a tolerably definite understanding. If such a thing could be agreed upon the trial would have our very best wishes for its success.

Although the prizes were fairly good in the class for pure-bred Shorthorn cows there was not a very grand lot in competition. We should be inclined to think that the expense, and risk, and disturbance—if such a word may be used in default of a better—which is incidental to showing animals about to calve, or just calved, or in full profit, must have operated to make the standard rather lower than one would naturally expect to see in such a class in such a show; but we are quite prepared to believe that the pure-bred "milky Shorthorn," is not quite so common as some would have us believe. It is amongst the cross-bred or partially bred Shorthorns where the best bags are usually to be found. Mr. Wodehouse's cow, Countess, was placed first on the list, an animal of uneven growth and not without serious defect, but still built on a good scale, with good character, and an excellent bag and teats—suckling twins withal. Mr. Tisdall's second prize cow had a good bag, but was scarcely as good a Shorthorn as Mr. J. Stratton's third prize animal; but as dairy animals only, both being eligible, no doubt the award was correct. Her Majesty's Fawsley 10th, from the Shaw Farm, Windsor was to our mind a plain mediocre cow, in spite of her pedigree, but the judges thought her worthy of a commendation, as they also did Mr. Kingsley's Seraphina the 5th. In this class was a most noticeable case of fearless condemnation on the part of the judges; the massive cow, Blooming Bride, exhibited by the Stand Stud Company, a well-known show animal of very considerable merit, being passed over entirely without notice. In this case, in spite of great merit as a breeding animal, the dairy qualification was not sufficient to obtain notice, and vastly

inferior Shorthorns were very rightly placed before her. In the heifer class, however, it was not so easy to carry out this rule, and a very thick, fleshy, good-coated Shorthorn, bred and exhibited by Mr. Walter, M.P., took first honours. Here it was impossible to say what sort of a bag she would have, as the time for its development had not yet arrived, and she was entitled to the benefit of that uncertainty, although the lacteal organs were scarcely more developed than in any barren three-year-old. However, the judges could not help giving this award, as the term "springing for calving" may be held to mean the very smallest indication of the functions having been actually set up. The Aylesbury Milk Company took the second prize, but their animal was afterwards disqualified, and Mr. Tisdall took their place, thus putting Mr. Day's highly commended and very pretty little roan heifer with calf at her side third. The rest of the heifers were not at all up to the mark, and the class was worse than that of the cows; as pure-bred animals they were, with about two exceptions, a disgrace to any show-yard. The Shorthorn bulls may be considered to have made up by their merit for the demerits of the two female classes, and certainly the quality was high, some of the best animals of the day being present. Thus we had Mr. Linton's Sir Arthur Ingram for a first prize, and Mr. Bland's General Fuzee for a second; then came the Stand Stud Company's Favourite—all of them being prize-takers at the Royal in the same order of merit, and all of them too well known to our readers to require comment now. We are somewhat at a loss to account for the reserve number being held by Mr. Fox Beaven's Ludibras, as we believe it was, for in spite of great size and good quarters he is a particularly uneven animal, with bad crops and chine, and flat ribs. Mr. Wodehouse's Royal Havering Secoud, Mr. J. Stratton's Royal James, and Mr. R. Stratton's Protector took high commendations, and the last-named old bull looked exceedingly well. Mr. St. John Ackers' Clovis and his Sir Roland were both there, the former being commended. General Flirt will require alteration at both ends before he is fit for the showyard or the stud. Mr. Walter's Caractacus did not get noticed, nor the Rev. Mr. Gilbert's Lamarquo—at least there were no cards to that effect when we left the Hall, and this gives us the opportunity of expressing a hope that at future meetings of the Society the awards will be put up without unnecessary delay after a class has been judged; in this case the tickets were not placed until a late hour in the afternoon. In reviewing the Shorthorn classes it is evident that had the females been equal to the males in point of merit it would have added greatly to the tone of the show.

Next to the pure-bred Shorthorn cows came a class for "Shorthorns not eligible for herd-book," in pairs, and here there were no less than 55 entries, comprising many useful ordinary dairy animals. We did not find among them many representatives of the milk-walk stamp of animal, the big Yorkshire cows, and partly-bred Shorthorns, such as were sent to the Society's first show; but the average British dairy cow was very well represented in this class. Mr. R. Stratton's first prize pair were not well matched, but were good cows, nevertheless. The second award fell to the representatives of a London dairy, two useful cows exhibited by Mr. Hillier; and Mr. B. St. John Ackers took third prize for a pair of dairy animals of nice quality, bred by Mr. George Jones. The Aylesbury Milk Company deserved the high commendation they obtained, as did the Stand Stud Company. Messrs. Bradbury,

Wingrove, and Co. exhibited some very useful town-dairy cows, and the class throughout may be described as very useful, but not very ornamental.

The Ayrshires were a particularly nice lot of cattle. The two animals which secured second and third prizes for Mr. G. F. Statter were very handsome and excellent milkers. The colour of these and several other entries in the same herd was a dark red and mottled white, which was very telling. The first prize in this class went to Mr. A. Rinton, junr., for what appeared to us to be a finer animal. There were several of these Ayrshires which looked like being well-bred. Only one Ayrshire bull was exhibited, and he was not without merits. In the heifer classes the Ayrshires were not classed by themselves, but they took the honours in a mixed class for breeds other than Shorthorns and Jerseys, the Stand Stud Company taking first and second, and Mr. G. F. Statter third with handsome specimens of the breed.

The Jersey cattle were very well worth looking at, with their delicate frames, model bags with well-placed teats, and general deer-like appearance they formed one of the most attractive features of the show. Animals like those of Mr. Simpson's give one the idea of perfection in high and pure breeding. The Guernseys, too, which were thought by some to have an appearance of being more generally useful, were represented by the Rev. J. Watson, of Guernsey; but the English breeders of Jerseys appear to bear the palm from the native breeders. There were some finely-bred bulls of the Jersey breed. The Kerry and Brittany breeds were both represented; of the former there were three cows and a bull, and of the latter four cows. These little animals are no doubt very useful in their respective districts, and the kerries were fortunately well represented. There was a class for single animals of any breed other than those already classified, or for mongrels and crosses, but it did not contain anything worthy of special notice. The corresponding class for bulls was more interesting, as all breeds competed for it except pure-bred Shorthorns and Jerseys. The little Kerry was by no means the worst, but the prize was taken by a level and well-furnished polled Norfolk, though of no great thick-ness. It is a pity this breed is so completely local, as it has merits both for feeding and for dairying. As several Alderney bulls competed in this mixed class whilst they had a class of their own it may be inferred that they were themselves a little mixed; we can put no other interpretation on it.

The champion prize for the best bull in the show, a silver medal, was of course secured by Mr. Linton for Sir Arthur Ingram; and we were informed that a gold medal had been awarded to Mr. H. Wodehouse for a group consisting of his bull Royal Havering 2nd, and his cow Countess, with her offspring. There were two curiosities in the shape of an Indian cow, and her offspring, and a cross-bred Indian and Alderney heifer, exhibited by Mr. J. G. Hay. The cow has the hump of the Zebu, and the yellow ears and poll, and also yellow spots down the spine, and yellowish streaks on the legs give presumptive evidence of descent from that animal. It is worthy of remark that the heifer has quite the Alderney cast of countenance, and has no hump. Both animals are white with black spots, and are very diminutive.

The goats were certainly not the least interesting feature of the show; and although we do not profess to be versed in the merits of goats, we could pick out those we liked best. Some of them were very pretty, especially the kids, amongst which was a pair of twins named Romulus and Remus. Most, if not all, of these animals were pets no doubt, and we may safely admit that the goats are very useful. But we are inclined to think that those who are loudest in their praises have not known

what it is to keep a goat or to live within half a mile of anyone who does. It is perfectly true that a good goat will give milk enough for a family, and when these animals can be kept within bounds in a suitable place no doubt they are profitable, and highly desirable in some cases. But those who have kept a goat on a farm where it has been allowed to run about, or who have allowed the cottagers to keep goats to run in the lanes where there is plenty of keep for them during the greater part of the year, will endorse our opinion that they are mischievous and destructive to a degree which is absolutely intolerable. They climb on outhouses and injure the roofs; they will spoil any thatch they can get upon; they kill all the young trees they can get at by "barking" them worse than rabbits; they will ruin a young fence; and, in fact, they are in mischief from morning till night. The author of the "Book of the Goat" says that "It is quite marvellous to think that with its many qualities the milk of the goat is so little known," and the explanation of this circumstance we take to be the fact of the many qualities of the goat being so well known. We know an instance in which a farmer had a goat given to his children as a pet, and he has informed us that from that time until the death of the goat—which occurred rather suddenly—he was a stranger to all the finer feelings of humanity, and his life became a burden to him. Our friend may have been over-sensitive or very irritable, but we do not hesitate to designate the goat an intolerable nuisance unless properly restrained—which our irritable friend declared to be an impossibility. Perhaps he did not try tethering.

Of the dairy products cheese takes the first place in the catalogue, as in the number and bulk of the exhibits. We have not compared the number of entries with those of previous shows; but there appeared to be a large show. All good judges, however, agreed that the English cheese was not equal to its usual excellence in quality, and the same fault has been found at previous shows of dairy produce this year. This may be accounted for by the great bulk of grass of poor quality forced by the wet weather of the spring and early summer. Hay is generally said to be of poor quality this year, and it is no more surprising that cheese made from the milk of cows fed on inferior grass should be of inferior quality than that the hay made from similar grass should be light and loose. We are of opinion that the generally poor quality of the cheese made this year may be thus accounted for, and it would be difficult to suggest a better reason. The exhibitor at dairy shows are some of the best makers, and it is not likely that they have all fallen off in the proper feeding of their cows or in the careful manufacture of their cheese. The tendency just now is the other way, especially as fine cheese is in great demand, while ordinary makes are at a discount. It is unfortunate that at the present show, which is successful enough to be much talked of, English cheese should have been comparatively poor, while the American cheese exhibited was of unusually fine quality. It is well known, however, that the Americans have not yet touched us in the finest makes of cheese, though they seem to be pressing on in that direction. While, then, what may be termed an accidental falling off in the quality of the English cheese should not be made too much of, the improvement in American dairying, which becomes more and more pronounced as time goes on, should be a warning to our dairy farmers to be on their mettle and to do their very best to meet the increased competition to which they are subjected. Many foreign makes besides American are growing greatly in favour in this country—notably the delicious Roquefort, the Gorgonzola, and other choice European varieties. It is satisfactory to find that the gold medal for the best specimen of cheese in the show goes to an English dairy

having been won by Messrs. W. and T. Allen, of Devizes, with a lot of Cheddars. The Cheshire class was better than some of the others, Mr. Mosford, Mr. Walley, and Mr. H. Siddon, who won the prizes in the order in which their names stand, having shown some cheese of good quality for the season. In the Cheddar class there were some very good, and some very poor samples. Those exhibited by Messrs. W. and T. Allen, of Devizes, which gained the champion prize, were very choice, and Messrs. Candy and Hoddinott, who were second and third in the class, and Mr. Padfield, who was highly commended, also showed cheese of good quality. The Derby and Leicester, the Gloucester and Wiltshire, and the "Other British Varieties" classes do not call for special notice. Coming to the class for American or Canadian cheese, were not at all surprised to find that the judges had pronounced it, as a whole, the best in the show. There was a special class for Stiltons, open to makers, merchants, factors, and dealers, and this was so poorly filled that the judges declared it to be a bad class, and withheld the third prize. The Cheese Fair, consisting of exhibits of not less than one ton, was well filled in point of the number of entries; but the general run of quality was decidedly low. Messrs. W. and T. Allen were first, Messrs. Sinclair and Co. second, and Mr. J. Padfield third. The foreign cheese—in which category the American were not included—attracted a great deal of attention. Some very choice makes were shown by Messrs. Webb, Noël, and other merchants and makers; but several of the classes were poorly filled. Another year, when the Dairy Show will have become more widely famous, a much better contribution from foreigners who desire British custom may be expected. It was a clever idea of Mr. Thomas Nuttall's (of Beby, Leicestershire) to dispose of his great show of Stiltons in the form of a model of Cleopatra's needle. This well-executed structure formed a picturesque object in the middle of the Hall, and attracted universal attention. A silver medal was awarded to Mr. Nuttall, who was also very successful last year.

There was a fairly good show of butter. Her Majesty the Queen won one of the first prizes, and the other prize-takers in the British classes were:—Mr. C. Cresswell, Messrs. Salter and Stokes, Mr. G. Davidson, Mr. R. Collings, Lord Latimer, Mrs. Carver, Mrs. Dumbrell, Mr. Ornston, and Messrs. Sandford, Stubbs, Hallett, Pyatt, Lascelles, Whitworth, and Duncan, and Major Ball. In several of the foreign classes there was no entry.

In the traders' class for the best show of dairy produce a Gold Medal was awarded to Mr. E. Noël, and a silver medal to Mr. J. Webb. Their stands were as interesting as anything in the Exhibition, containing as they did a great variety of British and foreign cheeses, some of which were very excellent.

A new and interesting feature in this year's show was the competition in designs and models of a dairy homestead. There were ten entries, and the first prize of ten pounds with a silver medal was awarded to Mr. Gilbert Murray, of Elvaston Estate Office, Derby, for his drawings of a very compact and convenient covered dairy homestead. The second prize of £5 and a bronze medal was given to Mr. Thomas Potter, of Grange Park, Aylesford, Hants. The question of covered homesteads is attracting much attention at the present time, and as these are bad times for farming, landlords will best consult their own interest by providing such buildings as are requisite in order to enable tenants to farm to the best advantage. Mr. Gilbert Murray, in the printed explanation of his design and its mode of construction, begins by insisting that it is "the first duty of a landlord to equip each holding on his estate with sufficient and substantial buildings for comfortably housing the farmer, the labourer,

and the live stock of the farm, and to furnish such other erections as are necessary in facilitating the preparation of food, and in aiding in the despatch and economy of labour." Probably in the near future it will not be necessary to decide the question of duty, as the powerful motive of self-interest will lead to the provision of premises required for making the best use of a farm. Mr. Murray goes on to explain the construction of his homestead as follows:—

Shelter and warmth are food economisers; although covered yards are still the exception, practical men are unanimously agreed as to their value and desirability. Landlords have hitherto rather shirked the question of covered yards, chiefly on account of the extra outlay they entail. Iron is now extensively used in construction, and is particularly well adapted for covering large areas with present prices—£8 10s. per ton for wrought-iron, and £5 10s. per ton for cast, and disposes of the objection of increased cost. In preparing the accompanying design we have endeavoured, as far as practicable, to secure a maximum accommodation at a minimum expense. The whole of the external walls, as shown on the plan, are of nine-inch brickwork, as are also some of the inside walls. All the internal divisions would be equally efficient and much cheaper if constructed of wood and iron. The whole of the fences or divisions are of ordinary gas pipe, supported by iron standards. We have used this fence extensively for the last eight years and find it both cheap and efficient. The stalls and mangers are also of iron; we disapprove of racks. The roof principals are of wrought iron, supported on hollow cast iron columns; the latter serve the double purpose of supporting the roof, and forming that of a channel to conduct the rain water falling on the roof to the drains below. The roof is purposely of as flat a pitch as practicable, with a view to economy. If we consider stability and economy there is no covering to surpass that of good slate; in the case of covered yards we recommend what is known as half-slating, not only on the score of economy but as affording better ventilation. Light and ventilation are essentially necessary to the health of store stock and dairy cows; the entire space is thoroughly lighted from the top. Sufficient ventilation is also provided, this can be regulated at pleasure. The buildings have been arranged with the view to strict economy of labour. The stalls are connected with the food-preparing department by a tramway. Water troughs are placed in each of the yards, unless a sufficient supply is available by gravitation. We would prefer using the steam engine to pumping into a reservoir, which would supply the different departments. The barn is small, and might probably be dispensed with altogether; we have provided for a fixed steam engine—in many cases a portable engine is more economical, as it is capable of being applied to a variety of uses. The farmhouse accommodation is better than that generally found on dairy farms of this extent; we find in the case of farmhouses it is better to be in advance of the times in which we live. The dairy accommodation is on a limited scale. Dairy farming is just now in a transition state; in all districts within a radius of five miles of a railway station, milk-selling is general. Cheesemaking in the farmhouse is fast disappearing; during the present year the average price realised by the milk made into cheese, in farmhouse dairies, will not exceed 5d. per imperial gallon. With these facts before us it would be injudicious to suggest expenditure which would incur the landlord and create a tax on the tenant. There are instances where a considerable expenditure on dairy accommodation is perfectly justifiable; we think it preferable to meet such cases as they arise rather than encourage a large outlay on buildings which may never be used.

There has been great delay in declaring the prizes in several departments of the show, and up to Saturday evening we were not able to obtain a copy of the official prize list. For the best collection of cheese-making apparatus for a dairy of fifty cows, to be shown in working order, Mr. Reuben Cluett, of Tarporley, Chester, obtained the prize. The apparatus was worked during the show. Mr. Cluett was also awarded a prize for a milk cooler. For butter-making apparatus the only prize awarded was won by Messrs. Bradford & Co. For

vehicles for the conveyance of milk four medals were given. There were no entries for the prize offered for the best collection of cow-house fittings, and for the prizes for the dairy appliances already mentioned the entries were strangely few. Another year we may expect much greater competition in this as in several other departments of the exhibition.

Amongst the stands of exhibition of dairy utensils and implements, cattle food, &c., we noticed those of Bell and Co., Oxford Street; Thorley, of London; Tipper and Co., of Birmingham; Waide, of Leeds; Fairbanks and Co., of London; Calvert and Co., of Manchester; Robbins and Co., of London; the Phoenix Cake Mills Co., of London; Richmond and Chandler, of Manchester; Carson and Toone, of Warminster; E. S. Hindley (small steam engines for dairy-farm purposes), of Bourton, Dorset; Day and Sons, Crew; J. Gibbs and Co., London; Lawrence and Co., London; Crowley and Co., Sheffield; Thomas and Taylor, Manchester; W. Gilling, London; Hill and Smith, London; Hancock and Co., London; Day, Son, and Hewitt, London; Alway and Sons, London; J. Unite, London; Bradford and Co., London; Thorley's Co., London; Greenwood, Hancock, and Co., London; G. Hathaway, Chippenham; and Delano and Co., London. As at agricultural shows generally, there were many stands filled with exhibits in no way specially connected with agriculture in any of its forms. One of the exhibitors of cattle food, Messrs. James Gibbs and Co., of London, Bristol, and Plymouth, provided an ample supply of their "Pure Feeding Cake" for the animals at the show, free of expense.

There was a large and excellent poultry show.

PRIZE LIST. CATTLE.

COWS.

Shorthorns, pure bred.—First prize and medal, W. H. Wodehouse (The Countess); second, E. C. Tisdall (Victoria); third, J. Stratton (Rosette). Reserve, Rev. G. G. Claxton (La Reine). Commended, T. Kingsley (Seraphina the Fifth), Her Majesty the Queen (Fawsley 10th).

Two Shorthorns, not eligible for Herd-book.—First prize, R. Stratton (Hannera 2nd and Fairy Queen); second, H. Hillier (Polly and Mary); third, B. St. John Ackers (Lady Belford and Beauteous). Reserve and highly commended, Stand Stud Company (Rosebud and Roseleaf). Highly commended, Aylesbury Milk Company (Aylesbury). Commended, A. Dibbins and Sons, C. H. Pyatt (Spot and Beauty), W. Thomas, Bradbury, Wingrove, and Co. (Jessie and Annie).

AYRSHIRE.

First prize, A. Rintoul, jun. (Lady Bountiful); second and third, G. F. Statter. Reserve and very highly commended, Stand Stud Company (Highland Lassie). Commended, G. Ferme and A. Dunlop.

JERSEYS OR ALDERNEYS.

First and second prizes, G. Simpson (Luna and Queen Bertha); third, F. Watson (Rose). Highly commended, Earl of Rosslyn (Pebble). Commended, Lord Chesham (Sophie III).

GUERNSEYS.

First, second, and third prizes, Rev. J. Watson (Grandeur, Florence, and La Rose). Highly commended, Rev. J. Watson (Placida). Commended, R. N. G. Baker (Young Nancy).

KEIRNS.

First prize, J. Robertson (Ivy); second, R. Good (Blackberry).

BRITANY.

First prize, J. C. Peters (Fannie); second, E. M. Vincent (Polley). Commended, J. C. Peters (Daisy).

ANY OTHER BREED (pure, crossed, or mixed.)

First prize, Mrs. M. Emerton (Florence); second, J. Welford and Son. Highly commended, J. Welford and Son. Commended, J. Welford and Son (Warwick); A Stapleton.

HIFTERS.

Shorthorns, pure bred.—First prize, J. Walter, M.P.

(Merrymaid); second, E. C. Tisdall (Frolic); third, G. J. Day, (Trifolium 5th).

JERSEYS OR ALDERNEYS.

First prize, G. Simpson (Luna); second, T. Lister (Blae Belle); third, E. A. Hambro and H. Smith (Bun-trec). Highly commended, G. Simpson (Celia). Commended, W. Alexander (Brownay).

ANY OTHER BREED.

First and second prizes, Stand Stud Company (Maggie); third, G. F. Statter. Highly commended, A. Dunlop (Barbara). Commended, G. Ferme, R. N. G. Baker (Lady Jane). Milking prize, G. Ferme (Ayrshire).

SHORTHORNS—BULLS.

First prize, W. Linton (Sir Arthur Ingram); second, T. H. Bland (General Fuzee); third, Stand Stud Company (Favourite). Very highly commended and reserve, W. F. Beavin (Hudibras). Very highly commended, R. Stratton (Protector). Highly commended, W. Herbert, J. and E. Denchfield, J. Stratton. Commended, J. Walter, M.P., J. Proud, B. St. J. Ackers.

JERSEY.

First prize, T. Lister (Sir Harry); second, G. Simpson (Prince Albert Victor); third, W. Hill (Rouanda).

ANY OTHER BREED

First prize J. J. Colman, M.P. (Rufus); second, G. Ferme; third, R. N. G. Baker (Prince Charley). Highly commended, H. M. Biddulph.

GOATS.

SHORT-HAIRED WITH HORNS.

Females.—Over twelve months.—First and milking prize, F. A. Crisp; second, R. Mart n (Nan); third, F. A. Crisp; fourth, J. T. Peacock.

LONG-HAIRED WITH HORNS.

Females.—Over 12 months.—First prize, Miss Jacobb (Nina); second, C. Daymon; third, T. Tax.

LONG OR SHORT-HAIRED WITHOUT HORNS.

Females.—Over 12 month.—First W. Chapman (Kit) second, J. Weston (Nancy); third, J. Hibbins (Minnie).

KIDS.

Females.—First prize, E. Dormer; second, H. M. B. Tritton (Lady Clara).

Males.—First prize, R. Martin; second, H. M. B. Tritton (Tom); third, D. Cowie.

CHEESE.

Cheshire.—First prize, G. Mosford; second, G. Walley third, H. Sidon.

Cheddar and Scotch Cheddar.—First prize, W. and T. Allen; second, T. Candy; third, J. W. Bell. Very highly commended, T. J. Moon. Highly commended, J. Hoddnot. Commended, J. C. Butler and J. Padfield.

Derby and Leicester.—First prize, Aston-by-Badworth Cheese Dairy; second, Brailsford Dairy Association; third, withheld.

Wiltshire.—First prize, W. and T. Allen; second and third, withheld.

Any other British variety.—Prize, medal, Miss Jacobb.

American or Canadian.—First prize, Hodgson Brothers; second, Q. R. Stubbs; third, Hodgson Brothers. Highly commended, Q. R. Stubbs. Commended, Hodgson Brothers.

Stilton.—First prize, T. Nuttall; second, J. B. Leadbeater; third, withheld.

CHEESE FAIR.

Not less than one ton.—First prize, A. Hiccock; second, J. W. Bell; third, J. Padfield.

FOREIGN CHEESE.

Dutch.—First and second prizes, Hastings and Nephew; third, J. Webb.

French.—First prize, L. Noël; second, J. Webb; third, K. Chamonat.

German.—Medal, J. Webb.

Italian.—First prize, G. Modeste; second, J. Webb; third G. Pessina.

Russian and Finland.—Prize, N. Verestschagin.

Swiss.—First prize, L. Noël; third, J. Webb. (No second given.)

BUTTER.

Fresh Aylesbury.—First prize, R. Fowler; second, Vandernersch and Co.; third, R. Coventry. Highly commended, T. Budsey.

Fresh (Devon).—First prize, C. Cresswell; second, Mrs. E. Carver; third, R. Sandford.

Any other variety.—First prize, Her Majesty the Queen; second, Lord Chesham; third, W. R. Stubbs; fourth, Mrs S. M. Dombrel. Commended, E. Budd, D. Mutton, R. Collings, Mrs. H. J. Smith, C. Hollands, Verischy and Co.

Butter Curca.—First prize, Salter and Stokes; second, E. G. Hallett; third, C. H. Pyatt.

Cured Butter.—First prize, G. Davidson; second, Major F. A. Ball; third, Lascelles, Merry, and Co.; fourth, Whitworth and Duncan.

Scotch.—Prize, Miss E. Ormston.

Welsh.—First, second, and third prizes, R. Collings.

FOREIGN.

Danish.—First prize, J. Webb; second, J. Cooper; third, J. Bowker.

Dutch.—First prize, Harmens and Zoon; second, J. Webb; third, D. Melntosh and Co.

French.—First prize, P. Houtier; second, W. Wales; third, E. R. Hume.

German.—None shown.

Italian.—First and second prizes, withheld; third, L. Noel.

Russian and Finland.—No entry.

Swedish and Norwegian.—Second prize, L. Noel; first and third, withheld.

Swiss.—No merit.

Any other variety.—No entry.

TRADERS' CLASS.

Special prize for the best stand of dairy produce.—First prize, gold medal, E. Noel; second, silver medal, J. Webb.

DAIRY APPARATUS, &c.

Milk cans.—Medal, W. Gellings.

Model or drawings of dairy homestead.—First prize, G. Murray; second, T. Potter. Commended, W. Norman.

Special prize.—Silver cup, T. Nuttall, of Beeby, for the excellent quality of his exhibits of Stilton cheese, forming an obelisk (Cleopatra's Needle).

Milk coolers.—Silver medal and £5, Loureance and Co.

Vehicles for the conveyance of milk.—Bronze medals, W. Alway and Sons; T. Blanch; W. B. Marchant; Aylesbury Milk Co.

Cheese making apparatus.—Prize, R. Cluett.

Butter making apparatus.—First prize, Bradford and Co.; second, not awarded.

GENERAL MEETING.

On Friday, October 11, the third annual general meeting of the British Dairy Farmers' Association was held in the upper Berners Hall, Islington, Colonel Burnaby presiding. There was a very good attendance of members, among those being Prof. Sheldon, Messrs. E. C. Tisdall, Finlay Dun, T. Nuttall, W. T. Carrington, Priestman, Alexander, J. Whittaker, J. Raffety, Stapleton, and H. S. Holmes-Pegler (Hon. Sec.), &c. As the minutes of the last annual meeting were not forthcoming, it was suggested to hold it as read. The minutes of the committee meetings held since Mr. Holmes-Pegler accepted the Hon. Secretaryship were read and approved.

The CHAIRMAN was sorry that the minutes of last general meeting were not forthcoming. He supposed they would require to act on the suggestion just made to suppose they were read. He thought it a pity the late Secretary was not present, as he should have been, to read it to them. In the circumstances he had no alternative but to suggest that the routine business be deferred till the paper was read.

This being then agreed to, the Chairman called upon Mr. Finlay Dun to read a paper on "Shorthorns as Milk Producers."

Mr. DUN, who was warmly received, considered that pure-bred Shorthorns were really the best breed for the dairy. By some this was doubted, but it would bear careful examination. The consumption of dairy products had increased amazingly, two-thirds being used as butter and one-third in the form of milk. In Scotland milk was used to a much greater extent than in England, and it certainly was a matter of some importance to indicate how the 3,000,000 living machines in the metropolis could be supplied with the requisite quantity of milk and butter. Mr. Dun then referred to the different

breeds of dairy cattle, pointing out that in many instances some breeds repaid the grazier much better than the dairyman. He had found that slow-feeding cows were good milkers and that quick-feeders produced indifferent milk. In Shorthorns there were different grades, and by some 5 gallons of milk per day were given. Crossed Shorthorns had proved very valuable as dairy stock and were much prized in the Midland Counties, but in London many liked the black and white Dutch cows, which, in his opinion, after a time fell away considerably and entailed a loss in selling out. The Irish went in for Shorthorns and Kerries, and in Scotland, especially in the West, Ayrshires. In Edinburgh, however, he believed that 60 per cent. of the dairy cows were Shorthorns, valued at from £25 to £30 each and giving from 5 to 6 gallons of milk per day. The great predominance of the milk-producing characteristics in all crosses was one of the best evidences that Shorthorn bulls had not been used unsuccessfully for the purpose. This characteristic the Shorthorn formerly possessed in a high degree. Impressiveness, fixedness, and intensity could only be obtained by judicious selection—by breeding for good points and eliminating all the objectionable qualities. Shorthorns were over one hundred years old. The foundation lay in the old Teeswater or Durham breed, and perhaps a little of the Chillingham Park blood was infused. The Durham cows, however, were famed for being excellent milkers, and the Collings Brothers, in their endeavour to improve the Teeswater breed, had capital materials with which to go to work. Their chief points were to remove coarseness and impart quality. Fancy prices could hardly be said to exist in those days, although in 1810, at Charles Colling's sale, as much as 200 gs. was given for a cow, and one of her daughters sold for 400 gs. The average of that sale was 150 gs.; and in 1818 the average of Robert Collings' sale was 125 gs. Mr. Bates had also done much to improve the Shorthorn and develop her milking qualities, and though in 1850 his 14 animals only made an average of 116 gs., they had multiplied in number and increased 20 times in value. The Messrs. Booth also had been exceedingly successful breeders and their produce was highly respected in the dairies of Scotland and Ireland. There were no less than 600 breeders in the United Kingdom, and over 20,000 cows, and the popularity of the Shorthorn was in no way diminished, for the other day Mr. Stratford obtained an average of 1,700 gs. at Holker, and Mr. Thornton 600 gs. at Dunmore two years ago. Registration had done a great deal to preserve the purity of the Shorthorn. The foundation rule was to prevent overfeeding and undue obesity, and in every way to promote the milking properties. There was nothing to compare with a good pedigree Shorthorn as dairy stock. It was believed that a cross between a Shorthorn and Hereford made a good distinctive breed, but in his opinion none of these dissimulars answered well for breeding, in which great caution and judgment were required. Mr. Dun had a note from a gentleman who said that he could "not fly in the face of royal judges and go in for milk," and was therefore bent on feeding for show and sale. Pure-bred Shorthorns gave richer milk, and the quality of cream was affected thereby. Money invested in a few good Shorthorns for dairy stock would in ten years give a better return than any other breed. Mr. Dun, in conclusion, wished the British Dairy Farmers' Association to give the claims of the Shorthorns a little more consideration, and carefully select the qualities that would increase the milk supply.

Before the discussion several new members were elected.

The CHAIRMAN also stated that he had written to Lords Penrhyn, Fitzhardinge, and Skelmersdale, but as yet had no reply. If a favourable reply was received he hoped their names would be incorporated along with those already proposed.

Mr. W. T. CARRINGTON, in opening the discussion, said he had listened with pleasure to Mr. Dun's paper, and was disposed to agree with his conclusions for ordinary English dairy stock. He thought the most probable way to manage a dairy farm was to use pure-bred bulls from good milking families. An American writer discredits Shorthorns and advises his readers to try Ayrshires for milk; but his opinion was that they could get all the milk requisite from the Shorthorns as it was the best breed of cattle they had.

Mr. E. C. TEESDALE was well pleased with Mr. Dun's paper. It appeared they consumed more milk in Scotland

than they did in England. Perhaps that was the reason why the Scotch were harder in the head and stronger in the muscle than English people. He had bred Shorthorns in his dairy six years and had been fairly successful. Instead of well-bred bulls deteriorating dairy stock, they had quite a different effect if the bull used had been selected from a celebrated milking tribe, such as the Princess. He thought dairymen might improve their stock, and increase their milk supply by giving a few pounds more for pure-breds. He was sure the value of milking properties over fattening had yet to be realised, but he believed the Association had done a great deal towards directing the attention of members to the fact, and the present show was the most instructive they had held, and must have a good tendency.

At this stage Col. BURNAY stated that good soldiers never deserted their colours, but he was sorry to say he had to go. Indeed he had had to get permission to be present at their meeting, as he was under orders to proceed to New York that evening. He had no doubt his respected friend, Col. Kingscote, would be happy to act as president next year, and if it was agreeable to them he should be happy to acquaint the late president of the Royal Agricultural Society that such was their wish. (Applause.) He proposed that Mr. Tisdale take the chair in his absence.

On the motion of the Honorary Secretary, a hearty vote of thanks was passed to the gallant colonel, also wishing him a safe journey.

Mr. RAFFERTY then read the report of the Committee, to the effect that the present was the best show the Association had held, that the Association was in a prosperous condition, and that the medals and prizes would be presented this afternoon (Monday). He also mentioned that the statement of accounts would be presented to the members after the show.

The discussion of the paper was again resumed by Mr. Alexander, of Stepney, who took exception to the remarks about Dutch cattle. Those who kept them found they fetched more at sale than when bought in young. For the wholesale London cowkeeper, they were the most profitable animals he could tie up in his sheds.

Mr. T. NUTTALL (Beeby) had heard Mr. Tisdale's paper and also that of Mr. Dun, but he should like Mr. W. T. Carlington to give his experience in a more durable form than he had done that day.

Mr. STAPLETON considered that such papers as that of Mr. Dun were calculated to do good. Cowkeepers were shown how to increase their milk supply and the milking qualities of their stock. He agreed with Mr. Tisdall that by tracing back they could restore improved milking qualities to their Shorthorn dairy stock, which had been lost by years of neglect.

The CHAIRMAN moved a vote of thanks to Mr. Dun for his interesting paper.

Mr. WHITTAKER moved "That the paper and discussion form part of this year's *Journal*," but on the suggestion of the Chairman this matter was left to the Committee to decide.

Mr. DUN in reply said that dairy farming had developed enormously during the last 20 years, and was still developing. There was still room for more milk, butter, and dairy stock. As they were at present flooded with American meat there was an admirable opportunity to convert damaged wheat and light barley into beef, mutton, and dairy produce. Lanced and decorticated cakes were never cheaper than they are now.

The CHAIRMAN moved that "As the committee are unable to present the financial accounts, this meeting stand adjourned *sine die*, and that one notice be sent to the members."

This was agreed to, and a vote of thanks to the Chairman terminated the proceedings.

CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

The *London Gazette* of October 8 contained the following:—

The Lords of the Council have licensed the local authority for the borough of Liverpool, to destroy, under Article 21.—(2.) of "The Animals Order of 1878," the carcasses of animals, horses, asses, or mules that have died or been slaughtered as therein mentioned, the same to be destroyed in manner therein prescribed, at the following place (that is to say):

At certain premises in the occupation of George Jordan and situate at No. 268, Great Howard Street in the borough of Liverpool, in the county of Lancaster.

The Lords of the Council have licensed the local authority for the Metropolis, to destroy, under Article 21.—(2.) of "The Animals Order of 1878," the cases of animals, horses, asses, or mules, that have died or been slaughtered as therein mentioned, the same to be destroyed in manner therein prescribed, at one or other of the following places (that is to say):

At certain premises in the occupation of Messrs. John Harrison and Company, and situate at Belle Isle, York Road, King's Cross, in the county of Middlesex.

At certain premises in the occupation of George Ebenezer Stronach, and situate in Brandon Road, York Road, King's Cross, in the county of Middlesex;

At certain premises in the occupation of William Barber, and situate in Little North Street, Whitechapel, in the County of Middlesex;

At certain premises in the occupation of Messrs. Winkley and Shaw, and situate in Green Street, Blackfriars Road, in the county of Surrey;

At certain premises in the occupation of Messrs. Nichols and Son, and situate in Kent Street, Borough, in the county of Surrey; and

At certain premises in the occupation of Messrs. Wallis and Milestone, and situate in Garrett Lane, Wandsworth, in the county of Surrey;

The licence issued on the 30th day of November, 1869, licensing the following premises where horses or animals might be destroyed under Section 60 of "The Contagious Diseases (Animals) Act, 1869," has been revoked by the Lords of the Council:

At certain premises in the occupation of George Jordan, and situate in Great Howard Street, in the borough of Liverpool, in the county of Lan-aster.

The licence issued on the 15th day of March, 1870, licensing the following premises where horses or animals might be destroyed under Section 60 of "The Contagious Diseases (Animals) Act, 1869," has been revoked by the Lords of the Council:

At certain premises in the occupation of Messrs. Harrison and Company, and situate in Maiden Lane, Belle Isle, in the county of Middlesex;

At certain premises in the occupation of George Ebenezer Stronach, and situate in Brandon Road, Belle Isle, in the county of Middlesex;

At certain premises in the occupation of William Barber, and situate in Little North Street, Whitechapel, in the county of Middlesex;

At certain premises in the occupation of Messrs. Winkley and Shaw, and situate at No. 35, Green Street, Blackfriars Road, in the county of Surrey; and

At certain premises in the occupation of Edward Wallis, and situate in Garrett Lane, Wandsworth, in the county of Surrey.

The licence issued on the 16th day of January, 1871, licensing the following premises where horses or animals might be destroyed under Section 60 of "The Contagious Diseases (Animals) Act, 1869," has been revoked by the Lords of the Council:

At certain premises in the occupation of Joseph Moggridge, and situate in Pleasant Vale, Belle Isle, Brecknock Road, in the county of Middlesex,

The licence issued on the 21st day of August, 1871, licensing the following premises where horses or animals might be destroyed under Section 60 of "The Contagious Diseases (Animals) Act, 1869," has been revoked by the Lords of the Council:

At certain premises in the occupation of Sarah Nichols and situate in Westcott Street, Kent Street, Southwark in the county of Surrey.

Privy Council Office, 5th October, 1878.

EMIGRATION OF PAUPER CHILDREN TO CANADA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—It appears from a paragraph in an English paper that Miss Rye is very sore at the refusal of Mr. Selater-Booth to sanction the emigration of pauper children to Canada, and that she intends to "have it out" with the Local Government Board, when Parliament opens, backed up as (she says) she will be by "influential" people, "including the Earl of Derby."

The action of Mr. Selater-Booth and of the Local Government Board will, however, entirely commend itself to unbiassed persons acquainted with the facts, and Miss Rye had better quietly accept the situation. A recent official communication from the Toronto St. George's Society to the Hanover Square Board of Guardians is only one of various evidences which could be adduced that Miss Rye's "philanthropic" work is looked upon with disfavour and mistrust by many people in Canada—natives and old-countrymen—who may fairly claim to be as disinterested and as solicitous for the well-doing of destitute children as Miss Rye and Miss Macpherson. As your influential Journal finds its way to many members of local Boards of Guardians, and as the subject is one of much importance, I trust you may be able to find space for the following remarks:—

As regards emigration to Canada in general I am reluctantly compelled to endorse the opinion of Mr. Howland, a name of no small weight in the Dominion, who, at a public meeting some time ago, said there was no justification for those engaged in its promotion "so long as the Dominion could not find employment for its own people," a condition of things I regret to say which has prevailed all the years I have known the colony. Many thousands of young men, though bone and sinew of the respective Provinces, annually expatriate themselves, never to return, because there is no employment for them in their own land. To labour to lure British emigrants to the country under such circumstances is to do a wrong both to them and to Canada, and is as logically inconsistent as it is unjust and injurious.

But my views on the special branch of the Canadian emigration "business"—as it is often called in Canada, and not inappropriately—fostered by Miss Rye, Miss Macpherson, and others, have long been more decided, if possible, than my views on Canadian emigration in general. When Mr. Doyle in his able, impartial, and exhaustive report observes, "I was frequently unable to recognise any marked contrast between the condition of pauper children in Canada and of the same class in England," the assertion, under-stated rather than over-stated, may seem strange to those whose ideas of the colony are derived from flying visits or from emigration lectures and literature. But it is true, and goes to the root of the matter. In view of Miss Rye's proceedings the English public may have concluded that street Arabs and gutter waifs are commodities unknown in Canada. But this supposition is incorrect. Not only are there juvenile outcasts in Canada, but they are in such numbers that it is incomprehensible to many Englishmen and others in this colony why Miss Rye conceives it necessary to compass sea and land to import more—whether for "apprenticeship" or "adoption." I will now briefly formulate the leading objections which may be assigned by those opposed to the work of Miss Rye and Miss Macpherson as altogether a labour of supererogation.

1. They object to it because, as Mr. Pell, the estimable Secretary of the Toronto St. George's Society, has shown, the Canadian labour market (male and female, adult and juvenile) is fearfully overstocked. It always is more or

less in that condition; but now, as for some years past, through trade-depression, and a recklessness in promoting immigration beyond conception or explanation, it is worse than usual. To those whose ideas of the Colony are derived from pleasure tourists or emigration lectures, and shipping agents, it may seem strange to be told of a chronic surplus of labour in Canada: but conclusive evidence can be easily forthcoming on that point. I will here only quote from a handbook on emigration published by Messrs. Alex. Ireland and Co., of Manchester, in 1870, and written by Mr. Malcolm Macleod, a name well-known in artisan circles in England. He says (page 34), "In Canada a working-man is not nearly so independent of his employer or foreman as elsewhere. As there is comparatively little trade there is more competition among manufacturers and employers, and as there is, perhaps, a great overplus of labour the workmen suffers all the indignities which have driven thousands from their native land. . . . Taken as a whole I must agree with what I have often heard, viz., Canada is a poor country for an emigrant, and all I have ever seen there confirms this." I regret to say my observations, during years of residence in Canada, have led me to endorse these conclusions. It must be borne in mind on this head—that as Mr. Anthony Trollope has well pointed out in his letters from Australia—the colonies are to be studied and regarded, not chiefly with reference to the life-interests, and well or ill-being of their monied class, but in their aspect, such as it may be, of a new, improved, and happier field for the working classes of Great Britain. This, as Mr. Trollope urges, is the one standpoint the colonial visitor or student must take; whereas, as things usually go, most of those who talk of the "colonies" in Britain, and almost all who in the colonies, talk of themselves, think but little of the outside multitude, and have their minds chiefly occupied with the life interests of squatters, mine-owners, M.P.'s, bankers, loan-mongers, ambitious tradesmen, placeholders, and Governors.

2. They object to Miss Rye's work because there is an abundant indigenous supply of the raw juvenile material going to the bad post-haste, and ready to hand for philanthropists to work upon, without looking to Britain. Charity begins at home.

3. They object to it because if Mr. Doyle could find no marked contrast—favourable to Canada—between the outward condition of the pauper children of Canada and England, far less, they are constrained to say, can anybody discover any marked favourable contrast in the moral status of their respective population, juvenile or adult.

4. They object to it because, in the opinion of many persons well acquainted with the Dominion, it is not a specially favourable country to bring up young people in. Girls and boys are exposed to more temptations, and have more license, than at home.

5. They object to it because there is practically no supervision over the children after they are placed out in Canada; and because the "inspection" which, after much pressure, the Government has grudgingly made-believe to concede—being an inspection by the Local Emigration Agents—is nominal and delusive.

6. They object to it because they entirely hold with Mr. Selater-Booth that pauper children in England are better circumstanced, better educated, better looked after, better trained, and better off, every way, under the public provision, and the governing bodies instituted on their behalf, than they are or can be in Canada, where they are left to rule of thumb, and haphazard.

7. They object to it because there is always an inexhaustible demand for girls and women in domestic and other service in England, under circumstances of less servile labour, less rigorous climate, and less trying conditions of life than in the Dominion, where moreover the same demand does not and cannot exist.

3. They object to it, finally, because the educational system of Canada, though good theoretically, or on paper, is in practice imperfect and ill-administered—as the annual reports of the School Inspectors show—and consequently admits of very many thousands of children, even of those supposed to be well cared for, growing up without any education worth the name. Pauper juvenile immigrants are therefore likely to be even more neglected.

If Miss Rye, Miss Macpherson, Mr. Armand, the Chief Canadian Immigration Agent in London, or any of the other official agents in England are disposed to contravert all or any of these propositions I am ready to "have it out" with them collectively or individually, and to place facts before the English public on these points *seriatim*, which the agents and interests will find it difficult to meet.

I am, Sir, &c.,
Canada, Sept. 23. ANGLICO-CANADIAN.

The following is the letter of Mr. Pell, Secretary of the St. George's Society, referred to above:—

"Office of St. George's Society, 7, Louisa Street, Toronto, August 8.—To the Chairman of the Board.—Sir,—The enclosed item of a printed statement that twenty young girls were to be offered by the Board to Miss Rye to take out to Canada at the end of this month I have cut from a Toronto paper of this date. I fill the position (and have done for many years) of honorary executive officer of the above Society, and am well known to Miss Rye and other kindred ladies. I beg leave most respectfully to offer to you my most solemn protest against the continuance of Miss Rye's work, which is keeping this country overflowing with pauperism. Our Boys and Girls' Homes are filled to repletion because situations cannot be found for the children. There are families upon families in our cities—men, women, boys, and girls—in destitution and want, for lack of employment, and there are hundreds longing to get back to England. Yesterday I had applications from five families for assistance to return, and I assisted three of them, viz., a man, woman, and six children; a man, woman, and three children; and a man and two girls. As to Government inspection or attention to cases of want, it is the veriest nonsense to talk of it, for even at the present time immigrants (few as they are) are just kept at the Government sheds forty-eight hours and then turned adrift. If Miss Rye is sincere in her work as a philanthropist, and Canada is the country she wishes to serve, let her assist us first in disposing of our superabundant boys and girls, and then, should the need arise to import some from England, I will (D.V.) be ready again to assist her. In the meantime, I most respectfully pray of you not to encourage her in the matter. I have the honour to be your very obedient servant,
(Signed) J. E. PELL.

Honorary Secretary."

THE CONDITION OF CANADA.

SIR.—Whatever I have written to you or to others, either in England or Ireland, was and is *bona fide*. I have taken my statistics from Toronto and Quebec papers and from my own personal knowledge. This spring the *Toronto Globe* deliberately stated that there was work for 200,000 labourers in this Province, when thousands in Toronto and elsewhere were unemployed and starving. A short time after Premier O'Mowat wrote and informed a deputation of working men that the labour market was greatly overstocked, and we had then, as now, agents in England, &c., telling the most barefaced falsehoods. Moreover, the *Globe* was sent in large numbers to England and gratuitously circulated in the agricultural districts. It also stated that 300,000 emigrants came to Canada last year chiefly by New York, when only 7,000 came and 5,000 returned, leaving 2,000, for which we paid 350,000 dollars. The secret of such a falsehood was that the money had been misappropriated. My figures are correct, and what I have written I am prepared to prove.

We are building a Provincial Exhibition (by extra taxation), and numbers have got work, which will last another fortnight; then there will be more unemployed

than I stated in my last, with not the slightest prospect of getting a day's work this side next June for more than two-thirds of the n. I have been in the Western parts of this Province since I wrote you last, also in Michigan and Ohio, and came in contact with over five hundred farmers and small settlers, and found only eleven labourers engaged by the year; yet our agents tell the poor labourer to be sure to engage with a farmer for twelve months, so as to provide for the first winter. The following is the exact number of Canadian-born residents (chiefly young men) in the States last Census:—Alabama, 183; Arkansas, 312; California, 10,660; Connecticut, 10,861; Delaware, 112; Florida, 171; Georgia, 217; Illinois, 32,550; Indiana, 1,765; Iowa, 17,907; Kansas, 5,321; Kentucky, 1,082; Louisiana, 714; Maine, 26,788; Maryland, 641; Massachusetts, 70,055; Michigan, 89,590; Minnesota, 16,398; Mississippi, 375; Missouri, 8,448; Nebraska, 2,635; Nevada, 2,365; New Hampshire, 12,935; New Jersey, 2,471; New York, 79,012; North Carolina, 171; Ohio, 12,988; Oregon, 1,187; Pennsylvania, 1,022; Rhode Island, 1,012; South Carolina, 77; Tennessee, 587; Texas, 597; Vermont, 28,514; Virginia, 531; Wisconsin, 25,666; Territories, 5,000.—Total Canadian-born in the States, 487,000. Add to these those since the Census and the majority of emigrants from the British Isles who have left here in disgust, and then your readers will see the benefit of being governed by a set of fellows many of whom cannot lay claim to a decent education.

The majority of our farms are utterly exhausted of potash and phosphate by wheat after wheat being sown, until we grow the finest crop of weeds in the Empire! These are the farms which we have to offer to tenant farmers with small capital. The soil has been so robbed that we seldom grow more wheat than enough for our own consumption, and never enough pork. In our yearly list of exports we appear to sell a quantity of farm produce, but the greater part is merely going *through* Canada. See our list for 1877:—

	IMPORTS. Dollars.	EXPORTS. Dollars.
Wheat	4,816,000	4,102,000
Flour	2,961,000	1,525,000
Indian-corn ...	4,259,000	2,583,000
Pork	2,104,000	1,735,000
Swine.....	181,000	11,000

A COMPARISON BETWEEN THE CANADIAN DUTIES AND THOSE OF THE UNITED STATES.

	Canadian duty.	United States duty.
Wheat	free	20 cents per bushel.
Rye and barley	free	15 " "
Indian-corn and oats.....	free	10 " "
Wheat-flour	free	20 per cent.
Rye-flour and corn-meal free	11 " "	" "
Oatmeal.....	free	½-cent per lb.
Live animals.....	20 per cent.	20 per cent.

More than two-thirds of the live stock brought to Liverpool, Glasgow, &c., as Canadian come from Texas, Illinois, Michigan, Ohio, &c. They remain in Canada a short time to be primed with the dregs of our distilleries, and then you receive them as Canadian—which has caused many poor labourers to sigh for the flesh-pots of Ontario.

Brother Jonathan has paid over 9 hundred million dollars off his National Debt since the war, and during the last five years over 3 hundred million; while we have added 11½ million dollars to ours and increased our taxation 3 million.

I am, Sir, &c.,

THOMAS FROST,

Many years a schoolmaster in England.

Toronto, Canada, Sept. 11.

OUR STIFF CLAY DIFFICULTY—HOW IS IT TO BE MET AND OVERCOME?

According with my thirty years' experience, the true way to conquer these soils and make them profitable is by very high farming—that is after under and surface draining, to feed them abundantly with rich cake-fed manure, made under cover, and thence at once carried to the land without any intermediate dunghap, adding, for a great mangrel crop, some 3 cwt. of Peruvian guano and 1 cwt. of salt. For a full wheat crop after mangrel apply 2 cwt. of guano and 1 cwt. of salt, intermixed before sowing, and applied at seed-time. I once grew 7 qrs. of wheat after heavily manured mangrel, and never expect less than 5 qrs. per acre. All this implies that we have plenty of cattle-making manure under cover both summer and winter, for which ample capital must be found. Our red clover is first moved for hay, then immediately top-dressed with 12 cartloads of fresh-made rich cake manure, direct from the covered yard. When the second growth of clover comes well above this manure, fattening sheep are folded on it, consuming cake, corn, malt culms, &c. The land is then "saucy" for white wheat, which must not exceed one bushel of seed per acre. After the white wheat is harvested we take on the same ground a crop of Rivetts, and then mangrel heavily manured. In 1868, a good wheat year, I thus harvested 8 qrs. per acre of fine white wheat, sold from the machine at once at 63s. per qr., and on the same ground grew in 1869 $7\frac{1}{2}$ qrs. of Rivett wheat, followed by 39 lb. of mangrel. These heavy dressings and large crops are a certain cure for stiff clays, for they diminish greatly the *pro rata* fixed charges of rent rates, tithes, seed, and manual and horse labour. Poor farming and small returns on such soils are ruinous. It would be better not to farm at all than to do so with insufficient capital. These non-calcareous, glutinous clays, which crack in drying, and are therefore unfit for the ordinary brick making, they are like birdlime when wet, and extremely hard when dry. Sheep cannot be folded on them in the wet season. Carting roots off and carting manure on is no easy task at times. These clays soon run into a mud condition if water stagnates in them; therefore the most important conditions are under and surface drainage, to plough them before winter, taking especial care, even where underdrained, to keep open furrows and water-furrows to withdraw water quickly from the seed-bed, and thus preserve, as much as possible, its friability. I knew of some large farms in Essex on these clays which caused heavy loss to farmers who came from a friable or drier district, and who have laid these lands on the flat, and have thus lost their crops in the mud. I know of such farms, even where underdrained and fairly manured, which have failed for want of open surface-furrows, especially where deeply steam-ploughed. A farmer, used to a friable dry soil, workable at almost any time, feels perplexed and annoyed on our stiff clays, where horses or steam ploughs cannot go on the wet land for many days until a propitious change. A wet, frostless, winter on such soils causes much idle time for men and horses. Frost (when we can get it) is the grand and uncostly pulveriser of such soils. I once ploughed part of a field when wet for oats; frost did not come, so the furrow slices dried as hard as cast iron, and were too obdurate even for my Crosskill, so as rain did not come in time we could not sow our oats until too late to get a crop. Strangers could hardly realise such a condition of soil, and should, therefore, consult local practice. Where steam ploughed in autumn on the flat, local farmers immediately draw out open furrows (at a distance of 7 feet in Essex) by the ordinary horse plough, to keep the land dry during winter, so that for spring sowing it would only require broad-winter, so that for spring sowing it would only require broad-winter or scarifying. Spring ploughing for root crops in these dense soils is a very hazardous affair now. Farmers are finding out that very deep cultivation with the powerful steam plough is a costly mistake. Too much of the bad sub-soil gets mixed with the seed-bed. Steam ploughs are now much used in this neighbourhood, but at diminished depths. These dense clays are unsuited for permanent pasture, but grow fine crops of red or white clover, winter tares, and especially mangrel wuzle. The climate is too dry for swedes, especially mangrel wuzle. The climate is too dry for swedes. Cabbages do well. Winter wheat and Tartar oats thrive, but the land is too stiff for barley. No rye-grass is sown with the clover, which is only taken for one year, and followed by winter wheat, which has an abundance of straw. The land

for mangrel should be very heavily manured with covered yard manure, ploughed under before winter, and only scarified in the spring, receiving an addition of 3 cwt. of Peruvian guano and 1 cwt. of salt. Very heavy crops of mangrel (30 to 40 tons per acre) may thus be grown on these soils, while swedes would generally be mildewed and a failure. Covered and enclosed yards are the great panacea for such soils. In these cattle should be fed winter and summer as manure-makers on cut up green food or pulped roots, mixed with plenty of cake, corn, &c. Horses should also have cut up and prepared food. Sheep do well in winter under cover, either on straw or sparred floors. They do not get foot-rot in covered yards, although they do so in uncovered yards. These stiff soils are impracticable for sheep in winter. I fatten them very successfully under cover, but they require less warmth than cattle. The great advantage of covered yards is economy of straw, preservation of manure, which should go direct to the field, 10 loads of it being equal to 15 of dung heap or open yard manure. Thus there is a great saving of horse and manual labour. My neighbours are at length availing themselves of them. With proper ventilation, and a slight daily littering, animals in these yards are especially healthy. I have experienced this for fully 30 years. By covered yards these heavy lands become meat-makers, which I consider most important. I make meat to get manure, and thus obtain maximum corn and other crops. Such arable farms require much tenant capital—£15 to £20 per acre would not be too much, to produce the most profitable results. It is a great mistake to take such farms with only £8 or £10 per acre. The amount invested in live stock alone should be at least £6 per acre, much of it fed on imported food. It is surprising how far a good green or root crop will go if passed through the cutter or pulper. It pays better than turning out and roaming at large. Iron hurdles on wheels for sheep pay well. In conclusion both I and my bailiff are fully convinced that this farm could not be profitable at present prices with uncovered yards, the roaming at large of animals, and the undrained and still fields of ancient custom. I feel for those who still have to farm under such adverse conditions. The extra £1 of rent for all modern improvements is the key to profit.—J. J. MERRITT.

THE AGRICULTURAL DEPRESSION.

It would be well if the present pinch of bad times would direct attention to the relations of agriculture with the prosperity of the State. In times when manufacturing industry fills the mouths and pockets of its votaries farming is looked upon as a luxury, and the land principally as a play ground. It is only when the more rapid mode of making riches fails or seems to fail for the moment, that the slower, if more certain modes of earning a livelihood may expect to receive adequate attention. It needed an Irish famine to abolish the Corn Laws, and it industrial distress would do the same kind office for certain of the Land Laws the present evil might be welcomed for the sake of the future good. The tendency so prevalent, among members of Parliament especially, merely to scratch the surface of public questions gives little hope of such a reform being effected, or even of the country being made ready for it very soon. The eye wanders wearily and in vain over the oratory of the recess for some dealing with the first principles of things, for some grappling with the questions of the future, for some suggestiveness of fancy or originality of thought. Beyond criticism of the most hackneyed kind, and mere negatives stuffed out with the windiest of words, there is nothing. Literally nothing, but vanity. The well-worn subjects which occupied the attention of Parliament are duly gone over—a dreary catalogue of common-places, with comments on the margin altered to suit the party ties of the speaker, but otherwise remarkable only for their sameness. One would think that the necessity for referring so often to the Cattle Diseases Bill would suggest to some one the desirability of Great Britain being less dependent upon foreign sources for its meat supply, by being made to produce more within itself. To most such a point in Parliament might be out of order on the discussion of a measure dealing with quite another branch of the subject, but surely it would be quite in order at agricultural dinners and other more formal meetings of Members with their con-

stituents. Every day we hear of the high price of meat and bread, and provisions generally, which come or should come, from the English farmyard or poultry-yard. Every day we hear of bad trade, of failing industries, and a market glutted with labour. Things are out of joint, but all we hear of to set them right are discussions on such points as "over-production," or the limitation of population, or a return to longer working hours, or reductions of wages, all which, even at the best, may be expected to be but temporary expedients, and evils scarcely less than those they pretend to cure.

It is not pretended that the land produces so much, or anything like so much, as it ought to do under healthier arrangements between landlord and tenant. The figures on this head are incontrovertible. The truth is that the land in England is used for the convenience of the rich. From a pecuniary point of view, it is neither a very good thing for the farmer nor for the landlord nor for the public. It is a luxury bought at a fancy price, has been throughout large portions of the country let out at a fancy price for many years, and is burdened by conditions which render its produce smaller in quantity and therefore dearer in price than would be the case were ordinary commercial laws allowed to have free scope. It might be argued that high rents would cause the farmer to take as much out of the land as possible, in order that he might live. So he does. But he has already paid so much for the right to farm that the high cost of production is a new tax which the public have to pay. Besides, he must be careful in laying out his capital on a farm which he may have to leave at the best in a few years without compensation, and at the worst at a year's warning in cases where there is no lease. This forms another tax which the public have to pay. The money goes "where the money is" that enabled the proprietor to become the fortunate possessor of a portion of the soil. The Law, which locks up land in families, and adds acre to acre and square mile to square mile till half a county is owned by one person, and one person owns land in half a dozen—keeps the power in the same hands from generation to generation, and wealth, which should flow freely and be distributed naturally, is artificially confined to one channel, and all beyond its boundaries suffer. The huge landed estates of this country, and the policy by which they are administered, are, together, making of England one great crowded artificial community, stifling in workshops a few hours a day, and late loose in the evening, with nothing to bind them to the State but a purely commercial relationship with an employer which circumstances may break to-morrow. The French peasant may well be a patriot. The stake in his country's prosperity is perpetual, tangible, can be felt and handled. He might well welcome Napoleon when he said the "Empire was peace"—peace to him is the *beau idéal* of liberty. We shall not place the English peasant, without a rood of land, lower in the scale of patriotism than the Frenchman with his vineyard or his little farm, but that is creditable to the peasant, and not the system under which he lives—an argument in favour of giving him a deeper interest in the country to which his instincts, if not very powerfully his interests, tell him to be true.

The relation of the farmer to the Legislature has always been a peculiar relationship in this country. In the agricultural returns just published it is remarked that fewer farmers now refuse to give particulars of their crops than was the case when the system of collecting those returns first began. Large numbers of farmers had the notion that the desire of the authorities at head-quarters to pry into their affairs boded no good, probably some addition to the taxes, possibly something worse, but taxes were the main dread. Even so late as last year some farmers revenged themselves on the "powers that be" by refusing particulars of their crops because they had been taxed for their dogs—a fact which is interesting principally as showing the kind of material that has to be dealt with before a really effective movement for Land Reform can be set on foot. Farmers have always disliked any interference of the State. They have no objections to take compensation for cattle slaughtered in the interests of the public, but the typical Old World tiller of the soil would much rather go his own way and do his own deed, and be independent of interference. One authority—the landlord—is quite enough to have to deal with. It must be admitted that with him the British farmer has shown an amount of patience, while it would have been for the public interest had it been less. The conditions a farmer binds himself to

perform in his lease, where he has one, are in many cases as difficult to observe as the Ten Commandments. As a reforming agent the world owes little to the farmer. He has asked for little, and he has received in proportion. At the present moment he has a franchise all to himself. Until lately he could do with his neighbour's children as he pleased, undeterred by factory inspector and unmolested by School Board officer. It is true encroachments are being made upon him, but he shows no anxiety to take up with the new ideas of this new time. He finds it hard enough to live, but he has no liking, or not much, to have his hands going to ballot along with him, and he does not see that he will never be able to break his thralldom without their votes. He is as slow to avail himself of political ideas as he is of new inventions for the cultivation of his land. This is, however, the direction in which it would be well to look for some relief from the pressure of times like the present.—*Edwin.*

BEEES AND FLOWERS—In gardens the violets, wall-flowers, stocks, lilacs, hawthorns, and numerous other sweet flowers are alive all day with the hum of the busy workers, and this continues on all flowering trees and shrubs until the flowering of the lime, the most favoured of all honey-making trees. From this time flowering plants alone can furnish the needed store, and as, especially in moist districts, myriads of wild plants bloom late in summer, no doubt these are being put under contribution. There is a tradition that the wild heather in autumn furnishes for the bees the most ample stores of food, but this is localised, and I have heard it gravely disputed as to whether it is really from the heather or from the wild flowers that grow among it that the bees get their chief supply. No doubt the sweet wild thyme, that flowers so freely on the uplands, both on pastures and on heathly commons, with kindred plants, are good honey producers, but it would hardly do to dispute the accepted axiom that bees do obtain large stores from the heather, because in some districts it is the practice to take the stocks into the heathery wilds for several weeks and that these are brought home again overlaiden store-houses of honey. In market-garden localities the large breadths of the scarlet and white runners are most valuable bee grounds, they bear these flowers in myriads and their hum is heard amongst them all the day. Probably the runner is one of the best honey flowers to cultivate because of its value as a food-producing plant. In gardens, besides the mignonette, of which where bees are kept a good breadth should be grown, I find the blue cyanus or corn cockle much frequented, as also are the balsams, both under glass and in the open ground. A large mass of mixed antirrhinums, now singularly beautiful and in full bloom, tempt the bees, but only for naught; their little bodies are not heavy enough to open the dragon's mouth, and thus they hover about in vain. The larger humble bees, however, plunder here at their leisure, as their greater weight enables them to lower the lip, sip the sweets that are found therein, and withdraw with comparative ease. Pentstemon, marigolds, asters, with many annuals, give pleasant bee-hunting grounds, where on fine days bees are seen busy until the cold of winter sends them to the retirement of their habitations for a few dreary months. Bees and beehives may not be classed as strictly horticultural subjects but I hold them to be much more useful, more in character, and quite as ornamental in gardens as nude shepherds or nymphs or other erudities in stone. The power possessed by the bee to utilize the products of flowers is one of the most interesting things to be found in insect life. It is all very well to tell us human sluggards, to go to the ant, but the ant is at times a very troublesome little insect, and in its most secretive moods boards up nothing that is acceptable to man. The bee robs no one, neither does it deprive the flowers of their beauty or perfume, it simply takes what nature can bestow with freedom and be none the poorer while the insect is greatly enriched.—*Gardener's Magazine.*

DEVOTION.—"I had rather be kicked out of the world by one of Bob's boots than have to live in it with any one else," said a devoted wife to me when discussing the question of marital ill-treatment. I commend the speech to ladies who would fly to the Divorce Court on a much smaller excuse.—*World.*

THE WEIGHTS AND MEASURES ACT 1878.

An important meeting of millers and others interested in the corn trade was held on Oct. 8 at the Liverpool Corn Exchange, to consider the operation of the Weights and Measures Act of 1878. Mr. Alderman Hadley (London) occupied the chair.

The CHAIRMAN said the question had originally been taken up by the London National Association of British and Irish Millers. Although at the time of the formation of the society they were not fully aware of the act, which had been introduced into Parliament very quietly, and passed very quietly, it had soon come under their notice through the vigilance of their secretary, Mr. Goodwin, and they felt that the attention of all millers and corn dealers should be directed to the subject. In Liverpool, acting as they had done, with that foresight peculiar to those who resided in northern parts of the country, the dealers some twenty years ago, being in advance of those in the south, appointed an influential committee of great ability, and they decided to adopt the cental as the unit of the trade in the market. That standard had gone on remarkably successful so far, and if those in the south had adopted it also there was no doubt whatever that their trade would have considerably improved, so far as results were concerned. They believed now that the time had come when, by means of this Act of Parliament, they could make the cental or some equivalent of the cental, universal throughout the kingdom. That was the object of the meeting that day. They had now in almost every town and district a diversity of weights which was a scandal to the country. As Englishmen they prided themselves upon the advancement they had made—upon being the first mercantile community in the world—and yet at the present moment they were more backward than any other country on the Continent, or in America, so far as the regulation of weights and measures were concerned. He was not there to decry the Act, which in principle was a most excellent one, but to suggest some modification of its details. At a meeting held in London lately it was decided to recommend to the trade there that for the future the standard of weights should be as follows:—Wheat, maize, Indian corn, pulse, and seeds, per 500 lb.; barley and rye, per 400 lb.; and oats, 300 lb. They found that they had a difficulty to meet in getting to that degree of advancement reached in Liverpool in having the cental of 100 lb. as the standard. They had to contend with a large floating cargo business, and a large import cargo business sold on the coast or on passage, whereas the trade in Liverpool was mostly off stand. He suggested that the Liverpool trade should send a deputation to join a London deputation to wait upon Lord Sandon, who he was sure would at once grasp the difficulty with which they had to deal, and it was possible some modification of the principle arrived at in London might be adopted, so as to render uniform the standards both of Liverpool and London. He expressed himself personally in favour of the Liverpool cental as the standard.

Mr. GOODWIN, the hon. secretary, read a letter from Mr. Hubback (chairman of the North Shore Mills Co.), in favour of a uniform weight of 100 lb., and a letter was read from Mr. Dow, representing the feeling of the Bristol district, also in favour of the cental.

The CHAIRMAN, with a view to show how little consultation had been held with the members of the corn trade before the Act was introduced, recapitulated the steps taken with regard to the introduction and passing of the measure in Parliament.

Mr. FAIRCLOUGH, Mayor of Warrington, moved the first resolution: "That this meeting recommends that all grain be bought and sold by the standard of 100 lb." Mr. Fairclough explained the difficulties which they experienced in Warrington where they bought wheat by the 70 lb., in adjusting their books and accounts to the different scales of weight which prevailed in other towns where they bought grain. If the cental were made uniform a great deal of time would be saved, and confusion avoided.

Mr. EZRA APPELEY seconded the resolution, believing that it would be much better for the trade and more economical for the country if one uniform standard could be adopted.

Mr. J. PATTERSON, vice-chairman of the Liverpool Corn Trade Association, heartily supported the resolution, pointing out with much force and humour the advantages of the decimal system. He contended that if they were to approach the Board of Trade with suggestions for the modification or improvement of the Act they must ask the Board to do something that was within the four corners of the Act, in accordance with its spirit and tenor, of general utility, widely acceptable, and which presented an opening for further reforms. If they went to the Board to legalise the cental they would, he urged, be acting quite in this line.

Mr. EDMUND TAYLOR (Richardson, Spence, and Co.) also supported the resolution. He severely criticised the anomalous and conflicting weights and measures prevailing in this country, not only with regard to wheat but other articles. There were 12 different kinds of bushels, 5 of loads, 4 of bolls, and altogether there were 36 different ways in which wheat was sold in England. It was an anomaly and a disgrace, and while they were taking the step of change and reform he recommended them "to go the whole hog." He believed that they would have no difficulty in convincing Lord Sandon of the advantage of the cental.

Mr. H. C. WOODWARD (Liverpool) followed, describing the difficulties and inconsistencies which a want of uniformity caused in his native county of Worcestershire, where the farmer sold his wheat by the bag. Now, a bag might be any size from a sample bag to a culasse, which held 350 lb., and to talk of a bag as an indication of value or quantity was as delightfully vague as to say that something was as big as a piece of wood.

Mr. S. SANDY supported.

Mr. WARBURTON (Secretary of the Manchester Corn Exchange) suggested that the principle of the cental should not be confined to grain, but that all solids should be sold by weight and not by measure, and that the principle of the cental be generally recognised. This, he thought, would best secure the harmonious action of various towns. In Manchester the feeling was in favour of the cwt., stone, and pounds, because they thought it would be difficult to adopt the cental, but if they could generally adopt the cental in all towns, no doubt Manchester would prefer it.

Mr. H. H. GOLDING suggested that the word "cental" should be abolished, and the words "one hundred pounds" used. It would be more intelligible, particularly to Welshmen.

The resolution was then put and carried unanimously.

Mr. SMYTH (Ross, T. Smyth, and Co.) then moved, "That this meeting recommends that all flour and meal be bought and sold by standard of 100 lb."

Mr. M. M. WILSON seconded the resolution, though he could not disguise that there were difficulties in the way.

Colonel BIDWELL thought that difficulties might arise with French and Spanish flour.

Mr. SMYTH thought that the foreign dealers would cheerfully pack their flour to suit English ideas as to weight.

The resolution was then put and carried unanimously.

The CHAIRMAN proposed the next resolution, desiring the Liverpool Corn Trade Association to form a committee, in conjunction with the National Millers' Association and London Corn Trade Association, to memorialise the Board of Trade with a view to the establishment of such denominations of standards of weight of grain, flour, and meal as shall best promote uniformity of custom throughout the United Kingdom.

Mr. GODWIN seconded the resolution, which was carried unanimously.

Mr. FAIRCLOUGH proposed the following resolution:

"That this meeting, welcoming the establishment of the National Association of British and Irish Millers, and approving its vigorous action in calling the attention of the country to the importance of complying with the requirements of the Weights and Measures Act, 1878, resolves that a branch association be formed called the Liverpool and Manchester District Association of Millers."

The resolution was carried unanimously.—A cordial vote of thanks to the chairman closed the proceedings.

LORD TOLLEMACHE ON THE ROTATION OF CROPS.

The following circular has been addressed by Lord Tollemache to his tenants in Suffolk, respecting the growth of more barley than wheat:—

DEAR SIR,—It is generally acknowledged that it pays better to grow barley than wheat. It strikes me, therefore, that more barley and less wheat should be grown. I beg to enclose a rotation of crops, which I suggest for adoption on your farm, should you think it desirable.

Yours faithfully,
TOLLEMACHE OF HELMINGHAM.
Helmingham Hall, Stonham, Oct. 11th, 1878.

FIRST FOUR YEARS.		
1st Year. BARLEY.		
2nd Year.		
BEANS, &c	|	CLOVER.
3rd Year.		
BARLEY.	|	WHEAT.
4th Year. ROOTS, &c.		
SECOND FOUR YEARS.		
1st Year. BARLEY.		
2nd Year.		
CLOVER.	|	BEANS, &c.
3rd Year.		
WHEAT.	|	BARLEY.
4th Year. ROOTS, &c.		

The third four years would be a repetition of the first and so on afterwards. It will be seen by the above that Lord Tollemache points out the necessity of a change from the old four course system to one more calculated to benefit the producer. At the present time, when wheat is quoted at from 40s. to 42s. per qr. with a yield not exceeding 8 or 9 coombs per acre; and barley 48s. to 50s. per qr., with a yield of about 10 or 11 coombs, it must be patent to all that any plan for the production of more barley and less wheat must be to the advantage of the farming community generally. By his lordship's plan a farmer will get three crops of barley during a period of 8 years from one field, and a crop of wheat every 8 years, instead of every 4 years as has hitherto been the custom. The advantages of the plan, if the present price of wheat continues, are obvious, and whether it continues or not, Lord Tollemache is greatly to be praised for the liberty he has afforded his tenants. There is no greater need at the present day than such freedom of cultivation. It is, in fact, the only thing which can arrest the downward course of rents, and restore prosperity to agriculture.—*First Anglian Daily Times*

BIRMINGHAM CATTLE AND POULTRY SHOW.

The 30th annual prize list as revised by the Council is, taken altogether, the most liberal in the amount of premiums offered that has yet been issued, and in the cattle section it is open to an exhibitor who is also the breeder of the best animal to win a larger amount in cash and plate than ever was offered at the shows of this or any other society, viz:—

	£
The best of the breed.....	100
The Gibbs' Prize	105
The Elkington Prize	105
The President's Prize.....	25
	£335

The Elkington trophy is a handsome cup, which has to be won twice successively, or any three years by the same exhibitor; but all the other prizes are given outright. The different breeds do not, as is the case at many other shows, compete

against each other, except for the special prizes, and this is an arrangement of which exhibitors approve. Exhibitors, moreover, are not required to become members of the Society in order to compete, but are only charged a moderate entrance fee on each entry. In regard to sheep, it is possible for the best pen to win as much as £75, and here also in competition the various breeds are kept distinct. Bingley Hall Christmas Exhibition has now become the recognised mart with breeders for young store pigs of all breeds, as the exhibits of the several owners in the classes for fat pigs show what the sort can do, and we are informed that from 200 to 300 breeding pigs, from three to six months old, regularly change hands on these occasions.

The poultry schedule is on the same liberal scale which has characterised it for thirty years. As fast as new breeds come up and prove by their merit or numbers that they are worthy of recognition, new classes are added, but rarely are any struck out. It is found that from 2,000 to 2,500 pens are as many as can fairly be accommodated, and the entrance fee has, in consequence, been raised from time to time to keep the department within reasonable bounds.

The root and corn sections are especially interesting, and are encumbered with no restrictions as to cultivation, the object being to bring together large and good specimens, the offering of prizes for field culture, on a larger scale, being best undertaken by the county societies.

We notice that the entries for implements, machinery, seedsmen's stands, and other articles in this department, close on Saturday next, the 19th inst., and for the cattle, sheep, pigs, corn, roots, potatoes, poultry and pigeons, on Friday, November 1st.

The Birmingham Council are working harmoniously with the managers of the Oakham, Norwich, Tredegar, Chippenharn, and other Meetings, and have no fear of the result.

Mr. John B. Lythall is still the Secretary, from whom every information may be obtained.

THE GLASGOW BANK FAILURE AND THE LAND QUESTION.

Mr. Walter Wreu writes to *The Daily News*:—

How long may Englishmen be expected to go on learning the lessons of experience without being the wiser? We are an industrious, frugal, and saving people. But we don't know what to do with our savings. So foreign barbarians and native brigands lay up for us, and we are induced to trust them to Turkey, Honduras, Costa Rica, Bolivia, Uruguay, Paraguay, and pay very dearly for our misplaced confidence. Then we assume that others will kindly do for us what we can't do for ourselves, and place our money "on deposit," and set all the joint-stock banks who are good enough to take care of it for us competing against one another for profitable means of employing it. They must pay interest and dividend, and gentlemen like Mr. Collie take advantage of the fact, and relieve them of as much as they can get trusted with, and there comes another smash, and another panic—followed by more savings, more trust, more losses, and so on *ad caput*. Why is this? and what is the remedy? All these savings of the nation are diverted from the wisest, and best, and most patriotic investment by the injurious laws relating to the sale and transfer of land. Nearly all Englishmen prefer "broad acres" to foreign bonds, bank shares and deposits, and all other investments, but they are disgusted when they can buy land in the neighbourhood where they live (which is not always the case) by the costs, fees, &c., they have to pay. The investment which should be the cheapest and easiest, as it is best for the nation as well as for the buyer and seller, is the dearest and hardest. If we could buy land as easily as foreign bonds and suchlike rubbish, more and more of our savings would be invested that way, and more and more would be spent in the improvement of each man's holding, and the enrichment of our native land. The wealth of a nation consists in the health and strength and happiness of its inhabitants, and in the capital stored up in the soil. Had we free trade in land every acre would be doubled and quadrupled in value. So would its produce. Now we have dear meat, the cultivators of the soil divorced from it and are dependent on foreign countries for a large proportion of our food supply. When will experience teach us wisdom

THE WHEAT CROP OF 1878.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The autumn of 1877 was favourable for getting in the seed. The winter was mild and wet. March and the early part of April were dry; but the remainder of the month, the whole of May, and part of June were excessively wet, and very heavy thunderstorms occurred during the summer. The blooming and ripening periods were favourable; but the harvest was interrupted by frequent and heavy rains. The result of these conditions was a bulk of produce of all descriptions such as is seldom known in this country. In Scotland the season has been much drier, and, in some parts, there are even complaints of shortness of straw.

A season of luxuriant growth cannot fail to be, upon the whole, beneficial to the farmer, especially when meat and milk are of such great and of such growing importance. But, unless the climatic conditions be exceptionally favourable throughout,

an excessive growth of straw is often succeeded by disappointment in the yield of grain. Sometimes the crop is attacked by insect, or fungus-parasites, or it is laid out and injured by storms. This season the wheat in my experimental field stood up well at the time of cutting; but, just before blooming, portions were covered by small flies, which deposited their eggs in the ear, and these developed into small orange-coloured maggots, which fed upon the young grain.

The following table gives the produce of wheat, in 1878, on the same selected and differently manured plots as usual, in the field at Rothamsted, which has now grown the crop for thirty-five years in succession. It also gives, for comparison, the produce on the same plots in each of the preceding three years, the average of the preceding ten years, and the average for twenty-seven years—1852-1878.

HARVESTS.	WITHOUT MANURE.	FARMYARD MANURE.	ARTIFICIAL MANURES.			MEANS OF PLOTS.	MEANS OF PLOTS.
	PLOT 3.	PLOT 2.	PLOT 7.	PLOT 8.	PLOT 9.	7, 8, 9.	3, 2, and 7, 8, 9.
BUSHEL OF DRESSED CORN PER ACRE.							
1875	8½	28¾	25½	29½	30½	28¾	22
1876	8½	23½	23½	29½	33½	28¾	20½
1877	8½	24½	19½	24½	40½	25½	20¾
1878	12½	28½	31½	38½	37½	35½	25½*
Average—10 years, 1868-77.....	11½	33	29½	34½	38½	34	26½†
„ 27 „ 1852-78	13½	31½	33½	36½	36½	35½	27½‡
WEIGHT PER BUSHEL OF DRESSED CORN, IN LB.							
1875	60.0	60.6	59.5	58.2	57.9	58.5	59.7
1876	59.0	62.4	62.9	62.9	62.7	62.8	61.4
1877	58.9	59.1	59.2	59.2	57.9	58.8	58.9
1878	59.0	60.9	60.6	60.3	59.2	60.0	60.0
Average—10 years, 1868-77.....	58.6	60.3	59.7	59.8	59.5	59.7	59.5
„ 27 „ 1852-78	57.9	60.1	59.4	59.2	58.6	59.1	59.0
STRAW AND CHAFF PER ACRE, IN CWT8.							
Average—10 years, 1878	9½	36¼	14¼	55¼	50¼	49½	31½
„ 1868-77.....	8½	30½	27½	35½	41½	34½	24½
„ 27 „ 1852-78.....	11¼	32½	33½	40½	41¼	38½	27½

* Equal to 21½ bushels at 61 lb. per bushel.

† Equal to 25½ bushels, at 61 lb. per bushel.

‡ Equal to 26½ bushels at 61 lb. per bushel.

The unmanured crop came into ear some days later than the manured crops, and escaped injury from the fly; whereas the plot manured every year with 14 tons of farmyard dung suffered severely, and yielded only about two-thirds as much grain as in 1868, when the weight of straw was about the same as this year.

The mean of the unmanured, the farm-yard manured, and of the three artificially manured plots taken as one, shows an average of 25½ bushels of dressed corn per acre,

of 60 lb. per bushel; or of only 24½ bushels at 61 lb per bushel. This is considerably above the yield of the last three years, but below the average of the preceding 10, or of the 27 years, 1852-78.

The next table gives the produce of 23 varieties of wheat, grown under the ordinary cultivation of the farm, in a closely adjoining field. The seed was sown later than that in the permanent wheat field, and the crop almost entirely escaped the ravages of the fly.

DRESSED CORN PER ACRE (BUSHELS.)

DESCRIPTIONS OF WHEAT.	1875.	1876.	1877.	1878.
1. White Chaff (Red)	40 $\frac{1}{4}$	49 $\frac{1}{2}$	48 $\frac{3}{4}$	59
2. Rivett's (Red)	48 $\frac{3}{8}$	43 $\frac{1}{2}$	49 $\frac{1}{4}$	66 $\frac{1}{4}$
3. Chubb Wheat (Red)	38 $\frac{1}{4}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	55 $\frac{1}{2}$
4. Browick (Red)	38 $\frac{3}{4}$	39 $\frac{1}{2}$	40 $\frac{3}{4}$	49 $\frac{1}{2}$
5. Red Wonder	33 $\frac{1}{4}$	44 $\frac{1}{4}$	41 $\frac{1}{2}$	52 $\frac{1}{4}$
6. Burwell (Old Red Lummas).....	38 $\frac{3}{4}$	38 $\frac{3}{4}$	39	46 $\frac{1}{2}$
7. Bristol Red	31 $\frac{3}{8}$	42 $\frac{3}{8}$	44 $\frac{1}{4}$	52 $\frac{1}{2}$
8. Red Nursery	39	37 $\frac{1}{2}$	40 $\frac{3}{8}$	47 $\frac{1}{2}$
9. Red Lougham	34 $\frac{1}{2}$	42 $\frac{1}{2}$	42 $\frac{1}{2}$	50 $\frac{1}{2}$
10. Woolly Ear (White)	36 $\frac{1}{4}$	46 $\frac{3}{4}$	37 $\frac{1}{2}$	48 $\frac{1}{2}$
11. Hardeastle (White)	33 $\frac{3}{4}$	44	42 $\frac{1}{2}$	54
12. Golden Drop (Red) Hallett's	38 $\frac{1}{4}$	48 $\frac{3}{4}$	49 $\frac{1}{2}$	52 $\frac{3}{4}$
13. Victoria White, Hallett's	33 $\frac{3}{4}$	41 $\frac{1}{2}$	42 $\frac{1}{2}$	43 $\frac{1}{2}$
14. Hunter's White, Hallett's	26 $\frac{1}{4}$	43 $\frac{1}{2}$	40	42 $\frac{1}{2}$
15. White Cluddam	32 $\frac{1}{4}$	37 $\frac{1}{2}$	37 $\frac{3}{4}$	49 $\frac{1}{2}$
16. Red Rostock.....	37 $\frac{3}{8}$	40	46 $\frac{3}{4}$	57
17. Casey's White	39	45 $\frac{1}{2}$	43	47 $\frac{3}{4}$
18. Golden Rough Chaff (Red).....	38 $\frac{3}{4}$	38 $\frac{3}{4}$	36 $\frac{3}{4}$	46 $\frac{1}{4}$
19. Bote's Prolific (Red)	43 $\frac{1}{4}$	41 $\frac{3}{4}$	44 $\frac{1}{2}$	52 $\frac{3}{4}$
20. Club Wheat (Red)	46 $\frac{3}{8}$	47 $\frac{3}{8}$	49 $\frac{1}{2}$	61
21. Belgian (White)	—	—	42 $\frac{1}{4}$	52 $\frac{1}{2}$
22. Main's Standing White	—	—	—	50 $\frac{1}{2}$
23. Main's Rough Chaff (White)	—	—	—	50 $\frac{3}{4}$
Average Bushels per acre	37 $\frac{1}{4}$	42 $\frac{1}{2}$	42 $\frac{7}{8}$	51 $\frac{3}{4}$
Average Weights per bushel (lbs.)	60 $\frac{3}{8}$	63 $\frac{1}{2}$	60 $\frac{1}{2}$	62
Average Straw per acre (cwt.)	36 $\frac{1}{2}$	39 $\frac{3}{4}$	44 $\frac{1}{4}$	60 $\frac{1}{2}$

It will be seen that the produce of these varieties is, in every case but one, higher, and generally much higher, than in either of the three preceding years. Indeed, it is in almost every case exceedingly high; and, as the bottom line will show, the quantity of straw was also very large. Such results can leave no doubt that in various parts of the country some very large crops have been grown. It is, of course, difficult to estimate the damage done to a crop by the ravages of an insect; but, that in the permanent wheat field undoubtedly suffered considerably from that cause. The yield of grain was not only much less than would be expected from the bulk of straw, and its upright condition at the time of cutting, but also much less than would be judged from the amount of produce, and proportion of corn to straw, in the adjoining field. It is obvious therefore that the average yield of the selected plots cannot be taken to indicate so closely the average yield of the country at large as it has generally been found to do. Upon the whole, I am disposed to think that the wheat crop of the United Kingdom will be over an average; and that it may be estimated at 30 bushels per acre. According to the Agricultural Returns the area under the crop was 3,372,590 acres, which at 30 bushels per acre gives

12,647,213 quarters, and deducting 2 $\frac{1}{4}$ bushels per acre for seed, we have a nett quantity of 11,698,672 quarters of home-grown wheat available for consumption.

The average population to be fed during the harvest year 1878-9 may be estimated at 34,211,474, requiring, at 5 $\frac{1}{2}$ bushels per head, 23,520,388 quarters, leaving 11,821,716 quarters to be provided from stocks and foreign sources. During the harvest year, September 1877, August 1878, the nett import amounted to 14,511,181 quarters, which was doubtless more than was required for actual consumption, in addition to that available from the bad home-crop of 1877. It is quite certain that our immediate wants would be met by a considerably reduced import during the coming year; but it is obvious that the quantity of wheat sent this country does not depend exclusively on the amount we require for actual consumption, but influenced materially by the amount which the wheat-growing nations of the world have to dispose of.

I am, Sir, &c.,
J. B. LAWES.

Rothamsted, St. Albans, October 18, 1878.

THE MAINSTAY WHEAT.—We are informed that two or three of the Austrian and Hungarian Agricultural Societies have been investigating the question of which of the varieties of wheat are least subject to blight, rust, or mildew. After a very careful and comprehensive test, it has been found that new varieties of wheat are less prone to these baneful influences than the older and more commonly cultivated varieties, and that even new sorts require to be obtained from a distance from time to time to gain the full benefit after a few years' growth. The three varieties which have stood this test most satisfactorily, and which are recommended by the various committees as most deserving of adoption by farmers, are the "Mainstay," "Urtoba," and "Adelaide." The "Mainstay" is a wheat which was introduced to the public, about four years since, by Capt. Delf, Great Bentley, Colchester, and it has now become popular in many parts of the world as well as in Great Britain. We are not told how many and what varieties were tried.

BRITISH POMMES DE TERRE.—Some of our exhibitors of potatoes have at least astonished the foreigner. Our "Pommes de terre," the provincialism of which is "taters," have been shown in large quantities at the great International Exposition, and have taken the Frenchmen by surprise. Hitherto the native of France, although a large grower for other markets besides his own, has not made the exhibition of the noble tuber a speciality, and his style of putting them up for show is an exceedingly crude one. A rough sample, unwashed, perhaps just as litted, little and big, all of a heap, was the highest stage to which the Frenchman had yet reached the art of exhibiting potatoes. Now some of our large growers have shown how we do these things better in England, and no doubt, with that powerfully imitative nature that characterises the Frenchman, we shall soon have reason to feel that he has not learnt his lesson in vain.—*Gardeners' Chronicle.*

FREE TRADE IN LAND.

No. XIII.

Mr. Kay continued his letters to the *Manchester Examiner* as follows:—Before leaving the important subject of the effects of the French system of land laws in the different European countries in which it has been in force for many years, I wish to direct the attention of your readers shortly to the effects of this system in the kingdom of Belgium; and I am all the more anxious to do so because many questions were put to witnesses upon this subject by members of the recent committee on the Irish Land Act, 1870, which has been sitting this year, showing too plainly that great misconceptions prevail as to the results of this system in that country.

"The case of Belgium," as Mr. Cliffe Leslie says in his "Land Systems of Ireland England and the Continent," p. 348, "is the more striking an example since the peasant there has none of the special gifts which the skies of France bestow on *la p^{re} culture*. The olive is not his; and the vine, though it grows an indifferent vintage on a few slopes in the east and south of the kingdom, is nowhere to be met with in Flanders. The soil of Flanders, moreover, is so poor by nature, that even second or intermediate crops require special manure. . . . The Pays de Waes, it should be observed, is not more fertile than the rest of the sandy regions, although it may appear so from the greater moisture of the soil, and its natural qualities were so far from attracting earlier cultivation than the rest of the province that it was not reclaimed for centuries after the environs of Ghent. More manure to the acre is applied in it at this day than anywhere else, even in Flanders." And M. de Laveleye, who is one of the most competent if not the most competent writer on the agriculture of Belgium, and who is the author of two celebrated works on the agriculture of Belgium and Holland, viz. "L'Economie Rurale de la Belgique," and "L'Economie Rurale de Néerlande," and also of a most interesting essay on the "System of Land Tenure in Various Countries," entitled "The Law System of Belgium and Holland"—says (see his essay, p. 199): "In England a contrast is often drawn between Flanders and Ireland, and the former is said to enjoy agricultural advantages not possessed by Ireland, such as great markets, a better climate, abundance of manure, more manufactures . . . Flanders does enjoy certain advantages, but they are equally accessible to the Irish, derived as they are from human industry; whereas the advantages possessed by Ireland, coming as they do from nature, are not within the reach of the Fleming.

"Let us look, first, at climate and soil. The climate of Ireland is damper and less warm in summer, but less cold in winter. In Flanders it rains 175 days in a year; in Ireland 220 days. On this account the Irish climate is more favourable to the growth of grass, forage, and roots, but less so to the ripening of cereals; yet the Fleming would be but too happy had he such a climate, cereals being but of secondary importance with him, and often used as food for his cattle. He seeks only abundance of food for his cows, knowing that the value of live stock goes on increasing, while that of cereals remains stationary. Butter, flax, colza, and chicory are the staple articles of his wealth, and the climate of Ireland is at least as well suited to the production of these as that of Flanders.

"As for the soil of Ireland, it produces excellent pastures spontaneously, whilst that of Flanders hardly permits of the natural growth of heather and furze. It is the worst soil in all Europe—sterile sand like that of La Campine and of Brandenburg. . . . Having been fertilised by ten centuries of laborious husbandry, the soil of Flanders does not yield a single crop without being manured—a fact unique in Europe. . . . Not a blade of grass grows in Flanders without manure. Irish soil might be bought to fertilise the soil of the Fleming." M. de Laveleye goes on to show what extraordinary pains the Flemish farmers bestow on the collection, purchase, and preservation of manure, and the large sums they expend in its purchase, and he then continues: "On the whole, for carrying farming to a high pitch of perfection, Ireland enjoys far greater advantages than Flanders, the land being much superior, the climate equally favourable to the growth of valuable crops, and the same markets being at hand" to both countries.

But then, he might have added, the Irishman has not the wonderful stimulus of *owning* the land which he farms; and that while in Belgium, as will be seen by-and-by, a great part of the farmers are spurred on to ever-renewed exertion and enterprise by the wonderful incentive of feeling that the land they farm is their own, and that every farthing and every hour's labour they expend upon it is so much expended for their own sole benefit. Let the poor Irish tenant, working under an agent and without any lease even, be put in such a situation as the Flemish farmer, and we should soon see whether our Irish brother would not soon equal, if not outstrip, his Flemish competitor. In Belgium, the French system of compulsory subdivision of a great part of land on the death of the owner, as described in No. IX., published by you on the 9th day of August, 1878, is in force.

But although this is the law of the land in Belgium, its effects are so modified in some parts of that country by local customs, and in other parts by the fact of the existence of so many manufacturing towns, that the consequence is that while there are, as in all countries in which the French land laws are in force, great numbers of small farms, kitchen-gardens, and single plots belonging to their cultivators there are at the same time a great number of estates which belong to the old noble families or to the rich manufacturers in the towns. These latter estates are seldom farmed by the owners themselves, but are let in farms of different sizes either to farmers who have no land of their own or to farmers who, having small farms of their own, are desirous of cultivating more land than that which belongs to them, and of thus hastening the time when they will be able to add to their own property by purchasing more.

In Belgium the nobility have, spite of the law of forced subdivision on the death of an owner, retained, as many of the French nobility also have done, large estates. So that in Belgium leasehold farms are to be found in most parts of the country existing side by side with what we should call "freehold" farms, or farms actually belonging to the cultivator.

Owing to the circumstances mentioned, and to the constantly varying fortunes of members of the manufacturing class—to their occasional insolvency, to their occasional want of all available capital for speculations, and to their frequent changes of occupation—there is a constant change going on in the land market; some seeking to buy, some to sell, some to sell in plots in order to obtain the higher price, and many eagerly competing to obtain sometimes only one and sometimes more of such plots.

It is found in Belgium, as in France, that when a large landowner sells he can generally obtain much more by selling in a number of small lots than by selling the whole estate in one lot.

The farms, which are let on lease by the manufacturers and others, are, as a rule, let on very short leases—three, six, or nine years at most, and more generally for three or six than for nine. And on these farms all the evils are to be found which result everywhere from short leases, insufficient security for outlay, and the little interest felt by such a tenant in improvements, as compared to the deep interest taken by the real owner in improving and expending upon his own land. About one-third of the occupiers of land in Belgium are owners, and the other two-thirds tenants with very short leases.

Professor Baldwin, the chief inspector of agricultural schools in Ireland, was sent to Belgium in 1867 to study the condition of the agricultural tenants in Belgium. He was this year (1878) examined before the select committee on the Irish Land Act, 1870, and gave some most important evidence upon the comparative condition of the small landowners and the mere tenants of Belgium.

He says that "the small tenants are in a very indifferent condition, to say the least of it; that they are rack rented; but the small owners, as a rule, are very prosperous and very contented, as they have an income from two sources; they have the income as proprietors, and the profit of the farm as well. I went in West and East Flanders from house to house,

and I found more happiness and comfort and prosperity in the houses of the small proprietors" than in those of the mere tenants: "The tenant farmer has no money, and he is in a wretched state."

M. de Laveleye (see his essay in "Systems of Land Tenure," p. 227) says: "If the cultivator of the soil is the owner of it at the same time, his condition is a happy one in Belgium, as everywhere else, unless the plot he holds is insufficient to support him, in which case he has to eke out his existence by becoming also a tenant or labourer. But as a rule the peasant proprietor is well off. In the first place, he may consume the entire produce of his land, which being very large, especially in Flanders, his essential wants are amply satisfied; secondly, he is independent, having no apprehensions for the future, as he need not fear being ejected from his farm, or having to pay more in proportion as he improves the land by his labour." In short he knows the full and entire value of every improvement he effects will be his own or his children's, and he or they will derive the whole advantage of every extra hour's labour.

But, as M. de Laveleye says (see essay, p. 228), "the situation of the small Flemish tenant farmers is, it must be owned, a rather sad one. Owing to the shortness of their leases they are incessantly exposed to having their rents raised or their farms taken from them. Enjoying no security as to the future, they live in perpetual anxiety. So much does this fear of having their rents raised. So much does this fear of having their rents raised tell upon their minds that they are afraid to answer any question about farming, fancying that an increase of rent would be the inevitable consequence."

But this state of things is gradually disappearing, by the gradual division of the larger estates among smaller proprietors, who farm their own land themselves.

In 1846 there were only 758,512 owners of land in the whole of Belgium.

On the 1st of January, 1865, there were in the entire kingdom 1,069,326 owners. (See M. de Laveleye's essay, p. 204.) Thus it appears that between 1846 and 1865 the number of landowners had considerably increased.

M. de Laveleye (see his essay, p. 212) gives the following as the reasons why the Flemish husbandman derives such abundant produce from a soil which is naturally, as he says, "so poor," viz.:—

1. The perfection of both plough and spade work.
2. Each field has the perfection of shape given to it to facilitate cultivation and drainage.
3. Most careful husbanding of manure. None is wasted, either in town or country; and all farmers, down to the poorest tenants and labourers, purchase manure from the dealers.
- I have shown already how extraordinarily careful of their manure the small Swiss farmers are, and what pains they take that none shall be wasted, but that all, both solid and liquid, shall be returned to the land.
4. The great variety of crops, especially of industrial plants, viz., colza, flax, tobacco, hops, chicory, &c., yielding large returns and admitting of exportation to the most distant countries.
5. Second, or "stolen" crops, such as turnips and carrots, after the cereals, of English clover, spurry, &c., whereby the cultivated area is in effect increased one-third.
6. Abundance of food for cattle. Although the soil is not favourable to meadows, yet, taking the second crop into account, one-half of the available superficies is devoted to the rearing of live stock. Hence the rise of rents, although the price of corn has hardly increased.
7. Housefeeding of the cattle, by which the cows give both more milk and more manure.
8. Minute weeding.

Writing of the great value set upon manure by the small farmers, M. de Laveleye (essay p. 209) says: "The institution in Flanders in aid of agricultural credit is the manure merchant, who has founded it in the best of forms; for money may be spent in a public house, but a loan of manure must be laid out on the land.

"The poor labourer goes with his wheelbarrow to the dealer in the village to buy a sack or two of guano, undertaking to pay for it after the harvest. The dealer trusts him

and gives him credit, having a lien on the crop produced by the aid of his manure. In November he gets his money, the produce has been doubled, and the land improved.

"The small farmer does as the labourer does; each opens an account with the manure-dealer, who is the banker of all bankers.

"The large farmers of Hainault and Namur do not buy manure, fancying they would ruin themselves by doing so. The Flemish small farmers invest from fifteen to twenty millions of francs in guano every year, and quite as much in other kinds of manure. Where does large farming make such advances?"

In another place (see essay, p. 199) M. de Laveleye says: "The Flemish farmer scrupulously collects every atom of sewage from the towns; he guards his manure like a treasure, putting a roof over it to prevent the rain and sunshine from spoiling it. He gathers mud from river and canals, the excretions of animals along the high roads, and their bones for conversion into phosphate. With cows' urine, gathered in tanks" (exactly as in Switzerland), "he waters turnips, which would not come up without it, and he spends incredible sums in the purchase of guanos and artificial manures."

What a contrast to many parts of our own country! Not many miles from where I am writing there lives a very intelligent farmer, much respected both by his neighbour farmers and by the gentry around. He farms between 100 and 200 acres. His land consists of a loamy soil, perhaps a foot and a-half deep, lying on the top of chalk, which is much broken up, and more pervious to rain than even gravel. His land requires much manure. He has made, on the higher part of his land, large tanks, cut in the chalk, but not lined with cement or anything which could make them watertight. He has conducted by pipe-drains into these tanks the sewage from extensive farm-buildings and dwelling-houses. His land slants downwards from these tanks, rendering it very easy to irrigate it with the liquid manure, and, as I have said before, it is land which requires all the manure it can get. What does this intelligent and really superior English farmer do? He allows all the liquid manure, of which there is a vast quantity, to run into the chalk to be lost, except a small quantity, which he uses for a small kitchen-garden. The sediment he has the good sense to make use of. And then, having thrown away all this valuable liquid manure, he goes to the market from time to time, and buys manure in a stinted manner, as he fancies he can afford.

If he had been a farmer in Switzerland, farming his own land, his tanks would be water-tight, he would have a water-cart on his farm, and before the first crop was sown, and as soon as the first crop was removed, the cart, having been filled from the tank, would water the land, and so prepare it for the next crop that by the aid of this rich and constant manuring can be obtained from it. But alas! there is as much manure wasted and thrown away in England as would, in my opinion, double or treble the produce of our country if properly applied. I have given an instance of the stupid waste of a very intelligent farmer; what must it be among the small and less scientific farmers throughout the country farming another man's land, without lease or any valid security for improvements!

M. de Laveleye denies that the small properties of Flanders are burdened with debts, or that loans on them are raised at ruinous rates of interest, as opponents of the French system of land laws allege. A similar objection has been brought, as I have shown, against the small properties of France, and, as I have shown, has been disproved by the most competent writers on this subject.

Another objection which has been often urged against *la petite culture* (or the cultivation of small farms by their owners) in Belgium is that it does not admit of the use of agricultural machinery. I have shown how a similar assertion with respect to France is disproved by the actual facts.

With respect to Belgium M. de Laveleye says: "To disprove this objection I need not point out that to Flanders are due the best forms of the spade, the harrow, the cart, and the plough—the Brabant ploughs having for a long time been imported from Flanders into England. It may be said that these are primitive, and not very costly implements. I need only reply, look at what is going on in Flanders at the present day.

"The most costly agricultural machine in general use in England is the locomotive steam-thrashing machine. Well, this machine is to be found everywhere in Flanders. Some farmers will club together to purchase one, and use it in turn; or else a villager—often the miller—buys one, and goes round thrashing for the small farmers on their own ground at so much per day and per 100 kilos of corn. The same thing takes place with the steam plough as soon as the use of it becomes remunerative.

"To keep hops in good condition very expensive machines are required to press them. At Poperinghe, in the centre of the hop country, the Commune has purchased the machines, and the farmers pay a fixed rate for having their hops pressed, which is at once an advantage to them and a source of revenue to the Commune.

"The example of Flanders, therefore, proves that the division of land forms no obstacle to mechanical economy in farming."

All this, as I have already shown, is equally true with respect to the yeoman and peasant farmers of France, farming their own lands; and even in Surrey, one of the richest farming districts in England, and in the part of Surrey in which I am residing, the same plan is pursued among the large leasehold farmers. Some one person buys the thrashing machine, and it is hired in turn by all the farmers of the district around.

M. de Laveleye says (see essay, p. 231) that in normal years there is no pauperism in the rural districts of Flanders; and it must be remembered that in No. XII. I showed that the same was true with respect to the Channel Islands. He also says that a stranger visiting Flanders should guard against rashly drawing unfavourable inferences from certain facts arising from custom. Some people, as he says, seeing women working in the fields barefooted, are apt to consider such a fact as a proof of extreme destitution. But they would be in error in coming to such a conclusion, as it is the custom of the country. "Well-to-do farmers' daughters, who are stylishly dressed on the Sundays, will work barefooted during the week." And, as I have said in former letters, it is perfectly absurd to judge the condition of the men or women of the small farmer classes of Germany, Switzerland, and the Channel Islands by the working clothes worn by them on week-days when at work. These clothes are always decent, never in rags. They are often made of strong home-spun materials. They are naturally stained by the work, the earth, and the rain, though often washed. They look poor enough in truth, but what would these complaining travellers have? Would they have the men and the women go to their work in their Sunday dress, or in their cantonal costume, or in their ornaments?

In all these countries, if you wish to see how the small farmers and their families dress, you must see them on Sundays, and ask yourselves then if our small farmers or our poor peasants and their families would bear the contrast. So it is also with the children. If they are not attending school they wear their old patched clothes. Their school and Sunday clothes are laid by while they are assisting in the farm or garden labours.

There is in Belgium, as in all the countries under the French law, an excellent system of registration, which, by enabling a buyer to ascertain at once the exact state of the title to the land he wishes to buy and of the claims upon it, renders the purchase very easy, very expeditious, and very cheap. If anyone wishes to buy he goes to a notary, who obtains from him a copy of the exact state of the title from the official entries in the registry office.

The notary then prepares the deed of sale, which in all these countries is very short and simple, as none of our complicated settlements and arrangements are possible. This deed of sale is then signed by the buyer, the seller, two witnesses and the notary. The minute or abstract of this deed is then taken to the office of the registrar, who puts an abstract of it on his register. After this the registrar transcribes the deed in full. The purchaser of the property who has been the first to have his deed transcribed is the legal purchaser as against all other subsequent buyers. There is, by these means, no difficulty whatever in ascertaining the state of the title of a plot of land at any moment. The whole transaction is very short and simple, and the expenses very small.

But the registration would effect only a very partial good in England unless we had got rid of the landowners' power to make the laws and complicated settlements, deeds, and wills which the law now permits them to make.

M. de Laveleye says that the small owners exercise great self-denial in their food and mode of life in order to lay by money wherewith to purchase more land and to give their farms a better outline; and he says that the larger properties are hardly ever divided in consequence of the law of succession or forced subdivision, but simply on economical grounds, viz., because they fetch higher prices when sold in lots; and he adds that the peasant proprietor attaches so much value to the proper outline of a field that he would rather sell it in one lot than in plots; and Mr. Cliffe Leslie says ("Land System," page 309): "Little plots are continually for sale; transfer is easy and cheap; the labourer is frequently a buyer; and the notary does a flourishing business though his charges are low."

Writing of the character of the villages in Flanders from his own observation, Mr. Cliffe Leslie says ("Land System," p. 317): "The very variety and beauty of the houses in these Flemish villages is no mean result of the cultivation of the country, and must have a most beneficial effect on the minds of the rural population. The grace of the dwellings of the wealthier small proprietors, embowered in tiny pleasure grounds, is beyond description. But the humblest workman's cottage is exquisitely neat, and each has something about it which gives it a character of its own. And look within; look at the furniture, the bright ware, the clock, the petroleum lamp, the chest of drawers, and its contents, and see what a quantity of auxiliary industry agriculture has called into existence in the house of the poorest of its village servants.

Now such is the description of another of M'Culloch's "pauper warrens," the effect of this terrible French land law. And be it remembered, the prosperous condition of the Belgian yeoman and peasant farmers, who cultivate their own land, has grown to its present state, just as in France, spite of defective education, caused by the religious strife which has afflicted that brave and industrious little country so many years.

Since the last elections, which have led to such a victory for the Liberal party we may now soon expect to see good schools, liberal teaching, and well-educated teachers in every commune, and by their means we shall see in Belgium what Germany and Switzerland have already attained—improved cultivation, good agricultural schools, more scientific farming, and a still greater advancement than they have even now attained, in the prosperity and well-doing of the rural districts. But, even as it is, look what wonderful prosperity that small kingdom has attained. Its network of railroads, opening up every district, however remote; its wondrously prosperous towns; its restoration of its glorious mediæval buildings; its restored cathedrals; its galleries of modern art is almost every town; the costly and splendid improvements which are being carried out as if regardless of expense in its capital, and the look of wealth and abundance which meets you on every side, and then let any dispassionate observer consider whether this country, like its powerful neighbour France, is not prospering by the prosperity of all classes of its citizens.

THE GRANGE IN AMERICA.—In its early history, and when it was in its manhood, the agricultural editor strove persistently for reforms in the National and State granges, which were necessary for its life and stability. But the oligarchy had the power and the purse in their hands, and the result is now visible everywhere. Having done our duty we feel our conscience clear, but mourn over the wreck of the order and the loss of many who risked too much in the organization. At too late a day many good men in the order are now clamouring for reform. The National grange meets at Richmond, Va., on the third Wednesday in November, but it is not probable that Iowa will be represented at this or any other future sessions of the National grange. And as our State grange will be delinquent for two or three years' dues, it is not presumed our officers will again receive the annual P.W. So that the end draweth nigh. And this is the result of having dishonest, selfish, and tyrannical rulers in high position. They have strutted their brief day, filled their pockets with ill-gotten gains, and have retired to the obscurity which they should never have been drawn from.—*Des Moines Register*.

THE LATE MR. JOSEPH KAY, Q.C.

The *Manchester Examiner* publishes an interesting memoir of the late Mr. Joseph Kay, Q.C., from which we extract the principal portion:—

Mr. Joseph Kay was born at Ordsal Cottage, Ordsal Lane, Salford, in the year 1821; he was the son of the late Mr. Robert Kay, the representative of an old Lancashire trading family. As we said above, he went first to a school in Salford, where some of the best-known of our citizens of to-day were his schoolfellows. Afterwards he was educated with the sons of Sir Thomas Fowell Buxton, and at that time the echo and excitement of the anti-slavery agitation reached the ears of the sons of the great philanthropist, and their friend's first aspirations as a politician were in favour of freedom to the slave. At Cambridge Mr. Kay had a very successful career and after taking his degree his appointment as "travelling bachelor" in 1844 gave him the opportunity of investigating the legal codes of foreign countries, and of testing by the experience of direct observation the comparative advantages of divergent systems. To the studies of this time are due the most important literary labours of his after-life. Startled, as he has said, at what he saw of the results abroad of "free trade in land," he made close inquiries into the working of the land laws, as well as the education systems of Germany and Switzerland. In one of his recent letters he thus refers to his first experience of the duties of his office:—"I left England on my appointed duties, furnished with introductions from our Government and from the German Ambassador, Chevalier Bunsen, to all the Governments and other authorities and heads of institutions who could aid me in my proposed inquiries. I went first to Switzerland, partly because in that country were to be found some of the greatest leaders of the educational movement which had been for many years spreading through Western Europe, and partly because I knew that some of the cantons were, even at that time, making the greatest efforts to perfect the schools for the children of all classes of their people. I visited first the rich agricultural cantons of Neuchâtel, Berne, Vaud, Argovie, Zurich, Geneva, and Thurgovie. As I travelled through these prosperous districts, from school to school, I was more and more struck by the prosperous appearance of the farms, by the high farming, the substantial comfort, size, and excellence of the farm buildings, the numbers, beauty, and fine condition of the cattle, the extraordinary richness of the pastures, and the evident care that I observed on every hand not to waste anything, either land in wasteful fences or in undrained plots, or any portions of the manures from the farms and homesteads, or anything that could by any means conduce to increase the produce of the farms. I was astonished also to see how much care and expense were bestowed on the embellishment of the exterior of the houses, as if the inmates were really interested in them. I noticed, also, that although the every-day working dresses of the men and women were of very coarse, substantial, and often home-made materials, I seldom, if ever saw rags even on the working days, while on the Sundays men and women always appeared in comfortable, substantial, unpatched clothes, and often, if not generally, in their national costume, or at least with some part of their picturesque, cantonal ornaments. But what surprised me as much, if not more, than anything, was that as I drove along the public roads for miles, even near the towns, the roads were bordered by rows of magnificent fruit trees of various kinds. These trees had no protection against theft. There were no hedges or palings. They were all open to any passenger along the roads. I have seen hundreds of miles of such roadside orchards in Switzerland, Germany, and Italy, and have constantly looked with astonishment at the wonderful respect for property which all this evinced. After some time spent in examining the primary schools throughout Switzerland, I went to the Lake of Constance, to visit and inspect the celebrated Training College for Teachers, which was then presided over by the celebrated Veheli, at that time one of the

most distinguished promoters of the education of the working classes in Europe." Veheli took him to see a large agricultural school in the neighbourhood, and which was maintained in order to enable the sons of small farmers to improve to the utmost their modes of farming and the capabilities of their land. Everything he saw was a source of wonder to him, and he began to study not only the education question, but the not less grave one of "free trade in land." When he saw the agricultural labourers struggling for themselves, working for no landlord, sharing their winnings with no master, he was more and more impressed with the moral and social effects of the release of the land from feudal laws. And then he began to ask himself would a like release have like results in England? "I returned to England," he said, "and began the earnest study of our land laws. I then returned to the Continent, and travelled through the principal countries of Germany. Throughout these countries I found that the feudal laws had been done away with, and that the educated yeoman farmers and peasants were cultivating their own lands. Everywhere I found the good effects of these great reforms manifested in the moral well-being of the yeoman farmers and peasants, in the healthy self-help they manifested, in their hopeful looks, in the good and substantial appearance of their villages and houses, in the economical and careful management of their fields."

In 1846 Mr. Kay published "Education of the Poor in England and Europe," and in 1850 "The Social Condition and Education of the People of England and Europe." It is scarcely necessary to remind our readers that for many years Mr. Kay has been a regular contributor to our own columns, and the ink is scarcely dry on his last written communication. With what ability he has discussed the Education and Land Law Reform they do not require to be told; few modern writers, indeed, have brought to bear on these subjects so much thought and such exact knowledge, and his wise lessons have been rendered all the more valuable by remarkable illustrative power, and by the advantage of a graceful and vigorous style. A few years ago he published a voluminous treatise on British Shipping and the Navigation Laws, which was generally recognised as a complete historical statement, and an admirably comprehensive legal disquisition. In these and his other literary works Mr. Kay has left a rich legacy of political wisdom, of the value of which we have happily not been entirely ignorant during his lifetime. It is not, however, generally known that Mr. Kay's experience assisted in the preparation of more than one of the great reforms carried out by the Government of Mr. Gladstone.

As an education reformer Mr. Kay was no mere theorist; he was deeply interested in the first attempt at anything like a system of national elementary education in this country initiated by his brother Sir James Kay-Shuttleworth. When the first English Training College for Teachers was established, Mr. Kay was appointed Principal, and his management of the college was in all respects successful. His appointment as Recorder of Salford and Judge of the Salford Hundred Court of Record brought him into closer relation with the borough, but he had never ceased to keep up intimate social relations with many of his early friends here. When the Manchester Court of Record was amalgamated with the Salford Hundred Court in 1869, Mr. Wyndham West, Q.C., the Recorder of Manchester, and Mr. Kay were appointed joint judges of the new court, and though Mr. Kay has not sat as judge for some time, he held that office at the time of his death.

Mr. Kay was called to the bar of the Inner Temple (of which he was a bencher) on the 5th May, 1848, and was appointed Queen's Counsel in 1869. At the time of his death, in addition to the office of Judge of the Court of Record, he held the appointment of Solicitor-General of the county palatine of Durham. He married Mary Elizabeth, daughter of the late Captain Thomas Henry Drummond, who was at one time Under-Secretary for Ireland, and without any violation of that reserve which should be held specially sacred at this moment, it may be said that never was a union more completely happy. His long and painful illness was borne with serene steadfast composure, and his almost heroic cheerfulness was sustained by tenderness and most devoted love; he was tended by loving and devoted hands, and the kindness and consideration for others which throughout his life won for him the love and regard of all who knew him intimately were not wanting in his last hours.

LIVE STOCK NOTES.

In the first place, is an old woman live stock? We will take it as such, if you please, for I would fain recount to you an amusing anecdote of a certain bailiff's performance. He was constantly annoyed by the gate of a fold-yard, across the end of which a certain right of public way exists, being left open. Nail it up, or lock it, he must not. His ingenious device then was to stick deep and fast in the ground an elastic stick, of about the thickness of a brush handle. The gate, thrown back against this, came back and paid its debt with a vengeance. The old crane, who was most persistent in the annoyance she gave, on the first occasion after the setting of the trap got such "a crack upon her buttock," as it was explained to me, that she has been wary of her bad practice ever since, and, does her duty reasonably by her neighbour.

Mais revenons à nos moutons. As regards buying Shropshire rams with a view to the preservation of uniform excellence in a flock, I did not in my last make my meaning quite clear. What I wished to teach was, that a beginner, having decided upon the sort of type he desires, should, after selection of as even a lot as possible of ewes in one quarter, then determine whose flock he holds most in admiration amongst the acknowledged breeders of established repute. To him, then, and him alone, he should go for a *succession* of rams. It is the only way to maintain a fixed type amongst "composite" animals. The domesticated cow, remember, is called "Bos composita," having in her a variety of elements which are apt, under unskilful management ever and anon, "to kick up behind and before" like "Old Joe." These can only be consolidated, and made beautiful for ever, by the perpetual infusion of rich gluey stuff, in the shape of blue blood, be it from Kirklevington, Holker, Warlaby, Fawsley, Towneley, &c. Only having decided which sort of glue to use, continue to use it. A genius may compound varieties; the ordinary breeder cannot. "He who has no master for a method should adopt method for a master" is a pithy remark that holds good as much in Shorthorn-breeding as in painting. The late reckless plan of putting a purchased cow to the nearest or most convenient bull is the "no master for a method" mode of action. Now-a-days not only is it found most difficult, if not impossible, to build up a type without methodical breeding, but the ordinary market has grown shrewd enough to be content with no Shorthorn, the *meaning of whose composition* they do not unravel. This is all due to the lapse of time. In the earlier Shorthorn days the best known bulls were so kindred, and the breeders confined with few exceptions to such a narrow district in the Northern Counties, that steering was easy. I am glad to see in a recent number of the *Prairie Farmer*, a Chicago paper, that some previous remarks of mine of somewhat similar effect to these are reproduced, and endorsed under the heading of "Breeding for profit." It is well that we should be agreed each side the Atlantic. This reminds me how childish is the venom of certain Hereford writers against the Shorthorn, both in American and English papers. There is room for both, and if the Hereford kine could only have their faces coloured, so that they could be used for crossing purposes, they would make a leap at once in increased popularity. One of our best and most famous Shorthorn breeders told me that he "never saw a Shorthorn so good as the first prize Hereford heifer at the Oxford Show." Pity the Hereford gentlemen cannot be equally impartial! The three tarrow plough, of which I have written before, has done me wonderful service, and puts one far ahead in one's work. The next dodge I think we shall try is clipping and singeing the farm horses. A friend has found the plan answers admirably for years. The carters

are longing for the gorse again, which we shall begin to use shortly. It is satisfactory that the men have found out and believe in its value. It is in fact half the battle to have the rustic persuaded that what he has to do is best.

There is to be to-morrow a large herd of considerable interest sold in North Wales, near Rhyddland, the property of Major Rowley Conwy. The topmost bulls don't seem to have been selected on a system. We shall be prepared to hear of some good cattle, even if there be no fashionable buyers present. The Cow-lips are spoilt by the occurrence in their pedigree of an unentered bull, Forecott, and some other too strong alien blood atop. At least I know that this deters some of this family's admirers from putting in an appearance to-morrow. What a difference it would have made in their value had Bates blood been persevered with! There is a Didmarton Florentia, which may make running if the right men are there. But there is one family in particular which I should have liked to see, and that is the Bona by Monk family. If good cattle in the flesh, I hope some one will purchase several of them, because they descend from R. Colling's Princess, and there is nothing in the top crosses to hurt them much. Conceit (lot 9) has for her 8th dam thus written, "— by Waterloo (2816)." Then follow Anna by Lawnsleaves, Angelina by Phenomenon, &c., the same in Belvedere's pedigree (1706). Conceit was, in fact, Belvedere's own sister, if the suspicion be correct that in Belvedere's pedigree Anna by Lawnsleaves was struck out, and Angelina 2nd by Young Wynyard (2859) substituted, because Lawnsleaves was reputed to hold "alloy" blood. Anyhow, this tribe, if of decent quality and appearance, must be worth buying up by a beginner. Of them there are nineteen females and six bulls to be sold. With the cheap bargains to be obtained at Birmingham now-a-days in the shape of well bred bulls this old family ought to be worth experimenting on. However, I have so warmed in my gallop that I shall be there to see for myself. There is another interesting family for sale, descended from Rev. H. Berry's celebrated Actonia. Amity, the great grandam of Agnes 2nd (lot 3), was bought at Mr. E. Bates' sale in 1857, for 45 guineas. She was white with roan ears. Her half sister Amy (our sale note is "a beauty") made 52 guineas and Ada 73 gs., and her three months old calf 21 gs. Good prices at that time! The same day the biggest prices were as follows:—A first-rate Barrington Rose cow, bought by Colonel Towneley, and a prize winner, brought only 9S gs., a "very fine" granddaughter of Mantahoi (Little Fanny) 66 guineas; a Lady Sarah cow, 51 gs., and the old Booth Hamlet, Bracelet's son (13 years of age), just 30 gs. There are five females and one bull of the Actonia descent to be sold to-morrow. Of this tribe's origin Mr. Housman in his valuable pamphlet on "The Improved Shorthorn," writes (page 6):—"For example of the use that fearless breeders have made of specialities, it is needless to go further than two or three familiar facts. Fifty years ago the Rev. Henry Berry saw in a heifer of Sir John Ramsden's a depth and fullness of 'twist' (between the rounds and over the udder) that he greatly admired. He bought the heifer (Actonia), and from her bred animals excellent in at least one point, that is, too much neglected."

FIGUR, Oct. 19.

AVERAGE PRICE OF BARLEY.—The following statement shows the average price of British barley for the week ending October 12, 1878, and in the corresponding weeks of the last five years:—In 1878, 63,442 qrs. 6 bushels were sold, average price, 40s. 1d.; in 1877, 69,055 qrs. 4 bushels, average price, 43s. 6d.; in 1876, 50,261 qrs. 3 bushels, average price, 39s. 5d.; in 1875, 45,392 qrs. 6 bushels, average, 36s. 10d.; in 1874, 77,072 qrs., average price, 42s. 8d.—*Brewers' Guardian.*

NOTES FROM NEW ZEALAND.

PROVINCE OF AUCKLAND, Aug. 20th.—The weather of the past month has been exceptionally severe, the oldest men amongst the Maories declaring that they have scarcely ever before seen such a continuance of wind and rain as has been experienced here during the past winter and spring. There have been also a few very heavy hail-storms even to the extent of making the ground white, which is most unusual so far north. The summer having been wonderfully fine, and the drought very long, it just pretty naturally follows—on the principle of the old Scotch proverb, "Lang fair, lang foul"—that the balance of Nature should be restored by a winter of proportionate severity to the benignity of the summer. In the Southern Island, in the Provinces of Canterbury and Otago, snow-storms have been lengthened and frequent, and mail-coaches have been snowed up, and even railways so blocked with the drifting snow as to prevent the trains running. The melting of the snow on the higher grounds has also flooded the rivers, and caused much damage to bridges and injury to property, even live stock having been swept away.

Wheat sowing has been laboriously concluded under great difficulties, few opportunities being got for getting the work done satisfactorily; and even when a chance was got of a clear day's work being done, a tremendous dash of rain was almost sure to follow on the freshly-stirred soil. Now that the braird is showing over the surface there is considerable patchiness on many fields, clearly indicating that the work of sowing had been forced, when the condition of the soil and state of the weather were equally unfavourable. Much of the crop had to be put in, however unwillingly, in the old-fashioned style, by hand, and covered either with the seed-plough or harrow, there not being drill-machines sufficient in the country to meet the urgent demand for them, the opportunities for sowing having been so few that every one wished to hire the drill at the same time. Preparation for sowing barley and oats and planting potatoes are now being urged forward; but the weather is still so broken that scarcely anything can be done, and what is attempted is done badly, the soil being saturated with water and the bulk of even the preparatory spring operations must now unavoidably run on to September. Grass is just now very scarce indeed, and store cattle, by the gaunt and shruke appearance they present when sent to the market, show unmistakably the privations they have undergone, and their sufferings from exposure to the cold and continuous rains of the past winter and early spring. Even from the splendid grazing districts in the Waikate country the cattle come to hand in miserable condition, showing that even these well-watered plains have suffered from heat and drought in summer, and cold in winter equally with districts much less favoured by nature in respect to climate and soil. Fat cattle have of late come to hand in increased numbers, though not in the top condition of two months ago and the recent rise in value has been lost, from 27s. to 35s. being now the price at the auction marts per cwt. of 100 lb. Tarnaki, Manganui, Hawkes Bay, and other southern districts having sent up large numbers of cattle by steamer, the supply of beef has been more regular and unbroken than could have been expected. The severe weather has been much against this trade; otherwise many more cattle would have been sent. On reaching Auckland after a sea-journey of three hundred miles they were often of late very much injured, and splendid four-year-old bullocks, weighing up to eight cwt.s., had often to be sold for as many pounds. Prime mutton is scarce, and brings

an average of 3½d. per pound, very well finished widders occasionally making 4½d. Store sheep are simply unsaleable, and cannot be turned into money on any terms, the wool on their backs in the present state of the pastures being all they are worth. The lambing season is just over, and has been a trying time, with such deluges of rain falling so continuously, and particularly during the night, when the temperature was lowest the mortality has been considerable. However, misfortunes of this kind do not give flock-owners so much trouble as at home, the value of a lamb being so very much less, and, with dear labour and low value of the stock, it would scarcely pay to give them the same amount of attention with the view of preventing casualties. While wool remains the leading money-making agent for the flockmaster, sheep must ever remain low in price; but much can be done in the line of improvement by introducing heavy-woolled breeds of sheep. For this purpose the noble Lincoln commands the largest amount of attention, and as the very best strains of blood have been introduced, New Zealand will soon be self-supporting, and farmers will be able to improve their flocks in stamina and wool by procuring rams from home-bred stock. Indeed she is in a position already to seek out the best market, and as the New South Wales ports are now open for the importation of stock from New Zealand, a beginning has been made to send stock there, and last week a consignment of 24 magnificent Lincoln rams, which for size, symmetry, and wool could scarcely be surpassed in any country, were sent to Sydney by the s. s. Hero.

The spring begins now to open, and here and there in very sheltered situations a peach-tree may be seen in full flower, although in general they are only preparing to open. Grass gradually assumes a greener colour, although as yet there is no growth. Another month, however, and, with more genial days and warmer nights, an impetus will be given to vegetation which will at once relieve the necessities of the live stock and gladden the hearts of the stockmaster and husbandman.

J. S.

DECAY OF AGRICULTURE IN RUSSIA.—The *Cologne Gazette* publishes a letter which it has received from a correspondent in Russia, and in which it is said that whatever course events may take Russia will not be able for some time to come to devote any attention to foreign affairs. Things have come to such a pass in the interior that the Government will have no choice but to address itself to the introduction of reforms, for the simple reason that the reserve of paying power has been squeezed dry. It is characteristic of the decay into which Russian agriculture has fallen, says the writer, that when revenue officers now visit farmhouses to see what articles there are to take by way of distress in satisfaction for arrears of taxes, they frequently find now those most necessary implements wanting which they are forbidden to take because they are considered absolutely indispensable. They have been sold for the necessities of life, and peasants in Russia lead a life which workmen in the West of Europe would consider too bad for beggars. The question which concerns them is not if they are to work 12 hours a day or 10, not how much meat they are to eat, but how they are to procure bread, and bread, too, which would be thought undeserving of that name in the West, being made of bran, some very coarse meal, and chaff. Even of that strengthless food there is lack.

POTATOES AT THE PARIS EXHIBITION.—We learn that the Gold Medal in the recent potato competition has been awarded to Mr. William Porter, of Old Meldrum, N.B., the famous Northern potato grower. Mr. Porter exhibited in the classes for 25 and 12 lbs respectively, and, although the competition was strong, was far in advance of his opponents. All who have seen Mr. Porter's superb samples at the various International Potato Exhibitions will acknowledge that the honour must have been deservedly won.—*Gardeners' Chronicle*.

Agricultural Societies.

BAKEWELL.

This show took place on October 3, and was a great success. The weather was beautifully fine, and a large number of persons from the surrounding district availed themselves of the facilities offered by the Midland Railway to visit the show. Mr. Smith, the Hon. Secretary, and the Committee, have been working hard during the past few months to make the show a good one, and their efforts have been eminently successful. The number of entries was large, and the quality of the stock shown was quite equal to former years. The cattle were placed in the cattle-market, and were a very fine show. A bull shown by Mr. Hopkinson, of Woodthorpe, was an extraordinarily fine animal; indeed it would be difficult to find a better at a county show. He took the first prize, but his rivals, though not such large animals, ran him very closely. In the ram class Mr. Johnson, of Kirk Ireton, took the first prize with a very fine animal. Pigs were a good show, the animals having plenty of hair. The mares were exceedingly well represented, those for agricultural purposes more especially. The foals were a very good lot; and Mr. Grindy's, which won the prize, was undoubtedly the best of the lot. The jumping, as usual, attracted a large amount of interest, and the performances were fairly good.

PRIZE LIST.

CATTLE.

BULLS.—Shorthorn bull, two years old.—First prize, M. T. Hopkinson, Woodthorpe, Tipton; 2, B. Swatfield, Pilsbury Grange; 3, B. Wildgoose, Over Haddon. Yearling Shorthorn bull.—First prize, H. Jenkinson, Unstone; 2, T. Pearson, jun., Chesterfield; 3, R. Johnson, Kirk Ireton.

CALVES.—Shorthorn bull calf, under twelve months old.—First prize, H. Jenkinson; 2, J. J. Crofts, Staveley; 3, F. Potter, Harthill Moor.

COWS.—Shorthorn cow, four years old and upwards, combining in the greatest degree milking and grazing properties, in-calf, or having calved since March 1, 1878.—First prize, S. Grindy, Tissington; 2, R. Sybray, Ambergate; 3, G. Lomas. Pair of cows of any breed for dairy purposes, each having had a calf in 1878, and in milk.—First prize, S. D. le Gratton; 2, J. Mellor, Bakewell. Four milk cows out of one dairy exceeding ten cows, each having had a calf in 1878, and in milk.—Prize, H. Harrison, Edensor. Two cows out of one dairy not exceeding ten cows, each having had a calf in 1878, and in milk.—First prize, P. Furniss, jun., Ashford; 2, T. P. Higgott, Bakewell; 3, Mark Clay, Bakewell.

COTTAGE'S PRIZE.—Milk cow, shown by a Cottage holding not more than eight acres of land.—First prize, D. Roberts, jun., Bakewell; second, W. Edge, Edensor; third, G. Gregory, Winster.

HEIFERS.—Shorthorn heifer, three years old and under four, in milk or in calf.—First prize, M. T. Hopkinson, Woodthorpe, Tipton; second, H. Jenkinson, Unstone; third, G. Wallin, Meadow Place. Pair of Shorthorn heifers, two years old and under three, in milk or in calf.—First prize, M. Dale, Conksbury; second, M. T. Hopkinson; third, S. Dale, Gratton.

STIRKS.—Pair of Shorthorn stirks, one year old and under two.—First prize, M. T. Hopkinson; second, R. Orme, Bakewell; third, G. W. Mason, Stony Middleton.

BULLOCKS.—Pair of store bullocks, two years and under three.—First and second prizes, G. Wallin.

CALVES.—Pair of cow calves of the Shorthorn breed, under twelve months old.—First prize, M. T. Hopkinson; second, G. Furniss, Birchill Farm; third, S. Grindy, Tissington. Beast, male or female, for breeding purposes.—Prize, M. T. Hopkinson. Cow or heifer in milk or in calf.—Prize, M. Dale. Cow calf under twelve months old.—Prize, M. T. Hopkinson. Bull calf.—Prize, G. Lomas, Stodhart Farm. Fat cow.—First and second prizes, F. George, Ashford.

SHEEP.

RAMS.—Long-wool ram of any age above a shearing.—First prize, R. Johnson, Kirk Ireton; second, W. Wright Whinston; third, J. Buckley, Whinston. Shearling long-wool ram.—First and second prizes, R. Johnson; third, R. Lee, Woodhead.

EWES.—Pen of five long-wool ewes which have reared lambs in the Spring of 1878.—First prize, R. Johnson; second, R. Sybray, Ambergate; third, R. Johnson.

THEAVES.—Five long-wool theaves.—First prize, R. Johnson; second and third, R. Sybray.

LAMBS.—Five long-wool ewe lambs.—First prize, W. Buxton, Bakewell; second, R. Sybray; third, W. Sheldon, Lowfields. Five long-wool wether lambs.—First prize, W. Sheldon; second, G. Furniss, Birchill Farm; third, W. Smith, Bakewell.

PIGS.

Boar of any age.—First prize, J. Wheelton, Hassop Station Inn; second, J. Johnson, Longstone; third, B. Wragg, Cow Close, Stanton.—**Sow of any age.**—First prize, J. Gibbs, Ball Cross, Bakewell; second, W. S. Holmes, Stanton Lees; third, B. Wragg.—**Pig shown by a cottager.**—First prize, Larze Mountney, Bakewell; second, E. Williams. Highly commended, W. Bagshaw, Bakewell. Commended, W. Aldgate, Ashford, and C. Hibbert, Edensor; D. Roberts, jun., Bakewell.—**Best three store pigs of the small breed.**—First prize, M. Clay, Bakewell; second, J. Wheelton.—**Prize given by Messrs. Hibbert and Co., Denton, for the best fat pig fed on their codiment.**—L. Mountney.

HORSES.

Brood mare and foal of the draught kind.—First prize, T. Lowndes, Ashborne; second, W. and T. Hyslop, Gladwin Mark, Ashover; third, W. Lee, Ashover.—**Cart foal exhibited with its dam.**—Prize, S. Grindy, Tissington.—**Brood mare and foal best fitted for breeding hunters and hacks, but not thoroughbred.**—First prize, J. J. Crofts, Staveley; second, J. R. Smith, Sheffield.—**Light foal exhibited with its dam.**—Prize, W. Gill, Stoke Farm.—**Pair of plough horses or mares, to be shown in harness.**—First prize, T. Brough, Alsop-en-le-dale; second, H. Harrison, Edensor; third, J. Heathcote, Callowstith.—**Two-years-old gelding or filly of the draught kind.**—First prize, T. Lowndes, Ashborne; second, S. Dale, Gatton; third, E. H. Garton, Lumsdale.—**Yearling colt or filly of draught kind.**—First prize, W. Lee; second, W. Toplis, Pilsley; third, G. Wallin, Meadow Place.—**Two-year-old gelding or filly of the nag or riding kind, and not thoroughbred.**—First prize, T. P. Higgott, Bakewell; second, F. Green, Ashford; third, Mrs. Wager, Longstone.—**Yearling colt or filly of the nag or riding kind, not thoroughbred.**—First prize, W. Tomlinson, Bradley Pastures; second, T. N. Twigg, Farwich; third, J. Wheelton.—**Hack, 14 hands and above.**—First prize, W. Stevenson, Farnah, Duffield; second, T. W. Butean, Middleton Hall.—**Pony or cob under 14 hands.**—First prize, Mr. Broomhead, Sheffield; second, F. W. Armitage, Owler Bar; third, T. Burton, Upper Langworth.

HUNTERS.—Hunter to be tested by leaping over hurdles.—First, second, and third prizes, R. W. M. Nesfield, Bakewell.—**Hunter, equal to 12 stone, not to be tested by leaping only.**—First and second prizes.—R. W. M. Nesfield.—**Hunting colt or filly, three or four years old, to be tested by leaping over hurdles.**—First prize, W. Tomlinson; second, J. Hodgkinson, Bakewell.

CHEESE AND BUTTER.

Six Cheese.—First prize, W. Potter, Harthill Hall; second, J. Dakin, Over Haddon; third, J. W. Thompson, Callinglow.—**6lb. of butter.**—First prize, Vca. Archdeacon Balston, Bakewell; second, G. Furniss, Birchill Farm; third, P. Furniss jun., Ashford; fourth, T. Potter, Curbar.—*Derby Reporter.*

EAST CUMBERLAND.

The following is the report of the inspectors of green crops shown in competition for prizes offered by this Society and some private firms.

"Having completed the task of inspecting the green crops grown on farms over and under 200 acres respectively for prizes

offered by the above society, and a challenge cup given by Messrs. Little and Ballantyne, of Knowfield Nurseries, also two prizes of the value of £10 offered by the Woodbank Manure Company, confined to a radius of twelve miles round Carlisle, as award as follows:—

“For farms over 200 acres, with not less than 25 acres of green crop, there were five competitors, viz., James Graham, Parcelstown; J. and R. Little, The Fauld; Thomas Mattinson, Mossband Hall; N. Wright, Harraby; J. and R. Little, The Guards. The three first-named having each won the challenge cup once previously, it behoved us to be satisfied that the winners for 1878 was fully entitled to it. This we are able to confirm, and to award the cup to Messrs. Little as their permanent property. Great credit is due to the producers of the green crops on the Fauld Farm, it being the heaviest with one exception. The second place falls to Mr. Nicholas Wright, of Harraby. We regret that we were unable to place him first so as to keep the cup rolling, at all events for another year. Mr. Wright, however, is a good second, and the competition generally was close. We found the best crop of manzel wurtzel on Mr. Wright's farm, and we were informed that artificial manure does not find a place on this farm.

“The following are the competitors for farms under 200 acres, with not less than 8 acres of green crop—viz., J. Donald, Glinger Mill; R. Graham, Bick House; Thomas Little, Watch Crass; D. Phillips, Newby; A. Ritson, Micklethwaite; Mrs. Slack, Newby; W. Thomlinson, Hosket Hill; Messrs. Wannop, Broadwath. We award the first prize to Mr. Phillips, and second place to Mr. Thomas Little.

“As to the Woodbank Manure Company's prizes (for which there were 8 competitors) for the best four acres of swedes, we have much pleasure in placing Mr. W. M. Rickerby, of Monkhill first, whose crop is the heaviest of the whole competition, without exception. The second prize is taken by Mr. W. Lloyd, of Bonstead Hill. Here also the competition was close.

“The whole of the green crops, as a rule, are good and deserving commendation, and generally free from finger and toe.

“In conclusion, we may be permitted to state that a great breadth of potatoes have been grown. On a few farms we observe a new sort of potato called the Champion, white fleshed, with strong haulm, but small tubers. In our own opinion, had the stitches or drills been wider, the tubers would have been larger and probably the yield increased. It is also our pleasure to state that the potato crops generally are, so far, free from disease.

“(Signed)

“F. PUNCHARD

“JOHN GILL.

“ROBERT HODGSON.

“Carlisle, October 10, 1878.”

TUNBRIDGE WELLS.

This extensive show—the most important provincial exhibition of horses, cattle, sheep, pigs, hops, butter, and farm produce, held in the South-Eastern Counties, was favoured on October 11 with beautiful weather, presenting a delightful contrast to the gales and storms of the day previous. The exhibition took place in Mr. Bates' fields, on the Eridge-road; the whole of the arrangements being admirably conducted by the Stewards, Lord G-o. Pratt, Messrs. J. F. Bates, T. E. Bethell, B. Buss, T. Conchman, J. Harris, T. B. Lansdell, John Nokes, W. Roper, C. Rowe, R. Smith, B. Southon, B. S. Wilmot, G. Ware, and the hon. secretaries, Mr. J. M. Richardson and Mr. J. W. Roper. The entries for horses numbered 101, the most successful exhibitors being Messrs. E. and A. Stanford, of Eaton, Ashurst, near Strating; Major Horrook, exors. of J. Hodges, Groombridge; Mr. J. Paine, Groombridge; Mr. Bushby, East Farleigh; Mr. B. Biss, Shelmonden; and Mr. E. Durrant. Of 19 shorthorns the most successful exhibiting were Mr. T. Russel, of Etchingham; Mr. Mockett, of Polegate; and Mr. Charles Collard, the well-known breeder of Canterbury. The Island stock was represented by 24 animals, Mr. K. Thornton, of Framfield, securing first prize in both classes. Sussex stock was in force, numbering 32 animals of excellence, Messrs. Stanford, Mr. Louis Huth, of Possingworth, and Mr. C. Whitehead, of Barming, being the most prominent exhibitors. In dairy stock (25), the Messrs. Stanford, Mr. T. B. Lansdell, of Benlit Bridge; Mr. J. W. Roper, of Frant; Mr. T. Reeves

Weston, of Guestling; and Mr. B. W. Tassel, of Patricbourne, were most successful. The Southdown entries numbered 30 pens. Messrs. E. and R. Emery, of Strorrington, and Henry Humphrey, of Ashington, carrying off the majority of the prizes. In long wools Mr. J. S. Godwin, of Hallow, was chief winner. Of pigs (27 entries) the principal exhibitors were the Marquis of Abergeenny, a staunch supporter of the show, and the Marchioness Camden. There were large shows of roots, butter, hops, poultry, rabbits, and pigeons, the latter classes being more numerous than ever known before. The agricultural implement department was well filled by Messrs. Cheals and Sons (Lewes), and Mr. James Bartlett (Vale-road, Tunbridge Wells).

The Hon. Ralph Nevill, in presenting the hunters' prizes, said it was very creditable to the neighbourhood to produce so many excellent hunters, exhibiting great jumping capacity.—*Sussex Express.*

Chambers of Agriculture.

BEDALE.

The annual meeting of the Bedale Chamber of Agriculture was held on Oct. 15 at Bedale. Captain CLARKE, President of the Society, occupied the chair, and thirty other members were present. After officers had been elected, and the business transacted, the Chamber proceeded to discuss a paper upon “Out-door relief,” contributed by Mr. H. M. G. Coore, J.P., a copy of which was in the hands of each member. Mr. Coore said that his object was to examine the out-door relief system, to point out its defects, and the reasons which, nevertheless, weighed with so many persons in leading them to encourage rather than reduce it. The first thing which struck anyone who looked into the subject was the extraordinary difference of practice in different parts of England, and even in different unions of the same county. There were unions where 60 per cent. of the paupers were relieved in the work-house, and others where only 3 per cent. were so relieved, the rest getting relief in their homes. In one place it was lavishly given, in another sparingly and only after strict investigation. He asked what was the object and end of the Poor-law—was it to make the poor comfortable, or to keep them from plunging the rich? No. It was simply to prevent starvation. What the law directed the Guardians to relieve was not poverty, but destitution—absolute want of the bare necessities of life. They had no right to take the money of the industrious and give it to the idle, because it would be unfair and unjust that the earnings which one man had gained by thrift and forethought should, except for the paramount purpose of preventing a fellow creature from perishing, be expended on another who had made no such effort. Another reason was that in nine cases out of ten it was the worst thing they could do for the individual man to give him relief, because it encouraged him in habits of improvidence, and moreover taught the whole class to which he belonged that they had no need to save, or to rely upon their own industry and steadiness; because the parish would provide. The outdoor relief system was the permanent rival of the friendly societies. Why should a labouring man put money in the savings bank or join a benefit club, when he knew that in illness he would be nursed and his children fed by the parish in his own home? Once let the labouring classes realise that they were to save, and they would see such an increase in the number of benefit clubs and provident societies as would prove the truth of the old saying, “Where there's a will there's a way.” To refuse out-door relief would be said to be a hard, uncharitable doctrine, which might be applicable to the able-bodied pauper who could work, and deserved no pity if he would not; but should not apply to the sick, to the widow left with children who could not help themselves, and therefore must be helped by others. It was true enough that they could not support themselves when overtaken by sickness or old age, but they could in most cases have provided in time of health and youth for what they knew to be the common lot of mankind. They ought to have made provision then, and if they neglected to do so, were they entitled to complain if they suffered now? They might pity them, and wish to relieve them; but they should consider what might be the result if they yielded to this benevolent impulse. It was encouraging others to follow in the

same course, and the hardship to the few was a small matter compared with the incalculable evil to the many wrought by indiscriminating benevolence, whether in the form of legal relief or private charity. What, then, were the conclusions they should draw as to the administration of relief. That it should be given as sparingly as possible, and only in times of extreme need; that it should be given for such a time only as was absolutely necessary, and should be discontinued as soon as careful watching shall have shown that it could be dispensed with, and that it should be given upon fixed principles, so that an applicant might know that he had nothing to expect from the mood of a Board, benevolent or otherwise, or from the presence of this or that Guardian. The question next considered by Mr. Coore was whether the relief to be given in necessitous cases should be given in the workhouse or in the pauper's own home. In all unions where the workhouse test had been applied it had been found to actually diminish the number of inmates, by diminishing the general pauperism of the district. The outdoor system, in the long run, was therefore the more costly. To end one's days in the workhouse was a prospect all shrank from; but the inmates received more careful nursing, better food, and more cleanly and comfortable abode than in their own cottages. Above all, they had to consider not the comfort of a particular individual, but the welfare of the whole class to which he belonged, and the more unpleasant they made the consequences of idleness, of intemperance, of extravagance, the fewer paupers they would have. Mr. Coore then went on to show how the poor law as it stands had been administered in various unions.

Mr. EDMUNDSON (Clerk to the Poor Law Union, Ripon) said that Mr. Coore appeared to overlook the fact that Boards of Guardians had in their hands a large qualifying and dispensing power, and that they were bound to a considerable extent to administer the laws according to local circumstances. Mr. Coore said that in some places relief was lavishly given; but was such a thing possible that the representatives of any body of ratepayers taxing themselves and their fellows with granting relief lavishly. Relief was far more likely to be given sparingly, and after strict investigation. But he (Mr. Edmundson) asked were all applicants for relief idle? Were not very many applicants brought to that stage through circumstances over which they had no control?

Mr. J. WALKER (Fencote) suggested that the best way to lessen pauperism was to encourage labouring men to join friendly societies. A few shillings entrance fee and a few pence weekly in the Odd Fellows Society would keep the aged or disabled man from the workhouse.

Mr. ATKINSON (Vice-President) said the farmers ought to become hon. members of such societies, and encourage them.

Mr. SHERWOOD (Bedale) as a member of a Board of Guardians, drew a different conclusion to Mr. Coore. Without giving outdoor relief poor persons at times would starve owing to their abhorrence to the workhouse.

Mr. ALBERT RUTSON (Northallerton) said that the criticisms upon Mr. Coore's paper went upon the ground that he made no provision for exceptional cases; but in fact he did so. Some of the speakers also appeared to think that Mr. Coore spoke of the lavishness of neighbouring unions; but he did not look at the paper in that light. It appeared to him to be aimed at the system.

Mr. COORE replied, and the discussion terminated.

DEVONSHIRE.

The Devonshire Chamber of Agriculture met at Exeter on Oct. 18, when a discussion took place on the Weights and Measures Act, in the course of which the unanimous expression of opinion was that it would have been better had the Act made the metric system the standard of weights and measures in this country. Great good had been done by consolidating the law; but by enacting an independent standard of our own instead of adopting that which was the prevalent system in the majority of civilised countries difficulties were unnecessarily placed in the way of the comparison of the prices in England with the prices of produce in other countries. There was no doubt that Earl Fortescue thought that if we had adopted the metric system our colonies, the United States, Russia, Norway, and Sweden, who were almost the only civilised countries having independent systems of their own, would have followed our example. As it was we were

practically stopping the way to the acquisition of a great boon to the whole of the civilised world, the adoption of one set of weights and measures current in all countries. In an educational point of view the variety of tables in existence in this country were a cause of great trouble and waste of time, and if we did but adopt the metric system it would save rivers of tears and acres of sore backs all over the kingdom. Scientific men would also gain advantage by the adoption of a system that would enable them to readily compare the statistical observations of scientists of other countries with those they themselves made. The course pursued by the Liverpool corn merchants in suggesting that the cental should be a standard measure in this country was approved of, and eventually a resolution was unanimously carried, that in the opinion of the Chamber all solids should be sold by the cental of 100lb. standard.

EAST KENT.

A special general meeting of this Chamber was held on Saturday, October 12, in the Guildhall, Canterbury. There was a large attendance of members. J. B. PLUMPTRE, Esq., President, was in the chair.

The business mentioned on the agenda paper was "To consider the law regarding distress for rent as affecting agriculturists, to be introduced by Mr. James Lake."

Mr. LAKE said he had ventured to call them there that day to discuss what he thought was a most important question affecting the agriculturists of this country, and it also equally affected tradesmen and landlords. There had occurred a most extraordinary case lately under that law. He found that whenever heretofore stock had been distrained for rent, on every occasion when they have been proved to belong to other parties the stock had been released. He would now merely give them the particulars of the case in question. He had been in the habit for the past fifty years, and his father before him, to the extent of seventy years, after lambs were weaned, to put them out on the hill, to eat the aftermath. He was very unwell some time ago, and Mr. Wood, who managed most things for him, put out the lambs as usual this year, and he would read to them Mr. Wood's statement of what took place. From that statement it appeared that on the 24th of September he found the lambs in the possession of Mr. Duppa's men. The men refused to give them up. They were well aware to whom they belonged, for the sheep were all marked with a large "L." He called on Mr. Duppa's solicitor at Maidstone, and he was referred by him to Mr. Duppa. He saw that gentleman, and he told him if he was prepared to pay him (Mr. Duppa) £300 or £400 he might have the sheep. The law, said Mr. Duppa, gave him the sheep, as he could show in black and white, and he meant to keep them. The sheep were, in fact, sold on the 2nd of October. They would see from this, and Mr. Duppa had the law with him, that the sheep were seized on the 24th of September, no bill of sale was issued until the following Monday, and the sheep were sold on Wednesday, the day but one after. If he (Mr. Lake) had not had Mr. Wood on his land his sheep would actually have been sold and he would have known nothing whatever about it. It appeared there were arrears of rent, expenses, &c., on the farm amounting to £495. The rent of the farm on which the distraint had been put in was £112 a year, and there were four years due. At the sale the farm effects went for £135, more than they were worth in his opinion, and his lambs sold for £360, making the £495. So you will see Mr. Duppa had in his possession £360 of his (Mr. Lake's) money in hard cash. This was a state of things which ought not to be allowed to exist in a civilised country. If a landlord intended to be liberal let him give the tenant a note of hand to enable him to go on, and not wait, like a spider hiding in his web, until there appears something on the land which is worth seizing and will cover his debt. He (Mr. Lake) meant to say that such a law ought not to exist any longer. He was not going to rail against landlords; he had been a tenant-farmer nearly all his life, and he had always received a great deal of kindness and civility. With the exception of the case he had stated to them he had hardly ever heard of a case of misunderstanding. They had heard of such cases in Scotland and Ireland, and the same law existed in England, but the English landlords, in every case in which

they took possession, had given up the stock on ascertaining that they did not belong to the tenants. He hoped they would not allow the matter to rest there, but let the proceedings of that day be circulated all over England. He concluded by moving "That in the opinion of this Chamber, owing to the unjust operation of the law of distress for rent, the time has arrived when it should be amended."

Mr. AVELING said he would second the motion because he had very nearly fallen a victim to the same law. He had sold a set of machinery to a tenant-farmer whose place was seized for rent. But he did not wait like Mr. Lake, for on Sunday evening he sent a body of men and took the machinery away. Mr. Aveling then read a paper on the question before the Chamber, stating the law as it exists and recommending revision, in which he said the following considerations should not be lost sight of:—

1. The law of distress, if maintained, should be rendered clear by statute on all points, especially as to what chattels are subject.
2. The antiquated notion of punishment should be for ever abandoned; and penal and fictitious rents should not be distrained for.
3. The distinction between the practical working of distress in country and town should be steadily kept in view.
4. No distress should be permitted without a previous affidavit or declaration that rent is due.
5. No seizure in town or country should be made except by a public responsible officer.
6. The fees and charges should be fixed.
7. The time within which a distress may be resorted to should be limited to two years, or better far, one year as the extreme outside.
8. The landlord's priority in and after a bankruptcy should not depend on the mere formality of a distress.
9. Labourers' wages, bankruptcy or not, should be preferred to the landlord's claim.
10. The landlord should be able to attach the tenant's chattels for current rent upon proof of intended fraudulent removal before the rent is now technically due.
11. The landlord's power of re-entry for non-payment of rent should, where there is no defence to the ejectment, be more speedily available.
12. The law as to the sale by the Sheriff of growing crops should be amended.
13. Stock going to and from market should be free from all risk on strangers' land.
14. Agricultural machinery and implements should be further protected.
15. Cattle and sheep existing should not be liable beyond the *bona fide* sum agreed to be paid and remaining unpaid by the stock owner.
16. The measure of justice extended to Scotch tenants by the Act of 1867, and to town lodgers by that of 1871, should not be withheld from the British farmer.
17. In future agricultural tenancies the right of distress should never exist without contract, express or implied.
18. No distress within a short fixed period before the filing of a petition for liquidation should avail preferentially for more than a year's rent.
19. To avoid injury and difficulty as to small tenants in the country the size of holdings should (as in a recent Act) be taken into account.
20. Generally and lastly, that the whole question, especially the liability of strangers' goods, and the effect of the landlord's priority, should be reconsidered with reference to the change of circumstances, the exigencies of business, and the demands of justice.

Mr. COLEMAN thought Mr. Lake's case was a very hard one, but he understood that Mr. Aveling's paper supported the entire abolition of the law. Which did the Chamber support, the amendment or the abolition of the law?

Mr. AVELING said the paper distinctly proposed the amendment of the law, and he concluded by reading twenty points on which such amendment was advisable.

Mr. ALEXANDER thought it should be known that the gentleman referred to in Mr. Lake's case was Mr. George Duppa, of Hollingbourne House, near Maidstone, who some time ago filled the office of High Sheriff of the county.

Some conversation then took place on the further action of the Chamber in the matter.

Mr. BASIL HODGES thought there had better be an adjourned meeting at which the Chamber might discuss how far they were prepared to go in for any reform of the law.

This appeared to be the general feeling of the members present, and on the motion of Mr. KNIGHT, seconded by Mr. LAKE, it was resolved "That petitions for the amendment of this law be forwarded to the county members for presentation, to Parliament; and that this meeting be adjourned for a fortnight, and that in the meantime a statement of the case be sent to the Central Chamber of Agriculture and to the Local Chambers asking them for their co-operation."

ONTARIO PROVINCIAL EXHIBITION

The following particulars of the agricultural exhibits at this show are taken from the *Toronto Globe*:—

The show of Shorthorns is a magnificent one. Samuel Wood shows two 2-year-old Devons from Rudd's stock, and a yearling bull from Peter's stock. There is a splendid show of black-pollled cattle. There are only a few Herefords, but they are of extra quality. F. W. Stone shows Crown Prince, Governor 4th (four year old, imported), Regent Duke of Manchester, three bull calves, and three females in every class but one, and in that class two head. Hugh Clark, Brampton, shows one Jersey bull and one bull calf and four females. T. Nicholls, Plattsville, shows the Ayrshire bull Tilton and a one-year-old heifer. Rodden, Plantagenet, shows Carriek Lad, winner of fourteen first prizes and diplomas, among them the centennial prize as four year-old bull; also a dozen head of young bulls and heifers from him, and two cows from Sir Thomas Moore, another prize bull.

In the sheep department Cotswolds, Leicesters, Lincoln and Downs were represented; and the principal breeds of pigs were shown.

The display of draught and agricultural horses is exceptionally good, both as to quality and quantity. Of course the Clydesdales greatly outnumber all the other breeds combined, but at the same time there are very worthy representatives of the Percherons, Suffolks, and other heavy breeds. A notable and very promising feature of the exhibit in these classes is the number of large mares shown. The importation of large rooey brood mares is an enterprise that can hardly receive too much encouragement, for while it is desirable to improve the size of Canadian horses, it should not be done at the expense of style and form, as is sure to be the case when large horses are permitted to cover mares of inferior size and limited breeding capacity.

It may be said that the entire display in machinery is a token, among many others, of what Canadians are steadily achieving. In agriculture the Canadians are second to none on this continent; in a host of industries the manufacturers hold their own against all others, and in this, the making of these working machines, and the last to be expected in which they could compete with the older countries, it is now said they are well abreast of all others. Among the novelties there is a new mower of almost startling simplicity. It is called Pye's Harvester, and was invented by George Pye, of St. John, N.B. It has no cogs nor cog wheels, no cranks, no pitman, and almost nothing. It is worked by a curiously-shaped cam inside the driving wheel. Against the cam anti-friction rollers play, and this gives the reciprocating motion to the knives, the motion being conveyed by a bar. As this mower can be made for 20 dollars, and as the principle is applicable to reapers just as easily as to mowers, there is a great future before it, unless in practice it exhibits defects not apparent on a casual examination. An ingenious arrangement for separating cream from milk is shown. An upper vessel fits in a tube and the tube in a lower vessel. The two vessels are filled with new milk, and when the separation has taken place the cream is in the upper vessel. A tap between the two is then turned and the cream lifted off bodily. Thomson and Williams show a self-binder which uses twine. That and other reapers will be shown in motion; also a new thing to Canadians in ploughs, being a rotary plough, which is claimed to be a big thing as a sub-soil plough and thistle killer. The working part of this implement consists of a large concave wheel with cutting edge revolving at an angle of 35 degrees with the line of draught. A rolling land bar follows the cutting-wheel. This plough is stated to be equal to three acres a day.

Literary Notices.

OUR WOODLAND TREES. By GEORGE FRANCIS HEATH. London: Sampson Low and Co.—A short time ago it was our pleasant duty to review an illustrated edition of Mr. Heath's now well-known book, "The Fern Paradise." The beauty and fidelity of the illustrations, the picturesqueness of the descriptions, and the enthusiastic advocacy of fern culture, with carefully composed directions for cultivation, rendered that work pre-eminently the book of the fern, as well as a most desirable ornament to the drawing-room table. The volume before us is in every respect fitted to be a companion book to the earlier work, and is, in our opinion, even more valuable, interesting, and instructive. Beginning with a brief but clearly and simply-written description of the life of a tree, tracing its birth, and showing its structure, growth, and development to maturity, the author goes on to enlarge upon the beauty of trees, describing "lovingly"—as he is perhaps a little too fond of telling us—their picturesque appearance, usefulness, and sanitary value. Beautifully wooded districts of this country are pictured in glowing though truthful colours, and particular examples of exceptionally fine trees are given. The preservation of woodlands is eloquently pleaded for, and a just tribute to the energy and public spirit of the preservers of Epping Forest to public use is most appropriately introduced. Mr. Heath also earnestly advocates tree-planting in towns, and dwells with useful enthusiasm upon the delight and healthful influence that would be secured by transforming our dull masses of bricks and mortar into "sylvan towns." Here we are entirely with him; and yet we may take occasion to observe that even this good work of tree-planting may be carried to excess. In a few of our London suburbs many of the houses are so closed in by encircling trees as to shut out air and sunshine to an undesirable extent, rendering the houses damp and dark, and the air close and damp too. The engravings in the first portion of the volume are beautifully done, a few from photographs, and the rest from drawings by Mr. Harrison Weir, Mr. Birket Foster, Mr. E. M. Wimperis, Mr. C. Macquoid, and Mr. T. H. Hill. The only fault we have to find—and it is an ungracious task to criticise in any way unfavourably so excellent a book—is that Mr. Heath indulges a little too often in rapturous exclamations as to the beauty of trees and the beneficence of the Creator, which by frequent repetition become trite, and appear forced, as if the necessity of writing picturesquely to match the illustrations were a little too pressingly felt. The book may be said to consist of two main divisions, in the first of which British trees are described generally, and in the second particularly. The first is subdivided into three parts, respectively headed—"The Life of a Tree," "Some Woodland Rambles," and "Trees at Home." The second, Part four of the volume, is entitled "British Woodland Trees," and is devoted to separate descriptions of the varieties of trees which flourish in this country, with coloured plates showing the foliage of each. The illustrations have been prepared with great care, and executed with rare fidelity from photographs, the venation of the leaves being accurately represented. We regard these illustrations, with the descriptive letterpress accompanying them, as the most valuable feature of the work, which is thus made an excellent means of making its readers acquainted with the names and characteristics of the trees they see around them, or in their country rambles. Mr. Heath has supplied a great want in giving us a book which is at once readable, ornamental, and instructive in a high degree.

ON HORSEBACK THROUGH ASIA MINOR. By Capt. FRED. BURNABY. London: Sampson Low and Co.—The words "seventh edition" on the cover of this most entertaining book of travels and adventures show the popularity which it has attained. Captain Burnaby is not only a bold traveller, but also a clever and humorous writer. In the strong partisanship in relation to the Eastern Question which he constantly exhibits throughout this book, as in his "Ride to Khiva," many will of course disagree with him, and some of his statements and conclusions will consequently be regarded with suspicion; but this in no way detracts from—it rather adds to—the entertaining characteristics of the work. We should be sorry to miss reading any book of travels which Captain Burnaby's restless spirit of adventure may induce him to write.

VILLAGE POLITICS. By C. W. STUBBS, M.A., Vicar of Granborough, Bucks. London: Macmillan and Co.—In this little book we have a series of addresses and sermons on the Labour Question, dating from 1872, when the agricultural labour agitation was in full swing, to 1877. Mr. Stubbs took an honourable and manly course in speaking out plainly to his parishioners as he did on such a delicate subject. His sympathies were obviously with the labourers and their Union, and he does not appear to have spoken as strongly as he might have done against the unreasonableness and abusiveness of many of their leaders; but he gave much useful advice to labourers and farmers alike, together with some that we do not agree with. Nearly all his sermons and addresses read like introductions merely, and come to an end without properly finishing. He leads us to expect that he is working up to some decisive conclusion, which, however, is never declared. In fact, though he tells those immediately concerned what is kind and just and reasonable, he only touches the fringe of the great question which he deals with. He does indeed hint at one or two modes of solving the labour difficulty, and his addresses were calculated to set men thinking, as well as to disarm prejudice and allay unreasonable irritation. For these reasons his little book is worth reading, though it cannot be said to throw much light upon one of the most important and difficult problems of the day.

THE CONTAGIOUS DISEASES (CATTLE) ACT AND THE NEW ORDER IN COUNCIL. London: Knight and Co.—A handy volume for stockowners, well-arranged and clearly printed, with an index which will greatly facilitate reference.

STAINING, VARNISHING, FRENCH POLISHING, &c. By SAMUEL SMITHER. London: The Author, 63, Crescent Road, Hackney Road, E. **THE AMATEUR MECHANIC'S PRACTICAL GUIDE BOOK.** Same Author.—These are two useful little hand-books, containing many valuable receipts, some of which were trade secrets previous to their publication by the author. The first includes directions for gilding and bronzing in water and oil, cementing, and a variety of information on cognate subjects. The second contains many valuable hints as to work that any amateur of ordinary skill may do under such direction in the workshop, the house, or the garden. Country people often have to send a long distance to get a workman capable of doing little jobs which they could easily do for themselves if they knew how, and so save an expense out of all proportion to the trouble of doing the work; and Mr. Smither's little books tell them how to do such things. We notice a mistake in the second of these books, on page 31, a roof of very inflammable materials being described as "fire-proof," where probably the word water-proof was intended to be used.

AGRICULTURE IN CYPRUS.

The two natural drawbacks to agriculture in Cyprus are drought and locust. The former, as in adjacent regions and other countries, has often been experienced in Cyprus. On famine, which lasted for seventeen years, in the third century has given its name to one of the capes of the island—Cape Gatta, or "Cape Cat." The legend is that the whole of that region having become depopulated through the famine was overrun with serpents. In order to exterminate these, cats were introduced, who did their work effectually. However true the story of the cats may be, that of the famine is recorded in history. During the Venetian *regime* the country also suffered from the same cause. That referred to already is the most recent occurrence of the kind. Cyprus, however, can be saved from this drawback by the planting of trees, and a utilization of its abundant subterranean water supply for the purposes of irrigation. The other natural drawback, that of locusts, has also in past years caused much suffering, and has no doubt materially checked the progress of the island. A few years ago, owing to the efforts of Said Pacha, one of the governors of Cyprus, the destruction of these pests was accomplished. In one year over sixty tons of bags (50,000 oke) of eggs alone were destroyed. Each of these bags contained the germs of no fewer than forty locusts. One oke, my informant tells me, was computed to contain nearly a million of locusts. Since the time of Said Pacha, one of the few able governors of the island, I am sorry to say that his efforts for the destruction of this terrible pest, from what I can learn, have not been energetically followed up. It is now feared that unless this is done the island will not long enjoy that immunity from their ravages with which it has for several years been blessed. One thing about these locusts makes their complete extirpation quite possible. They do not come from Syria, as I supposed before I left England, and are indigenous, if I may use that word, to Cyprus. A Cypriot remarked to me that the island would eventually be freed from locusts as England had been from wolves.

I had last week a pointed illustration of the evils of the system of farming taxes. Having gone into a vineyard to purchase some grapes, I asked the owner why he did not harvest his crop, as his grapes appeared to be quite ripe. He told me he was anxious to do so, but could not get the tax-farmer to value it. He further stated that he feared he would lose a part of his harvest by this delay—and this the tax-farmer well knew—and used this means to make him pay more than the stipulated tenth. In this manner I am told that extortion is usually practised upon the peasant, often forcing him to pay twenty per cent. instead of ten, in order to avoid a greater loss. This, I need hardly say, was connived at by the officers of the late Government, who received a share of the spoils. Under the present *regime* matters are somewhat changed. The tax-farmers have recently asked the aid of the Government to collect their taxes, as stated in my last letter; but I am since informed that in preferring this request they have made representations about the peasants calculated to prejudice them in the eyes of the Government, but which are either gross exaggerations or utterly false. As might be expected from Sir Garnet Wolseley, they have not yet won him over to their side. It is unfortunate that this evil cannot be remedied at once, but nothing can be done in the matter until next spring, as the taxes are annually sold in June.

While the Government cannot at present remedy the evil just referred to, much surprise is felt that the Customs of the island are still collected under the old Turkish system. The general impression prevailing here when I arrived was that after a certain date, which expired last week, the Custom House management should pass entirely into our hands. Upon inquiry I find that this is incorrect, and that even no movement is yet apparent in that direction. There is something mysterious about the whole matter. A report was current that one class of Turkish bondholders having a lien on the Customs of the Porte had objected to an entire transference of the Customs of the island to the English. Other vague and some equally absurd rumours were also current upon the subject. That there is a hitch somewhere is pretty evident, some obstacle raised by the Porte or coming from some other quarter. The management of the Customs here, at any rate, is so un-English that it is impossible to believe that

it will be tolerated a moment longer by our Government than is necessary.

There has been a good deal of grumbling amongst British importers, chiefly at the delays, and what they regard as the impositions to which they have been subjected in getting their merchandise through the Customs. In order to satisfy myself, I accompanied a friend yesterday, who went to clear a lot of merchandise he had brought with him. I must confess that from Mr. Robson, the English collector, down to the lowest clerk every possible facility was given him to clear his goods without waste. The fault to me appeared not to be so much in the official as in the system they are compelled under existing circumstances to carry out. My friend's goods had been landed and stored before his arrival by Messrs. H. S. King and Co. The first operation in clearing them was to obtain a delivery order from that firm. On its presentation about eleven o'clock orders were given for immediately examining the goods. Although the Custom House closes here from noon till half-past two, his thirty odd packages were all examined by four o'clock. But here a delay occurred. The goods are examined by one set of officers and valued by another who never see them. The principal upon which this valuation is based is that duty is paid upon the value of the goods when landed here, and not that at which they have been invoiced in England. This increased valuation is limited, I believe, to an addition to the invoice of the cost and charges of their transportation. The process as I witnessed it was as follows: All duplicate packages were placed together, and one of each lot only opened and examined—although the right exists of opening every package. This opened package was first weighed and then its duplicates. If the weight of each tallies no more are opened. A note is taken by the clerk in attendance, who rather amused us yesterday by suspecting a box of lime juice cordial to be something stronger. My friend had a bottle uncorked, but the clerk being a Moschontan and this being Ramadan he could not taste it. His Greek assistant did, however, and by the verbal assurance he gave and the wry face the draught caused him to make the difficulty was got over. The process of weighing was also amusing. Two men, one of them in this case a very, very black negro, hitched the package to a balance scale on a pole, and then lifted the latter to their shoulders, holding it there until a venerable Arab took the weight. And so every one of the thirty odd packages, including several casks, were dealt with. This morning, between the notes made by the examiner and the invoices of the goods, a valuation was made by the clerk in what appeared to be a very saphod manner. The value of the goods over that of the invoice was between 25 and 30 per cent.

Objections are taken by English importers to charging them eight per cent. duty on what they have paid for the transportation, and this done in a very warm manner by many of them, especially by those who wish their goods and themselves back in England again. Others complain of the annoyance and delay of opening their goods. In order to get over this, Mr. Robson the collector, I am told, in one case offered to add 25 per cent. to the invoice in order to expedite matters. This gave rise to a report that the Government had suddenly raised the duties to 28 per cent., and a general outcry was raised against every one having anything to do with the Customs. As is usual in such cases, the officers came in for the blame of a system which they are compelled to carry out. It is to be hoped that, as the Union Jack floats over the Custom House here, the Turkish system on which it is now carried on may be changed for that of the country whose flag waves over it. Better raise the duty at once from eight per cent. to such an amount as may be necessary than continue the vexatious system now in force. By none of our colonies is such a system of valuing merchandise pursued, and one naturally asks why should it be continued here.—*Standard*.

BEEF STEAK A LA FRANÇAISE.—They are best cut from the muer side of the sirloin, but any prime part will do. Place two pounds of steaks in a dish with a little of the best Lucca oil, and let them steep in it for eight or ten hours; add to them pepper, salt, and a little finely-chopped parsley, and fry them until they are brown; what remains in the pan may be thrown over the steaks. Butter may be substituted for oil if preferred, and the steaks served up around the dish with olive sauce in the centre. Average cost of beef, 1s. 4d. per lb. Time to fry, from eight to ten minutes. Sufficient for four or five persons.—*Cassell's Family Magazine*.

MUSHROOMS.

The difficulty, however, of distinguishing edible from poisonous and noxious fungi must be ignored. If only one out of a hundred, or for the matter of that a thousand, species were poisonous or noxious it would not be sound advice to say that we should eat all that come to hand, and stand the chance of baneful results. Unfortunately it is the case that some of the most poisonous fungi are the most common, and there is scarcely a field, and perhaps not a single wood, which does not abound with varieties of *Coprinus* the *Agaricus fascicularis*, and the beautifully coloured *Thussula emetica*, and several other very undesirable species. Some writers, and among them, if we remember rightly, the learned and enthusiastic mycologist, Dr. Badham, deny the existence of any poisonous fungi in our islands, and they account for the effects which are often produced by eating varieties different from our common mushroom by stating that some people, through idiosyncrasy of constitution, are injuriously affected by all fungi; and in support of this statement they instance the well-known fact that some people experience the most unpleasant effects after eating the common edible mushroom, which chemically contains noxious ingredients. We all know that idiosyncrasy of constitution may account for much and for very strange phenomena; for instance, oysters are almost poison to some persons, while roast beef will cause hysterics in other cases; and to not a few certain odours, harmless in themselves, are causes of serious attacks of illness; but the fact remains that persons who can eat with impunity and greatly enjoy the common mushroom are unpleasantly affected by other species of fungi. Not a year passes but deaths are recorded of persons—sometimes of whole families—after eating noxious fungi, though they had no idiosyncrasy of constitution; and during the present month a learned botanist and enthusiastic mycologist, and a friend, in experimenting on some specimens of fungi sent to him, narrowly escaped death, while another person who partook of the dish prepared actually succumbed. A thousand and one tests have been given in writing from time to time whereby our ordinary mushroom is to be distinguished from species which resemble it, and one species is to be distinguished from another—but we fear that practically they are not to be depended upon. Fungi differ in appearance according to the localities in which they grow, and according to their age. The common belief that the edible species never change colour when cut or bruised is untenable, for three varieties at least are perfectly edible, and yet assume different tints when injured in any way. The test of taste, too, which is applied under the idea that those with a pleasant savour and an inoffensive smell are always wholesome, is fallacious, for a raw mushroom is quite a different thing from the stewed or grilled one, and often what has an acrid taste when raw becomes perfectly savoury when cooked; and *vice versa*, a tasteless fungus may be poisonous, but only develops its latent flavour when submitted to the cook. Dr. Christian declares that a sure test of a poisonous fungus is an astringent, styptic taste, and a disagreeable pungent odour, but this, again, cannot always be depended on. Nor, again, is the popular idea that a mushroom which will skin easily is wholesome altogether based on fact. What, then, is to be done to enlarge the field of our mushroom gatherers and to bring about the utilisation of food now suffered to run to waste, or, in other words, how is a knowledge of our fungi to be obtained? The only answer is that knowledge on this matter is to be got, generally speaking, as knowledge on other matters—partly from books, but more especially from oral instruction and demonstration. Such eminent authorities as Dr. Badham, the Rev. M. Berkeley, Mr. Cooke, and Mr. Worthington Smith may be consulted with profit, and works such as that on "Domestic Economy," in which coloured plates bring accurately before the eye the different species of our fungi. And here we may mention that the plates prepared by Mr. Worthington Smith, which were once at the South Kensington Museum, but now, we believe, at Bethnal-green, have done much to help the Londoner when in search for mushrooms in the country to distinguish between the good and bad species of fungi. It might be well that in our schools, where so many practically useless branches of knowledge are crammed into children both in town and country, practical lessons on fungi should be given. Those, too, who wish to learn what is to

be learnt on this subject should avail themselves of opportunities now often given at exhibitions and botanical meetings. At Paris, in 1876, there was an exhibition of edible and poisonous fungi, in a fresh and dry state, together with books and drawings; and a similar exhibition took place in Aberdeen two years before; and, as most of our readers are probably aware, there exists a Fungus Club, or, rather, a botanical society which makes fungi a special study. This is the Woolhope Club, which has its headquarters at Hereford, and embraces in its scientific investigations all the district between Shropshire and the Bristol Channel. One day in each autumn is devoted to the fungus hunt, and the numbers that are gathered by this enthusiastic band are something enormous. The labours of the day are closed by a dinner, at which the main dishes are composed of the spoils of the chase, dressed in the most epicurean fashion, and of other good things flavoured with the most appetising (funzu-) sauces. In the annual volume published of the transactions of the Club there is a description of the fungi of the district and the best modes of cooking them. It would be a great gain to the public if at least that part dealing with fungi were generally obtainable.

Gastronomically the ordinary mushroom, and a large number of our British fungi, are most estimable, and ketchup produced from them—not the ordinary ketchup "of commerce," which is often innocent of any fungi whatever—is to the cultivated taste of the *gourmet* the best of sauces. Many an epicurean has been heard to aver that after that of an oyster that of a mushroom is the finest in the whole world of gastronomy. Bacon, in his "Naturall Historie," says of mushrooms, "they yield a delicious meat;" and to these commendations it may be added that they can be cooked in almost as many ways as the French can cook eggs. Their alimentary value is also great, for chemistry has revealed in them the presence of the leading principles which exist in the flesh of animals. Dr. Letheby says that "the edible varieties are highly nutritious; and that well-known dietist, the late Dr. Edward Smith, who was very chary of commending anything, also has a good word for them.

One word as to the connection between fungi and what are called "fairy rings" in our meadows. These fairy rings unfortunately lose all their poetry when it is known that they are simply produced by the growth of various kinds of fungi. The fungi start from a centre, owing to some peculiarity of the soil and decaying vegetable matter in it, and when they have exhausted the spot on which they originally sprang up they enlarge their borders as it were, and thus form circles, giving a darker tinge to the herbage affected by them. These rings increase in size annually, and thus they vary considerably in circumference. This is a prosaic but truthful explanation of the phenomenon which so often attracts the attention of children and puzzles the heads of older persons.—*Standard*.

SWIMMING FOR GIRLS.—We are glad to learn that a vigorous effort is being made to institute classes for teaching girls to swim. It is possible that proprietors of baths might be willing to give up the use of their establishments for two or three hours a day for this purpose. There is no reason why such a movement should not have been organised long ago. Women and girls are just as likely to be proficient swimmers as men and boys, and quite as capable of enjoying the healthful exercise. The gentler sex, too, are probably placed as often in circumstances of danger as the sterner, without possessing the same means of combating disaster, as the records of river and sea-side accidents bear only too ample and melancholy witness. Mr. John Macgregor ("Rob Roy") has advocated the cause of the girls, and we trust that his appeal may meet with the success it so well deserves. Already, he says, "hundreds of girls in London are learning to swim, but many hundreds more would gladly learn if teachers could be had;" and he instances a class of thirty whose instruction began late last season, of whom twenty-five learned to swim in six lessons, and six won prizes.—*Cassell's Family Magazine*.

TRAVELLER TOO BONA FIDE.—Dusty Pedestrian.—"I should like a glass of beer, Missis, please." Landlady.—"Hae ye been trevelling by rell?" Pedestrian.—"No, I've been walking—fourteen miles." Landlady.—"Na, na, nae drink will ony yin get here, wha's been pleasure-seekin' o' the Sawbath Day."—*Punch*.

COMPRESSED AIR AS A MOTOR.

The problem of using compressed air for street car propulsion has apparently been successfully solved. A compressed air car has been running on upper Second avenue, for a month and gives such good results that the horse railway company have resolved to dispense with horses on the Second-avenue, above the new depot at Ninety-seventh street as soon as six of the compressed-air cars can be built. The car now running makes regular trips daily between Ninety-seventh-street and One-hundred-and-twenty-seventh-street, from 10 to 12 in the morning and 3 to 6 in the afternoon. A steam engine for charging the car has been erected in the depot at One-hundred-and-twenty-seventh-street. The boiler which generates the steam is on one side of the track and the stationary engine on the other. While being charged the car stands on a track between them, and the connection between the air cylinders of the car and the air chamber of the engine is made by means of a very thick cloth-woven rubber hose.

The car resembles an ordinary street car, except that the wheels are almost hidden by sheet-iron sheathing; six strong wrought-iron cylinders, two feet in diameter and six feet long, are placed under the floors of the car, three at each end. Two smaller cylinders are placed under the seats. These are connected by iron pipes and form the magazine of compressed air. A double cylinder engine is used to pump the air into the car, or charge it. The air is sucked into the first cylinder and on the backward stroke receives a pressure of about forty pounds, which heats the air. Then it passes into a cooling chamber, where the temperature is reduced by water. This air then being forced into the second cylinder receives a pressure of between 300 and 330 pounds to the square inch, whence it passes through a second cooling chamber into the receiving cylinders in the car, where the pressure is the same as in the cylinder where the air was compressed.

After five minutes the car is pronounced charged for its three mile trip to Ninety-seventh street, and return. An indicator on the front platform shows a pressure in the cylinders of 320 pounds. In general, the mechanism resembles that used in applying steam to locomotion. Two small air-chests on each side resemble steam-chests. The pistons connect by hinged arms to the axle cranks, all being much the same as a locomotive crank axle and its connections. The two things necessary to apply compressed air successfully were invented by Mr. Robert Hardy and Mr. James. One is a special link motion for controlling the valves so that one movement reverses both the main and expansion valves, cutting off the power at any part of the cylinder stroke and making the car almost as tractable as a baby carriage. But more important in the use of air is an equilibrium valve between the air-chest and the tube, which brings the reserved air to the chest, where its sudden expansion drives back and forward the arm which turns the crank axle. An equilibrium valve is necessary to gauge the amount of compressed air admitted to the engine chest or cylinder. Steam in an engine boiler may be kept nearly at the same pressure and it is a constant force; but the force "bottled up" in the air chamber of the car is a constantly decreasing power, as the air loses some energy with each charging of the air chest. So when the car starts with 320 pounds of pressure aboard a small admission of air to the chest will let loose expansive energy enough to move the piston and crank. When the pressure is reduced to 200 pounds a proportionally greater amount of air must be admitted to produce the same expansive energy. The equilibrium valve which secures an amount of air in the cylinder or chest, inversely as the pressure, consists of a couple of disks connected by a buckle rod, the reaction of the valve being proportional to the pressure.

The motion of the car is controlled from the front platform by levers like those used on locomotives, the machinery being very simple. One lever opens the throttle. Another with notched guard determines the direction in which the car shall move, and when brought to the middle notch shuts off the power, bringing the car to a smooth, quick stop. A slot and finger-screw determine the quickness of the stroke and rapidity of motion. These levers are on the front platform, so the engineer may look out the more readily for obstacles. Mr. John James, one of the inventors, handled the car, which started off with a grunt at a horse trot. A speed of a mile in

five minutes was obtained, when, a lady waving for passage, the car was stopped inside of thirty feet and started on again. There were no cinders or smoke, and only the pulling sound of the exhausting air-chest and of the wheels. Several passengers were picked up on the way to Ninety-seventh-street, where the car turned itself on a Y switch. One hundred pounds of pressure were expended in running a mile and a half. A thirty pounds pressure is sufficient to drive the car. During the German festival at Hearst Park, an ordinary car was attached to the compressed air car, and 100 persons were taken over the mile and a half course in six minutes. The inventors hope to get their motor introduced on the elevated railways, claiming that it is cheaper than steam and obviates the nuisance of smoke and cinders.—*New York Tribune.*

REFRIGERATION IN THE DAIRY.

As the use of ice or snow for rapidly cooling milk used for butter-making is coming more and more into fashion, the following statements of Professor L. B. Arnold in the *New York Tribune* will be read with interest:

Mr. Wm. V. S. Bekman, Columbia County, N. Y., makes this suggestive inquiry:

"Several of the present methods for setting milk include the use of ice. I should like to ask whether that affects the keeping qualities of the butter. In warm weather, butter taken off from ice spoils rapidly, but I do not remember ever reading that butter made from milk set in ice water or ice-cold air spoiled more rapidly than that made in the usual way."

Nearly all the changes in milk and butter by which they are spoiled are caused by living organic agencies, none of which are destroyed by cold, although it may kill helow freezing. By chilling milk or butter down below the temperature at which organic organisms advance we at best only suspend advance, to have it start with renewed vigour whenever the temperature rises to a degree that will allow of its going on again. If a sample of new milk is taken at 65 deg. and a part of it cooled suddenly to the freezing point, or near it, and then raised again to 65 deg., and both parts continued at the same degree, the part which has remained all the time at 65 deg. will keep sound the longer of the two, showing that dropping the temperature and restoring it again has injured its keeping. What injures the keeping quality of milk might well be expected to injure the keeping of butter made from it. This conclusion is corroborated by recent observations upon butter made by a refrigerating process, and exposed with other butter during a week of warm weather at a fair. It is also in accordance with observations previously made, and with observations reported by others.

It is believed that it may be safely laid down as a rule that wide and sudden changes in the temperature of butter-globules, whether after or before they have been separated from the milk, tend to their destruction. But such changes have less effect while the globules are fresh and new than afterward. The position here assumed is supported by the nature of butter itself, as well as by observed facts. It is known that the butter globule is an organized structure. Small as it may be, each globule is composed of several atoms of fatty matters, differing from each other in their composition, and bound together in one organized body or globule. It is notorious that repeated shrinking and swelling by change of temperature disintegrates the atoms of these globules, and causes the destruction of the mass of butter which an agglomeration of such globules constitutes. Since a number of changes produce a specific result, it must be evident that each single change has a distributed something toward the end accomplished. But a single change made at the most favourable period in the age of the butter-globule need not be expected to produce any very strongly-marked result. There may be other considerations which may make it desirable to heat or cool milk and suddenly make wide changes in its temperature; but the effect of every such change upon the resulting butter, considered singly and without reference to other effects, must be to impair its keeping.

A TRUE ARTIST.—Mamma (to Tommy, who has been allowed for a few minutes to wait at table): "Now, Tommy, kiss me, and go to bed." Tommy (to Footman): "Do you ever kiss the Missus, Charles?" Footman: "No, Sir!" Tommy: "Then I won't!"—*Punch.*

GENERAL VIEW OF BRITISH AGRICULTURE.

PART II.

LAND IMPROVEMENT.

Having now endeavoured to explain the respective positions of the three interests engaged in the cultivation of the soil in each of the three countries forming the United Kingdom, I will proceed to consider the circumstances which embarrass the free action of a large proportion of the landowners, and the moles by which these are more or less overcome. A very large proportion of the land is held by the tenants for life under strict settlement, a condition which prevents the power of sale, and it is also frequently burdened with payments to other members of the family, and in many cases with debt. The nominal income is thus often very much reduced, and the apparent owner of five thousand a year may have little more than half of it to spend. In such cases there is no capital available for the improvements which a landowner is called upon to make, in order to keep his property abreast of the advance in agricultural practice. This was pressingly felt at the time of the repeal of the Corn Laws, and the withdrawal of protective duties from native produce. Parliament, therefore, when it enacted a free import of the necessaries of life, provided State loans on favourable terms to the land-owners for the drainage and reclamation of their estates.

The potato disease of 1846 and 1847 was a serious calamity at the time, but it was the occasion from which arose the great stride made in agricultural enterprise in this country during the last thirty years. It led at once to the removal of all protective duties on foreign agricultural produce, and obtained for the people of this country access to supplies from foreign lands where wages were lower and good land abundant. Landowners and farmers bestirred themselves to meet the inevitable competition to which they have become exposed; and their efforts were promptly aided by the State with reproductive loans to tide them over the early years of trial. As the sum voted by Parliament for these loans became exhausted, Land Improvement Companies were formed to carry on the good work on the principles which had already proved successful, though the Companies necessarily charged somewhat higher terms than those which the credit of the State had enabled it to afford without loss.

The State Loans were limited, in Great Britain, to drainage and reclamation, the landowners being left to their own resources for buildings, roads, and fences. In Ireland these were and still are included, that country having always been favoured in matters of State assistance. The rate of payment was by annual instalments of $6\frac{1}{2}$ per cent., which in twenty-two years redeemed the principal, and at the same time paid the annual interest at $3\frac{1}{2}$ per cent. In many cases the tenant undertook the whole of this annual payment in addition to his rent, and the landowner thus had his land permanently improved, and returned to him free of all charge, at the end of twenty-two years. Not infrequently the landowner was satisfied with 5 per cent. from his tenant, and paid $1\frac{1}{2}$ out of his own pocket for this permanent advantage. Especially was this the case in regard to bairns, the return from which is not so direct or immediate as from drainage or reclamation.

The same principle is followed by the Land Improvement Companies, whose loans, like those of the State, are secured by priority over all other charges, but continue for twenty-five or thirty years, in inverse proportion to the rate annually paid. It has been proposed to extend the term still farther, in order to reduce the rate of annual repayment; but this is a questionable advantage, for each generation has improvement of its own to carry out, and it is a good general rule that the cost of the past should be paid off before new charges are placed on the land.

The total amount of money charged on the land of the United Kingdom for agricultural improvements under the system of periodical redemption, in the last thirty years, amounts to about fifteen millions sterling—twelve in Great Britain and three in Ireland. About eight millions of it was advanced by the State, and seven millions by private companies. A large proportion of the first has now been repaid, having been returned to the public exchequer, principal and interest, and is

no longer a charge upon the land. Two-thirds of the whole have been spent on drainage, the remainder on farm buildings, labourers' cottages, embanking, watercourses, farm roads, reclamation, planting for shelter, and enclosing. The expenditure through such loans goes on with great regularity at an average of half a million sterling a year, and the loans are being redeemed and the charge extinguished at about the same rate. The extent of works still to be done far exceeds what has been accomplished, and so many new demands arise to meet the changes in husbandry that the system is likely to be a permanent one. It may therefore be useful to consider its present mode of working, the objections which have been made to it, and whether any improvement can be introduced which might facilitate its operation.

An inquiry into this subject was undertaken by the House of Lords in 1873. The Committee comprised men of acknowledged eminence on both sides of politics, great landowners conversant with such subjects, and having more or less practical knowledge of agricultural affairs. Twenty-three witnesses were examined from various parts of the kingdom, all of whom had experience of the system. Various instances were adduced to show the unremunerative nature of certain improvements, the explanation of which was either injudicious and imperfect execution of the works, or inadequacy of capital, or energy, or knowledge, to follow them up by good culture—want of knowledge and experience on the part of the landowner or his agent, or the usual circumstances of a similar nature which are found here and there to occur in all large operations, which must often be unwittingly entrusted to weak or dishonest management. As this inquiry embraced the execution of works in all parts of Great Britain, spread over a period of twenty-six years, and embracing an expenditure then exceeding ten millions sterling, the comparatively few and exceptional instances of failure might be taken as a strong proof of the general success of the system. Except in such buildings as required restoration from the continued neglect of landowners to repair—a case very common both north and south—some return seems always to be reckoned upon, even for expenditure on new buildings. On all other kinds of improvement there was a general testimony to their remunerative character. And those of the witnesses most competent to speak, the tenant-farmers who had themselves repaid the cost of the works, declared that they had received from the money spent on land improvement much more than a return of capital and interest.

The Committee very truly remark that it is an anomaly that private transactions should be submitted to the control of a Government office. This was perfectly legitimate, so long as the money advanced was a public loan. When the supply of public money ceased, and that of private persons or companies was substituted, the existing Government machinery of inspection and control, which had been found on the whole to work well, was continued by Parliament on the ground that the improvement of the land of this country was a matter of public interest. But this was not with the view of protecting the interests of the remainder-man and mortgagee, for that is no part of the duty of Government; but in order to give a first charge on the inheritance, and so enable landowners, whether under settlement or otherwise, to obtain money for improving their estates, which is an object of public importance, at a lower rate of interest than would otherwise have been possible. This preferential charge could be given only with the tacit assent of other parties already creditors of the estate; and the condition which hitherto has assured that assent has been the certificate, under statutory powers, of an acknowledged Government authority, that their security had not been thereby injuriously affected. The continuance of the Government inspection has thus been wholly in the interest of the landowner, especially if he is under settlement or entail, where the tenant for life is otherwise unable to raise money for the improvement of his property.

Besides the public and private loans spent on land improvement, a much larger sum has been laid out on the same object by landowners from their own resources.

It may be useful to consider in their order the several object

of land-improvement, and the return they are capable of yielding under suitable economical management.

The first requirement, in all cases where it is required, is drainage, for until the land is freed from stagnant water and rendered capable of yielding its fullest assistance to the arduous efforts of the agriculturist, all other outlay is vain. There is never any difficulty in deciding upon the expediency of drainage in these islands, because wherever it is required and is judiciously executed it at once becomes remunerative. The under drainage of arable and good grass land, in a climate where drainage is advantageous, renders the land so much warmer and more wholesome for plants and animals, everything upon it becomes so much more thrifty, and all operations so much more easy and certain in their results, that it is sure to pay. No doubt the increasing cost of labour and materials is seriously felt, but the value of land and of most kinds of agricultural produce is likewise increasing.

With regard to outlay on farm buildings, there is not the same certainty of return. Farm buildings are of two kinds, those for the accommodation of live stock and the manipulation of the crop, and those for the housing of the farmer and farm labourers. In regard to the first, it is only necessary to refer to the increasing prices of live stock to show the advantage of making adequate and comfortable provision for their food and shelter. But the time has gone by for great corn barns. The corn is much more economically treated by stacking it in the field where it grows, and thrashing it out by locomotive engine power when required. The partial conversion of these large barns into feeding sheds, or in the grazing counties into haysheds, is the best mode of turning them to account; and where farm buildings have been kept by the proprietor in good repair, their conversion to objects of modern husbandry need not be very costly. It is only where they have been completely neglected, and require entire renewal, that the expense is greater than can be met by the immediate return. Even then it is capable of proof that the economy of labour and of food, the better quality of the manure, and the greater thrift of the stock, will, as a rule, be ample compensation for the charge. Additions to existing buildings for a specific object, planned and executed with judgment, will always be remunerative. But the more common fault of putting up very costly buildings, planned with little reference to the value and extent of the farm, or little practical knowledge on the part of land-agent or architect, too surely ends in disappointment to both landowner and farmer.

Labourers' cottages are reckoned the least remunerative of all. New cottages, even though built in blocks of two or four together, cannot at present be built by contract for less than £150 each, if planned with due regard to comfort and decency, and a greater cost if the expense of haulage of materials is included. To repay this in twenty-five years, both principal and interest, a weekly rent of 4s. is required. But labourers in the southern counties have been unable to pay more than 1s. or 2s. out of their weekly wages, so that the landowner who lets good cottages at that rent is really also paying 2s. or 3s. a week towards the wages of his farmers' labourers. By this all the parties are misled. The landowner's duty to his estate is to provide it with all permanent buildings required for its proper cultivation. He must do so if he cultivates the land himself, and he ought equally to do so if he lets it to be cultivated by another. The farmer, whether landowner or tenant, must then furnish the farm with the "plant," the live and dead stock necessary for its cultivation. Both parties are entitled to look for a return for their investment; the landowners' safe and improving capital yielding him a smaller annual return than the farmer's, which is liable to the vicissitudes of seasons, and wear and tear, and must also cover his personal industry and skill. The labourers' dwellings are as indispensable as the stables and barns, and no arable farm can be said to be complete which has not the command of an adequate number of cottages for the workpeople. These, with farm and all other necessary buildings, should be let to the farmer at a rent which should include a fair return on the landlord's capital, and the farmer and the labourer should be left to deal with each other on the basis of adequate remuneration for useful service, regulated by the ultimate rule of demand and supply. On this footing the return on labourers' cottages will become as remunerative as that of any other outlay of land-owners' capital, because it will be controlled by the real necessity and requirements of the farm.

This will apply chiefly in cases where new cottages are attached to farms, and fresh outlay for that object is to be made. But, in the vast majority of cases, labourers' cottages already exist in sufficient numbers. Better cottages are required in many parts of the country, rather than more of them. It has been well ascertained that during the last thirty years the agricultural population has diminished. The circumstances which have led to that continue in full strength. Increased facilities of locomotion between different parts of the country, and for emigration across the seas, tend more and more to carry off the energetic portion of the agricultural population. This has raised the rate of farm wages and the cost of cultivating arable land. The prosperity of the wage-earning class in other occupations has, at the same time, vastly increased the demand for butcher's meat and dairy produce, and so greatly increased the returns from grass land. The natural result is a gradual conversion of suitable arable land to grass, and this diminution of extent is accompanied also by the introduction of labour-saving machines. There is thus in both ways a tendency to a diminution of our agricultural population, the one operating in carrying off the ablest to more remunerative fields of industry, the other in lessening the home demand for agricultural labour. It is a fact of great importance in the consideration of this question that, within the period between the census of 1861 and 1871, there has been a decrease of the country population in every county of England except five, and it is only in the suburban counties and in the manufacturing and mining districts that an increase has taken place. Future provision for agricultural labourers' dwellings ought therefore to be in the direction of improvement rather than increase.

Abundant proof might easily be adduced from most parts of the country that on the main heads of agricultural improvement there should be no lack of good return. The fact that the outlay goes on without diminution, notwithstanding the great increase in the cost of labour and materials, would alone set all reasoning, and isolated instances, to the contrary. A very instructive paper on this part of the subject was produced by the managing director of the Lands Improvement Company. It showed a return of forty cases of outlays, not picked cases, but taken as they happened to come, with the increased rents subsequent to the improvements. Upon an outlay in the agger gate of £195,000 there was an increased rental of £31,000. This increase had been obtained within seven to ten years. In only five instances did the increase fall short of repaying the annual charge which redeems the principal as well as the interest. In every other case it left a profit beyond this, in many cases a large profit. On the whole, the increase is equal to a return of 15 per cent. on the expenditure, and if this is capitalised at the common estimate of thirty years' purchase of land rent, the sum expended will be found to have been increased more than fourfold. If landowners generally could reckon on anything like the average return of these cases they would have the means, under the Lands Improvement Acts, of improving their estates, not only with present loss, but with a large immediate profit. But no distinction was made or could be made in this return between that increment which arose from improvements and the general increase of rent due to the prosperity of the country, the increased value of produce, and the development of particular districts by the opening of railways and roads. Still in one way or other the landowner in these cases has been made entirely safe.

And in the nature of things in this country such must be the case wherever reasonable judgment has been shown in expenditure on land improvement. The improver is dealing with a limited article, for the produce of which there is an ever-increasing demand. Nature has given us a climate more favourable to the production of meat and milk, vegetables and grass, than that of any other European State. These in proportion to their value, are the least costly in labour, and therefore the least affected by a rise of wages. The growing demand for them, and their consequently increasing value, exercise a constant pressure for increased production, which can still to some extent be obtained by improving the land we have. A large proportion of the improvable land under cultivation admits of this, and much of that vast tract which has hitherto been left to nature might also be profitably reclaimed for the rearing of sheep and cattle.

RECENT RISE IN THE VALUE OF LAND.

There has been, within the last twenty years, a very con-

siderable increase in the value of land in this country. The income-tax returns are most instructive on this point, and, as they show the rental of land in England, Scotland, and Ireland separately, they afford the means of comparing the rate of improvement in each country. That improvement does not seem to have begun in England till 1853, the gross annual value of "Lands" in 1857 having been returned at £50,000 less in that year than in 1846. From 1858 the rise has been progressive and continuous, and with an average increase of £470,000 a year. The rise seems to have begun somewhat earlier in Scotland, and the average yearly increase has been £82,000. The returns from Ireland cannot be distinguished prior to 1862, and show an average yearly increase from that year of £39,000. The total rise within a period of eighteen years has been a little over 20 per cent.; but, as will be seen by the annexed table, the proportion of increase on the Scotch rental has been greater than on that of England. The small rise in Ireland presents a striking contrast to England and Scotland. The capital value of the total increase at the present selling price of land in this country will be reckoned something prodigious, especially by those of us who are old enough to recall the dismal prophecies of the agricultural ruin which would surely follow the free admission of foreign corn.

GROSS ANNUAL VALUE OF LAND ASSESSED TO THE INCOME TAX IN 1857 AND 1875.

	1857.	1875.	Increase.	Increase per Cent.	Capital Value of Increase at 30 Years' Purchase.
	£	£	£		£
England...	41177000	50125000	8948000	21	268440000
Scotland...	5932000	7493000	1561000	26	46830000
Ireland, from 1862.	8747000	9293000	546000	6	16380000
	55856000	66911000	11055000	...	331650000

This vast increase in the value of landed property within the short period of twenty years is very remarkable. It has been already shown that the improvement expenditure effected by loans has been fifteen millions. If we assume that even three times as much has been effected during the same period by private capital without loans, we here see that the capital wealth of the owners of landed property has been increased by three hundred and thirty-one millions sterling in these twenty years, at a cost to them which probably has not exceeded sixty millions. This increase, as elsewhere explained, has arisen chiefly from the great advance in the consumption and value of meat and dairy produce, and is thus only in part the result of land improvement.

But though in the aggregate the landowners of England have become richer by more than one-fifth, and those of Scotland by more than one-fourth, the progress has not been uniform. In the purely corn districts, and on the chalk and sands of the drier counties where grass does not thrive, the increase has been small. On the poor clays there has been none. It has been greatest in the grazing counties and in the west and north. The increase shown in Scotland deserves special attention. In that country the larger proportion of grazing land no doubt partly explains this, but, on the other hand, entails are more strict, and land is understood to be more heavily mortgaged than in England, so that in these respects Scotland has no advantage. It was this great disability of the entailed Scotch proprietor which drove him earlier to seek a remedy. A little more than a century ago, 1770, the first Improvement of Land Act was passed, the famous Montgomery Act, the preamble of which clearly explains its origin. "Whereas much mischief arises to the public, which must daily increase so long as the law allowing such entails subsists, it some remedy be not provided," and then it provided a remedy very similar in principle to the Drainage Acts passed for both countries eighty years later. But the powers of raising money would not alone have sufficed. It was neces-

sary also to take care that the money should be wisely expended, and the astute heads who devised the Montgomery Act enlisted the aid of the tenant-farmers, by giving them the security of nineteen years' leases, and thus obtaining their co-operation in the execution of the works, and in the subsequent operations necessary to make them remunerative. This co-operation between landlord and tenant in Scotland had been in full action for more than two generations before the Drainage Loans introduced by Sir Robert Peel in 1848, when both landlord and tenant in Scotland at once eagerly availed themselves of the very liberal terms on which these were offered; and that goes on to this day. The facilities given by the Improvement of Land Act, 1864, which enables limited landowners to operate with their own means without the intervention of the Improvement Companies, were at once recognised in Scotland, which has availed itself of them to an extent six times greater, in proportion, than England. In Scotland, as was stated by one of the witnesses, "the tenants are practically the applicants for Improvement Loans." They readily meet their landlords much more than halfway in contributing to the repayment; and instead of lagging behind, or waiting to be spurred on to further enterprise, they compete even too much with each other for the possession of farms on terms which have now become more remunerative to the landowners than to themselves. There is not in England, generally, a similar spirit of agricultural enterprise.

To what is this difference between the two countries to be attributed? Chiefly to three causes, in which the Scotch landowner has the advantage—earlier education in, and appreciation of, the benefits of land improvement; a better knowledge of the business of land owning; and the general system of leases. To the first, reference has already been made. The better knowledge of their business has naturally flowed from it to the Scotch landowners. They are trained to it by fathers who have been in their day likewise taught to look into the management of their property. Sir Walter Scott mentions the discussions with which his youth was familiar when visiting his country relations, the comparative merits of "long" and "short" sheep, the reclamation of waste, and the advantage in a bare country of sheltering woods. "Aye be sticking in a tree," was the dying advice of an old Scotch laird to his son, "it will be growing when you're sleeping." The "home" farm was always found in the personal occupation of the Scotch landowner, and the Edinburgh University has for many years had a Chair of Agriculture. It is true that among the greater landowners of Scotland the English schools and universities have long had a special attraction, but even their tone has failed to eradicate from the young Scotchman's mind the inborn love of the farms and fields, and the country employments of his fathers.

This knowledge of business is a matter of great moment to these who employ so vast a capital as the English landowners, a capital far beyond the entire value of our railways, mines, ironworks, canals, and gasworks put together. Men of the highest capacity, with special training and qualifications, are employed in the management of these. Constant watchfulness of the progress of invention, by which large results may be obtained on a given expenditure, is absolutely necessary to procure a profit in the general competition. The landowners of large estates entrust the management of their property to agents, more or less qualified, many very capable, but often hampered by the pressing need of their employer for the largest return of rental at the least cost. The landowner himself too seldom takes such an active and intelligent interest in the details of management as would convince him of the need to keep his farms in a similar state of high working order. It is not with him really a question of business. Let us take, by way of comparison, a manufacturer, merchant, or shipowner, employing each a capital equal to that of a landowner who has a rental of £5,000 a year. What would be thought of the prospects of a woollen manufacturer who, without the slightest preparation or special knowledge, embarked £100,000 in that business? Or a man who took over a mercantile concern of the same extent, without ever having before written or read a business letter? Or of a young military officer giving up his commission to take the direction and responsibility of a great ship-owning house? And yet this is in effect what is done every day by the majority of

English landowners. They complain that the business so undertaken "is not sufficiently lucrative to offer much attraction to capital." And people are surprised that within the narrow limits of the British Isles, with a teeming, wealthy, meat-consuming people, so large a proportion of the cultivated land is still permitted to remain only partially productive.

The third point of difference between the two countries is the system of yearly tenancy in England, while leases of nineteen and twenty-one years may be said to be the rule in Scotland and the exception in England. It is the nature of a yearly tenancy that there should be insecurity. Agricultural investments demand time to be fully remunerative. How can a man subject at any time to a year's notice to quit be expected to improve? That he does so in very many cases is due to the confidence of a long standing connection between landlord and tenant. There does not live a more upright, honourable man in any class than the average English landowner. But, with every acknowledgment of his desire to be just and fair in his dealings with his tenantry, it is vain to look for enterprise and progress where there is no real security. Whether that may be best attained under the Agricultural Holdings Act, or by special agreement without a lease, or by giving such security with two years' notice in addition to a lease, in one way or other security must be given to induce such an adequate flow of capital into farming as will render it effective.

Owners in fee simple, as well as tenants for life, very frequently use the powers given by the Land Improvement Acts. The principle of annual repayment of the loan, by which the estate is at once put under improvement and the debt redeemed, commends itself to every man who desires to retain and improve his property. He borrows, at a fixed rate of interest, on a security the augmenting value of which is all his own. Besides this, there are few landowners who have not either inherited, or found it necessary themselves to create, mortgages on their estates. This is common to all countries, and no change in the laws affecting land is likely to alter it. The limited owner and the full owner are alike subject to it. If further expenditure is required, the money in the ordinary way must be raised on less advantageous terms than the previous loans. It probably cannot be raised on any terms by the limited owner. But the admirable principle of Sir Robert Peel's Drainage Loans, the essence of which is that no charge shall be sanctioned which does not promise a return greater than the annual cost of a gradual repayment of the debt, may, without injustice to the previous creditor, permit them to be made a prior charge upon the land, and will thus secure the most advantageous terms to the borrower, whether he holds under settlements or in fee simple.

But there are many cases of land improvement which can be only partially reached by these Acts, and which require to be dealt with in a different manner. In the home counties, or in some of the neighbourhoods of some of our great centres of population, there are large tracts of comparatively infertile land, let at low rents as farms, and yielding little satisfactory return to anybody connected with them. Cases may be met with where the limited owner, who has inherited such a property from a succession of men in a similar position of legal incapacity, finds himself, in the midst of general progress, constrained to keep perhaps half-a-dozen parishes in a state almost of stagnation. The country itself is most likely well-timbered and very picturesque, with easy railway access to the metropolis or town, and highly suitable for residential occupation. He could sell it readily, if he had the power, in small properties for that purpose, retaining still an important family estate. It would not be difficult to point out cases in which this might be done with immense advantage to the landowner, the neighbourhood, and the public. Take, for example, a limited owner of 10,000 acres of such land, yielding a gross rent of £10,000. If he were enabled to sell 2,000 acres, which might fetch a residential price of £100 an acre, or £200,000, retaining his family seat and 8,000 acres: his rental would then be £8,000, plus the interest at 4 per cent. of £200,000 = £8,000. These sums together would make an income of £16,000, or 60 per cent. more than he had before. He would thus at once find himself in funds and in spirits to go on with the improvement of the remainder of his estate while the neighbourhood would have the advantage of a circulation of fresh capital and ideas, to brighten a scene formerly

rendered gloomy by dissatisfied indifference. Landowners who are precluded by entail or settlement from using this natural advantage of their position, are deprived of an incalculable benefit to themselves and their families.

To a certain extent this has already been discovered, and there are probably no settlements of land now made without considerable powers of sale. The principle is recognised, and may with great benefit be extended and made general. Settlements of land to a limited extent, like settlements of any other kind of property, are likely to continue. I desire to avoid any discussion at present of their advantage, or otherwise, as a question of policy, but am anxious to see them, at least, limited to lives in being with large powers of sale, so as not to hamper in the smallest degree the most beneficial disposition of the land. This, with an improved system of land transfer, long promised and anxiously hoped for by men of all parties, will render the county less independent on palliative measures, such as the Land Improvement Acts. But these have proved, and continue to be found, of indispensable service, as without them, the improvement of land would still be impossible over a large portion of this kingdom.

But even increased freedom for the energies of the landowner will fail if not adequately backed by an intelligent and enterprising tenantry. The rapid changes which have taken place in late years, both in the improvement of live-stock and in the better cultivation of the land, are in the main due to them. The vast business which has grown up in the importation and manufacture of manures and feeding-stuffs, shows their willingness to enter upon new lines of expenditure which promise useful results. They have a large capital at stake, and they justly desire freedom of action in regard to cultivation, and security for that portion of their capital which, being necessarily incorporated with the soil to produce a future return, may be confiscated wherever it remains unprotected by contract or by law.

PRIZE FARMS AND MARKET GARDENS.

In connection with the Exhibit of the Royal Agricultural Society for 1879, prizes will be offered for the best-managed farms and market gardens, as follows:—

SECTION I.—Sewage Farms in England and Wales.

Class 1.—Farms utilising the sewage of not more than 20,000 people: a piece of plate value £100.

Class 2.—Farms utilising the sewage of more than 20,000 people: A piece of plate value £10.

SECTION II.—Market gardens within a radius of twenty miles from the Mansion House.

Class 3.—Market gardens exceeding ten and not exceeding fifty acres in extent: First prize £50, second £25, third £10.

Class 4.—Market gardens above fifty acres in extent: First prize £50, second £25, third £10.

SECTION III.—Market garden farms situated in one of the five Metropolitan counties, viz.: Kent, Surrey, Middlesex, Hertford, and Essex, or if situated in any other county such farms to be within a radius of fifty miles of the Mansion House.

Class 5.—Market garden farms on which market garden crops alternate with farm crops, above 100 acres in extent: First prize £50, second £25, third £10.

The last day of entry is October 31st, 1878.

Forms of entry and conditions of competition may be had on application to Mr. H. M. Jenkins, Secretary, 12, Hanover Square, London, W.

THE COGESHALL ROOT SHOW.—Messrs. King, of Cogeshall, will hold their eighth annual Root Show on Tuesday, Nov. 12th, when, besides the usual prizes for roots of various kinds, a silver cup, value 5 gs., will be given for the best 12 roots of Globe Mangels grown from King's seed and with Odams's manure supplied by Messrs. King. The last day of entry is Wednesday, Nov. 5th. In consequence of the recent death of Mr. J. K. King the luncheon will not, as heretofore, be held at the Gravel House, but one will be provided at the White Hart Hotel.

PARIS EXHIBITION AWARDS.

- Explanation of italic letters.—*g*, *P*, Grand Prix; *d*, *h*, Diplôme d'honneur; *g*, Gold; *s*, Silver; *b*, Bronze; *h. m.*, Honourable Mention.
- CLASS 51.—AGRICULTURAL IMPLEMENTS AND PROCESSES USED IN THE CULTIVATION OF FIELDS AND FORESTS.
- Aveling and Porter, Rochester, *s*, steam ploughs
 Ball, W., and Son, Rothwell, *b*, corn separators & Banlett, A. C., Thirsk, *s*, mowing machines
 Barford and Perkins, Peterborough, *b*, steam ploughing tackle
 Baby, R., Bury St. Edmunds, *b*, corn separators
 Burgess an Key, London, *b*, mowing machines
 Burnard, Laek, and Alger, Plymouth, *s*, artificial manures
 Carson and Toone, Warminster, *b*, horse hoe, &c.
 Clayton and Shuttleworth, Lincoln, *g*, thrashing machines
 Coleman and Morton, Chelmsford, *g*, agricultural implements
 Cook, E., and Co., London, *b*, manures
 Corbett and Peele, Shrewsbury, *s*, agricultural implements
 Coultas, J., Grantham, *b*, corn drills
 Dav-y, Paxman, and Co., Colchester, *h. m.*, corn drying apparatus
 Denton, H., Wolverhampton, *h. m.*
 Farmer, T., and Co., London, *h. m.*, manures
 Fowler, J., and Co., London, *g*, steam ploughs
 Garrett, R., and Sons, Suffolk, *g*, agricultural implement
 Gibbs, J., and Co., London, *s*, manures
 Goulding, W., and H. M., Dublin, *b*, manures
 Hall, A. W., and Co., Southampton, *b*, manures
 Harrison, McGregor, and Co., Manchester, *b*, reapers
 Holmes and Sons, Norwich, *b*, agricultural implements
 Hornsby, R., and Sons, Grantham, *g*, agricultural implements
 Horward, J. and F., Bedford, *g*, agricultural implements
 Humphries, E., Pershore, *b*, thrashing machines
 Hunt and Tawell, Halstead, *h. m.*, thrashing machines
 Jeffery and Blackstone, Stamford, *b*, haymakers
 Kearsley, G., Ripon, *h. m.*, reapers
 Lowcock and Barr, *h. m.*, reapers
 Marshall, Sons, and Co. (Limited), Gainsborough, *g*, thrashers
 Morris and Griffin, Wolverhampton, *b*, manures
 Neale, M. T., London, *h. m.*, sheaf-binder
 Nicholson, W. N., and Son, Newark-on-Trent, *s*, rakes and haymakers
 Nitro-Phosphate and Olams' Chemical Manure Co. (Limited), Nottingham, *s*, manures
 Ohlendorf and Co., London, *g*, manures
 Packard, E., and Co., Ipswich, *g*, manures
 Penney and Co. (Limited), Lincoln, *s*, separators
 Purser, E., and Co., London, *h. m.*, manures
 Ranforth, W., and Sons, Lincoln, *b*, agricultural implements
 Ransome, Sims, and Head, Ipswich, *g*, agricultural implements
 Ransome, A., and Co., London, *s*, tree-felling machine
 Reid, B., and Co., Aberdeen, *h. m.*, thrashers
 Robey and Co., Lincoln, *b*, thrashers
 Ruston, Proctor, and Co., Lincoln, *s*, thrashers
 Samuelson and Co., Banbury, *s*, corn drills
 Smith, Wm., and Son, Kettering, *b*, horse hoes
 Smyth, J., and Sons, Peasenhall, *s*, manure drills
 Woolnough, W. and C., and Co., Kingston-on-Thames, *s*, agricultural implements
- CLASS 52.—APPARATUS AND PROCESSES USED IN AGRICULTURAL WORKS AND IN WORKS FOR PREPARATION OF FOOD.
- Barford and Perkins, Peterborough, *b*, corn mill
 Barnett, Son, and Fos er, London, *s*, aerated water apparatus
 Baxter, W. H., London, *b*, corn measures
 Bewley and Draper, *b*
 Bradford, T., and Co., London, *s*, washing and wringing machine
 Buchanan, G., and Co., London, *g*, sugar mills
 Burnard, Laek, and Alger, Plymouth, *s*, manure-making machine
 Burney and Co., London, *b*, cisterns
 Carson and Toone, Warminster, *b*, straw and root cutters
 Carter, J. H., London, *s*, mills
 Coda, H., and Co., London, *s*, aerated water apparatus
 Colman, J., and J., London, *s*, mustard machinery
 Coppard, J., and Co., Birmingham, *b*, mincing machine
 Corbett and Peele, Shrewsbury, *b*, cheese press
 Coreoran, Witt, and Co., London, *s*, rice mill
 Clayton and Shuttleworth, Lincoln, *b*, mills
 Crowley, J., and Co., near Sheffield, *b*, mincing machine
 Davies and Sneaed, Liverpool, *b*, millstones
 Davis's Excelsior Knife Cleaning Machine Co. (Limited), London, *b*, mincing machines
 Dell, W. R., and Son, London, *b*, mills
 Duvalion and Lloyd, Birmingham, *s*, ice machinery
 Eizenberger, R. U., London, *h. m.*, coffee-making machine
 Gerard, E., and Co., London, *b*, aerated water apparatus
 Garrett, R., and Sons, Suffolk, *b*, corn dressers
 Hancock, F. and C., Dudley, *h. m.*, machine for washing butter
 Laid, J. H., and Co., London, *s*, presses
 Lawrence and Co., London, *g*, beer refrigerators
 Lowcock and Barr, Shrewsbury, *b*, root cutters
 Meadow Foundry Co. (Limited), Mansfield, *s*, tobacco press
 Marshall, Sons, and Co. (Limited), Gainsborough, *s*, tea roller
 Nicholson, W. N., and Son, Newark-on-Trent, *b*, mills
 Penney and Co. (Limited), Lincoln, *b*, corn cleaners
 Ransome, Sims, and Head, Ipswich, *s*, mills
 Ross, L., and Co., London, *h. m.*, patent stoppers
 Ruston, Proctor, and Co., Lincoln, *b*, mills
 Robey and Co., Lincoln, *b*, mills
 Scott, W., London, *h. m.*, milk and butter machine
 Siebe and German, London, *s*, ice machines
 Stafford, S., Manchester, *b*, coffee cleaners
 Triggs and Benson, Bristol, *b*, disintegrators
 Turner, E. R. and F., Ipswich, *h. m.*, mills
 Tyler (Hayward) and Co., London, *g*, aerated water apparatus
 Tallerman, D., London, *b*, meat preserving apparatus
 Walworth, J., and Co., Bradford, *s*, flour dresser
 Wenham Lake Ice Co., London, *b*, ice machinery
 Whitehead, J., and Co., Preston, *b*, pipe-making machine
 Wilder, J., Reading, *b*, chaff cutters
 Woods, Cocksedge, and Co., Stowmarket, *h. m.*, mills
- CLASS 53.—MACHINES AND APPARATUS IN GENERAL.
- Adair and Co., Liverpool, *h. m.*, pumps
 Alley and Maclellan, Glasgow, *h. m.*, water meters
 Appleby Brothers, London, *s*, patent lift
 Bernays, J., London, *b*, steam engine
 Bourne, J., and Co., London, *h. m.*, steam engine
 Bowling's Patent Filter Press Co., Limited, London, *b*, filters
 Clayton and Shuttleworth, Lincoln, *g*
 Craig, A. F., and Co., Paisly, *h. m.*, injectors
 Dewrance, J. and Co., London, *b*, cocks
 Davey, Paxman, and Co., Colchester, *b*, portable engines
 De Michele, V. D., Rochester, *b*, apparatus for testing cement
 Dodman, A., Lynn, *h. m.*, steam engine
 Duvalion and Lloyd, Birmingham, *s*, steam engine
 Edwards, W. J., Manchester, *b*, straps
 Fajja, H., London, *b*, steam indicator
 Galloway, W. J., and Sons, Manchester, *g. p.*
 Garrett, R., and Sons, Suffolk, *g*, portable engines
 Green, E., and Son, Wakefield, *s*, economisers
 Greenwood and Bitley, Leeds, *b*, steam pump
 Gwynne and Co., London, *b*, centrifugal pumps
 Gwynne, J. and H., London, *s*, centrifugal pumps
 Hathorn, Davis, and Davey, Leeds, *g*, hydraulic apparatus
 Hindley, E. S., Dorset, *h. m.*, portable engine
 Holmes and Son, Norwich, *h. m.*, portable engine
 Hopkinson, J., and Co., Huddersfield, *s*, boiler fittings
 Hornsby, R., and Sons, Grantham, *g*, steam engine
 Howe Machine Co., Limited, London, *h. m.*, electric motors
 Humphries, E., Pershore, *s*, steam engine
 Hunter and English, London, *b*, marine engine
 Hydraulic Engineering Co., Limited, Chester, *s*, hydraulic apparatus
 Kennedy's Patent Water Meter Co., Limited, Kilmarnock, N. B., *b*, water meter
 Lawrence and Porter, London, *h. m.*, centrifugal pumps
 Leeds Forge Co., Limited, Leeds, *g*, corrugated boilers

Le Grand and Sut-hill, London, *b.*, turnstiles
 McKenzie, T., and Sons, London, *b.*, turbines
 Marshall, A., and Co., London, *h. m.*, boilers
 Marshall, Sons, and Co., Limited, Gainsborough, *g.*,
 Martineau and Smith, Birmingham, *h. m.*, cocks
 Mather and Platt, Manchester, *b.*, steam engines
 Merryweather and Sons, London, *g.*, steam pumps
 Moncrieff, J., Perth, *b.*, turbine
 Napier, D., and Son, London, *b.*, speed indicator
 Nathan, D., London, *b.*, scale
 Nicholson, W. N., and Son, Newark-on-Trent, *b.*, portable
 engines

Norris, S. E., and Co., London, *h. m.*, belting
 Priestman Brothers, Hull, *b.*, crane
 Pul-ometer Engineering Co., Limited, London, *s.*, pulso-meter
 Ransomes, Sims, and Head, Ipswich, *g.*, steam engine
 Ransome, A., and Co., London, *b.*, governors
 Robey and Co., Lincoln, *g.*, steam engine
 Rowson, Drew, and Co., London, *h. m.*, steam engine
 Russell, J., and Co., Walsall, *s.*, locomotive tubing
 Ruston, Proctor, and Co., Lincoln, *s.*, portable engine
 Shanks, A., and Co., Arbroath, *b.*, steam engine
 Simon, L., and Son, Nottingham, *s.*, gas motors
 Tangye Brothers, Birmingham, *g.*, steam engines
 Tullis, J., and Son, Glasgow, *s.*, belting
 Turner, E. R. and F., Ipswich, *s.*, steam engine
 Turner, F. W., *h. m.*
 Twibill, J., Manchester, *b.*, economiser
 Tyler (Hayward) and Co., London, *s.*, hot air engine
 Tyler, J., and Sons, *h. m.*, water meter
 Whitworth, Sir J. and Co., Limited, Manchester, *g.* *rappe*

CLASS 73.—VEGETABLES AND FRUIT.

Barnes and Co., London, *s.*, preserved meat, fish, vegetables,
 fruit
 Brand and Co., London, *s.*, preserved meat, fish, vegetables,
 fruit
 Crosse and Blackwell, London, *g.*, preserved meat, fish, vege-
 tables, fruit
 Halford, James Valentine, London, *b.*, meats curried as in
 India, and preserved in tins.
 Knowles, J. and G., Stonehaven, *b.*, dried cod
 McCall, John, and Co., London, *b.*, preserved meats
 Schuyler, Edward Albert, Cambridge, *b.*, preserved soups
 ready for immediate use
 Sutton and Sons, Reading, *g.*, beans, peas, &c.
 Webb and Son, *s.*, preserved vegetables

CLASS 76.—SPECIMENS OF RURAL EXPLOITATIONS AND AGRICULTURAL WORKS.

Aveling and Porter, Kent, *g.*, application of steam to agricul-
 tural works
 Barford, Perkins, and Co., Peterborough, *s.*, conical mill
 Benthall, E. H. and Co., Maldon, *s.*, apparatus for prepar-
 ing food for cattle
 Bradford and Co., Salford, *s.*, machine for pulverising bone
 Barney and Co., London, *s.*, iron troughs.
 Clarke, W., London, *s.*, horse-clipper
 Corbett and Peele, Shrewsbury, *s.*, straw-chopping, food-
 preparing, and root-cutting machine
 Crowley, J. and Co., Sheffield, *g.*, straw-chopping machine,
 with safety apparatus
 Fowler, J. and Co., London, *g. p.*, first introduction of culture
 by mechanical power
 Hunt and Tawell, Halstead, *b.*, straw-chopping and root-
 cutting machines
 Ladd, J., London, *b.*, cider press
 Lawrence and Co., London, *s.*, apparatus for cooling and
 warming milk
 Lowcock and Barr, Shrewsbury, *b.*, straw-chopping appa-
 ratus
 Maldon Ironworks, Essex, *b.*, agricultural implements for
 interior use
 Martin, R., Kent, *g.*, well-made horse-clippers
 Musgrave and Co., Belfast, *s.*, stables, &c.
 Nicholson and Son, Newark-on-Trent, *s.*, implements for use
 in farms.
 Picksley, Sims, and Co., Leigh, *g.*, implements for use in
 farms.
 Riches and Watts, Norwich, *b.*, mill

Richmond and Chandler, Manchester, *s.*, well-made straw-
 chopping machines
 St. Pancras Ironworks, London, *s.*
 Turner, E. R. and F., Ipswich, *s.*, corn seed crushers, &c
 Wilder, J., Reading, *s.*, straw-chopping and root-cutting
 machines
 Wilson (Newton) and Co. London, *s.*, new process for brushing
 and clipping horses and sheep
 Woods, Cockedge, and Co., Stowmarket, *g.*, crushing and
 grinding mill

CLASS 85.—CONSERVATORIES AND HORTICULTURAL APPARATUS.

Barnard, Bishop, and Barnards, Norwich, *s.*
 Boulton and Paul, Norwich, *s.*, ornamental conservatory of
 bent wood and iron
 Boyd, James, and Son, Paisley, *g.*, ornamental conservatory of
 wood and iron, admirably adapted for horticulture
 Carter, Dunnett, and Beale, London, *g.*, models of all kinds
 of roots; fine collection of all kinds of seeds
 Colman and Moreton, Chelmsford, *b.*, garden pumps and
 watering apparatus
 Follows and Bate, Manchester, *b.*, grass mowers
 Fox, J. Caven, South Kensington, *s.*, kiosques and rustic
 buildings
 Harlow, Benjamin, Cheshire, *b.*, apparatus for warming
 conservatories
 Hartley and Sugden, Halifax, *s.*, boilers for thermo-siphons
 Lascelles, W. H., London, *b.*, curvilinear plant house made
 of wood bent by steam
 Lumby, Edwin, York, *c.*, boilers for thermo-siphons
 Patent Water Proof Paper Co., Willesden Junction, *b.*, garden
 labels, of waterproof material
 Saynor, Cooke, and Ridal, Sheffield, *s.*, horticultural cutlery
 Sutton and Sons, Reading, *s.*, most remarkable collection of
 seeds, models of roots, &c.
 Thomas, J. J. and Co., Lambeth, *g.*, wire applied to agricul-
 tural purposes
 Webb, E., and Sons, Stourbridge, *b.*, fine collection of seeds
 of fruits, flowers, &c.

CLASS 86.—FLOWERS AND ORNAMENTAL PLANTS.

Carter, Dunnett, and Beale, London, *g.*

CLASS 87.—VEGETABLES.

Carter, Dunnett, and Beale, London, *g.*

CLASS 89.—FOREST PLANTS AND SEEDS.

Carter, Dunnett, and Beale, London, *g.*, complete collection
 of all kinds of seeds.

In addition to the above list we notice that in Class 26
 Mr. J. J. Bevan, of Farnham, gets a silver medal for hops,
 and Mr. J. Kitchin honorable mention for the same product.
 In Class 43, Messrs. Packard and Co., of Ipswich, obtain a
 silver medal for phosphates. In Class 69, Messrs. Carter,
 of Holborn, obtain a gold medal for cereals, Mr. J. Hollington,
 of Wolverley, Kidderminster, an honourable mention for
 cattle food, and Thorley's Cattle Food Co. a bronze medal for
 the same.

THE ANIMAL'S NAME.—A good story is told of one of
 the leading clergymen of Albany, who is a devoted equestrian.
 A new horse had been sent him from the livery, and to quiet
 its friskiness the gamin who brought it was shouting "Whoa,
 Emma!" The reverend gentleman, in all innocence, asked
 if that was the animal's name, and met with an affirmative re-
 sponse. Riding through the park the animal became restless,
 and the bystanders were convulsed with laughter to hear the
 good dominie repeating, in the most earnest and somewhat
 excited tones: "Whoa, Emma! Whoa, Emma!"—*Albany
 Times.*

FRANCE AND ENGLAND.—Astonishment has some-
 times been expressed at the rapid recovery of France from the
 disastrous effects of the German war; but it is evident from
 the following passage, extracted from Samuel Roger's *Re-
 collections*, that Edmund Burke would have been prepared for
 what has occurred: "England," he said, "is at all times a
 moon shone upon by France. France contains all within her-
 self. She has natural advantages; she can rise soon after
 severe blows. England is an artificial country; take away her
 commerce, what has she?"—*World.*

THE WEIGHTS AND MEASURES ACT.

In reference to criticisms on the probable working of the "Weights and Measures Act" of last Session, Mr. Farrer, of the Standards Department of the Board of Trade, has forwarded the following letter to the Secretary of the Local Taxation Committee—

"Board of Trade (Standards Department), 7, Old Palace Yard, Oct. 28.

"SIR,—I have to acknowledge your letter of the 17th inst. inquiring how far the legal position of farmers and other buyers and sellers of agricultural produce is affected by the 'Weights and Measures Act, 1878,' and enclosing an extract from the *Chamber of Agriculture Journal*, adverting to misapprehensions as to the scope and bearing of the Act, particularly as to the operation of its Clauses 19, 23, and 24.

"In the first place, I am to point out that in all its main features the Act in question is a re-enacting and consolidating Act, and, generally speaking, makes nothing illegal which was not illegal under the previously existing law. Such changes in the existing law as it was necessary to make in order to preserve consistency or to remove doubts that had arisen were brought to the special notice of Parliament and the public by a memorandum prefixed to the Bill at its different stages.

"As regards Clause 19, to which you refer, and which is the clause which requires the sale of agricultural and other produce, if made by weight or measure, to be made by Imperial weight or measure, I am to state that the clause is simply a re-enactment in altered and consolidated form of several clauses in the existing Acts. Unless, therefore, the use of any denomination of weight or measure now in use for trade is illegal under existing law the use of such denomination will not be illegal under the new Act. The present custom of selling grain and other produce by weight or by measure, or by both weight and measure, is not affected by the Act.

"As regards Clause 23, which imposes a penalty on any person who prints a journal or other paper containing a price-list, in which the denomination of weight or measure quoted or referred to implies a greater or less weight or measure than is denoted or implied by the same denomination of Imperial weight or measure, I am to point out that the clause is a re-enactment in exactly the same words, not of an ancient or obsolete law, but of a clause of the principal Act now regulating weights and measures—viz., 5 and 6 William IV., ch. 3, 1835, sec. 31.

"It may be worth while to observe that the offence mentioned in this clause does not consist in quoting a weight or measure unknown to the law, but in quoting a weight or measure known to and determined by the law with a meaning different from that given to it by the law. Thus 'load' and 'coomb' are not denominations of measure set forth in the Act, and the use of such terms is not affected by this clause. Such denominations, however, as the 'bushel' and 'quart' are set forth in the Act, and it is therefore illegal to quote or refer to any measure as a bushel unless they are of the capacity attached to these denominations by the Act.

"In conclusion, I am to direct your attention to Clause 24 of the Act of 1878, respecting the use of material weights and measures. This clause imposes a penalty on every person who uses, or who has in his possession for use, for trade, a weight or measure which is not of the denomination of a Board of Trade standard. From the list of such denominations of Board of Trade standards (the material representatives of Imperial denominations of weight and measure) stated in the 2nd schedule of the Act, it will be seen that all denominations of weight and measure now legally and commonly in use for trade are represented in the schedule by Board of Trade Standards. By Clause 8 of the Act this Department has also power from time to time to legalise the use for trade of new denominations of weight and measure, providing such new denominations are multiples or aliquot parts of one of the Imperial weights and measures. Should the exigencies of trade at any time demand the legalisation of a material standard weight of the central of 100lb., referred to in the *Chamber of Agriculture Journal*, or of any other standard being a multiple or aliquot part of an imperial weight or measure, it will be within the power of the Board of Trade to legalise such standard.

"I am, Sir, your obedient servant,
 (Signed) T. H. FARRER.

A meeting of corn traders of Manchester and the district was held in the Corn Exchange on Thursday, Oct. 24, for the purpose of considering the Weights and Measures Act, which will come into force in January. The meeting had been convened by the Manchester Corn Trade Association, and as yesterday was a market day there was an attendance of 200 or 300 persons.

Mr. W. T. SUTCLIFFE, who was called to the chair, said that the subject for consideration was one of much importance to the trade from the fact that hitherto there had been a great and perplexing variety in the weights and measures used in the sale of grain. One of the most important provisions of the new Act was that the same weights and measures should be in use throughout the country; and the object for which that meeting had been called was to discuss and decide as to the best manner of complying with this regulation.

Mr. WM. WARBURTON, Hon. Secretary to the Association, moved:—

"This meeting expresses its satisfaction that an Act was passed in the session of Parliament for securing uniformity of weights and measures. This meeting is of opinion that the central of 100lb. will furnish at once the most simple and effective definition of weight, and would respectfully and earnestly beg her Majesty's Government to arrange its adoption throughout the country on the 1st of January next." That such an Act as the one mentioned in this motion was necessary he did not think that any gentleman present would deny. The existing state of affairs was unexampled in any other civilised country, and seemed to have come down from the times of the heptarchy, or even earlier. He thought, however, that difficulties which did not appear to have been foreseen might probably arise under the Act. It would be a public misfortune if they were in future only nominally to comply with the Act by selling corn in similar quantities as at present but by simply changing the denomination, as he was sorry to find members of the trade were doing that day. For instance, they might continue selling sacks, but instead of calling them sacks they might merely describe them as 250lb. of corn. The standards prescribed by the Act were 1lb., 14lb., 112lb., and the ton; but a decimal standard would be much better, and he thought that the trade could obtain it if they were so determined. It might be said that such a compromise was contrary to the Act; but such was not the case, for the 8th clause, as he understood it, gave the Board of Trade power to alter the standard from time to time. The superiority of the decimal system over other systems had been clearly demonstrated. It would save time, which was more valuable than money. It would save labour, much of which was now thrown away. It would save expense, which was specially important in connection with the present close competition; and in doing all this would ensure uniformity, the advantages of which would be patent to everybody.

Mr. CHARLES HOLT seconded the motion, which was supported by Mr. GEO. GYTE, and carried unanimously.

Mr. FREDERICK MOSS proposed the following resolution, which was seconded by Mr. TIMOTHY BODDINGTON, supported by Mr. WILLIAM GOODWIN, Secretary of the Liverpool and Manchester District Association of Millers, and agreed to without opposition:—

"That this meeting would strongly urge the members of the corn trade in particular, and the public generally, to unite for the purpose of facilitating the objects indicated in the foregoing resolution."

On the motion of Mr. W. H. HAMILTON, seconded by Mr. ARTHUR McDUGALL, it was also resolved:—"That the following gentlemen be a committee to correspond and work with other bodies seeking the same objects, and if necessary to wait upon the Board of Trade—viz., the Chairman, with Messrs. Frank Barrett, Charles Holt, Abraham Wolfenden, F. Moss, T. Boddington, Marriott, Hamilton, and William Warburton."

The CHAIRMAN said that the London Flour Millers' Association had sent a telegram stating that on the previous day they passed resolutions identical with the Birmingham proposals, which were to the effect that 100 lb. should be the standard of weight.

THE POSITION OF FARMERS.

The agricultural correspondent of the *Leicester Chronicle* writes:—

Farmers may at present be said to be in that unpleasant locality, "Queer Street." They are gazing into the future, waiting and watching for those better times which have long been so far distant. "Hope deferred maketh the heart sick," says an old proverb, and it is one of which farmers have had practical experience for several years. Seed time and harvest, summer and winter, have followed in succession for the last four or five years, without bringing any gains to the arable land farmer. This is the reward for the latent capital and energy which it is necessary to invest to make modern agriculture in any way successful. To use a vulgar expression, we are "heked at all ends, and are thrashed on all sides" by others who are daily coming into the market, and who can compete with us and laugh at us into the bargain. Then again, at home the wages of labour have risen to a much higher extent; corn returns little or nothing for its cultivation; and the rents, rates, and taxes do not in the least decrease. Store stock, for example, is this year bought in at extravagant prices, and the consequence is that numbers are sold out in the latter end of the year for very little more than the price at which they were purchased in the spring. Then again the foreigner has every chance of making the best of his own cattle, which are now, and will continue to be, increasingly imported in larger numbers every year. Thus the prospect looks black, dark, and dreary for the agriculturists of Great Britain. The present aspect of affairs is one that it behoves every one connected with land, from the owner down to the agricultural labourer, to look firmly and steadily in the face. Of late we have been passing through a most critical period, but it is one that I trust will ere another year, have passed away. The thrashing machines have been busy since harvest was finished; but no one, unless he wanted the money on the sward for thatching—which in many cases is much needed—would think of knocking it out at present. I have not yet heard of many fine quarters of wheat to the acre; where such is the case it will not realise much, when sold at about 36s. the quarter, which I suppose is the highest price for a fair sample of red wheat. The village bakers have at last reduced their bread from 6d. to 5½d. the 4lb. loaf—not a very heavy reduction, when it is asserted that when wheat sells at £3 the quarter a profit may be realised by selling the quarter loaf at 6d. The grazing fields are very full of keep, too much so for the sheep, which were suffering from lameness, occasioned by the wet state of the grass, and the dampness of the ground, the grass where it is long having hardly been dry throughout the whole of the day. Ploughing for wheat seeding is progressing favourably, though much of the soil turns up very hard and "unkindly." The potato crop in many neighbourhoods where they have not been got out of the ground, will be barely worth gathering. Store sheep are selling at a very high price, in fact they are making more per head than fat ones. The beef trade continues dull and heavy, and prices are not sufficiently high to recompense the seller, in consequence of the high rates at which they were bought. The woods and plantations, as well as the hedgerows, are already showing, by their various tints, that the autumnal change has taken place, and that ere long we must make provision for the winter, which is near at hand.

THE SYDNEY EXHIBITION—The programme and regulations for British exhibitors at the "Australian International Exhibition, 1879," have been settled by the London Committee. It has now been definitely decided to hold this Exhibition next August, and the Agent General in London has been instructed by the Colonial Secretary to do all he can in support of the undertaking. Sir Daniel Cooper is chairman of the London Committee, and Mr. Edmund Johnson is Honorary Secretary. The London offices of the Exhibition are at 3, Castle Street, Holborn. On the 7th of February this year the Governor of New South Wales, with the advice of the Executive Council, directed the fact to be notified for general information that it was intended to hold an International Exhibition at Sydney in August, 1879, under the supervision of the Agricultural Society of New South Wales. It will be held in the hall in Prince Alfred Park, which will

be extended for the purpose. Medals and certificates will be awarded to exhibitors in nine sections—fine arts; apparatus of the liberal arts; furniture and other objects for use in dwellings; clothing, including fabrics and other objects of personal wear; products of mining industry, forestry, chemicals, &c.; apparatus and processes used in the common arts; food, and cattle foods; artisans' section; school work. Australia is fifth on the list of purchasers of English manufactures; and New South Wales is the seventh State in the world for revenue. The latter colony has an area of 207,000,000 acres, and a population of 662,000 and 25,000,000 sheep. She has 3,000,000 cattle, 366,703 horses (a horse to every two inhabitants), and 173,691 pigs. Free trade is established in this colony. The only high import duties are on fermented liquors and tobacco. The population of Australia is now 2,500,000, and the import and export trade is £70,000,000. The population is thus greater than that of the United States at the time when they severed the English connection, and the trade is twenty or thirty times as great. Captain Cook, whose statue, designed for Sydney by Mr. Woolner, we have recently described, discovered the magnificent harbour of Sydney only a century ago, just anticipating the French navigator, La Prouse. An import trade of about £6,000,000 from the United Kingdom alone, and of £7,000,000 from British colonies, with an export trade of corresponding amount, is now conducted by means of this harbour. The land is rich in wheat, maize, sugar, wine, tobacco, cereal crops, arrowroot, dried fruit, silks, gold, tin, copper, iron coal. The manufacturing industries are of some importance. In 1877 the colony had 150 steam flour mills, 48 establishments for making agricultural implements, 23 tobacco and 70 sugar manufactories, 2 refineries, 32 soap and candle works, 39 boiling-down establishments, 47 wool-washing establishments, 17 salting and meat-preserving depots, 39 clothing factories, 87 boot factories, 118 tanneries, 320 brickyards, 192 steam saw-mills, 48 iron and tin works, 45 iron, brass, and copper foundries, 148 harness and saddle manufactories, &c. The exports from England in 1876 to Australia were £19,470,033. The largest exports were in apparel, beer, cottons, hardware and cutlery, linens, leather, machinery, paper, and miscellaneous manufactures. It will be seen that the Exhibition to be held in the richest and oldest of the Australian colonies is worthy the attention of English manufacturers. The representation of Colonial producers is being vigorously organized by M. Jules Joubert, secretary of the New South Wales Commission at the Paris Exhibition, and the Hon. Mr. Combes, Executive Commissioner. The Exhibition derives additional importance from the fact that an International Exhibition is announced for 1880 at Melbourne, to which objects sent might be re-consigned, and that a Queensland Exhibition in 1881 is also mentioned.—*Tues.*

THE PRISONS ACT.—The Home Secretary has caused a letter, of which the following is a copy, to be addressed to the chairman of Quarter Sessions throughout the country:—
"Sir,—I am directed by Mr. Secretary Cross to acquaint you that the necessary Parliamentary inquiries having now been completed, he is prepared to proceed with the settlements of the claims arising under the Prisons Act, 1877, between the Government and the local authorities. Mr. Cross is of opinion that much time and correspondence would be saved were a committee of say three gentlemen to be nominated by the magistrates in Quarter Session to discuss with the Under Secretary of State at the Home Office any questions that may arise on the one side or the other in adjusting these claims. Mr. Cross requests, therefore, that you will submit this suggestion to the consideration of the magistrates at the ensuing Michaelmas Session, and move them, if they see no objection, to name three gentlemen to represent them in the matter. Any arrangement entered into could be submitted for the final approval of the magistrates at the next Epiphany Session, and the amounts payable to the county would be inserted in the estimates to be laid before Parliament at the beginning of the session, and an early vote be taken with respect to them. In the event of the magistrates adopting this suggestion I am to request that you will inform the Secretary of State of the names of the gentlemen so appointed, in order that a communication may be addressed to them, fixing a date for the interview.—I am, Sir, your obedient servant, GODFREY LUSHINGTON."

Agricultural Table Talk.

At the annual dinner of the Freshfield Labourers' Association, Mr. ROUND, M.P., said:—If he might speak of the age in which we lived, without using any particular term for it, he would say this was an age of competition—although they who engaged in farming had not, as was the case in many other avocations, to undergo competitive examinations. Now, although he had spoken of the agricultural interest not being so prosperous as they could wish to see it, there was no doubt that the revenue of the country was in a prosperous state, and was slightly increasing. It was expected this year to yield no less a sum than between 78 and 80 millions of money. The population of this country increased every year by some 240,000, and it was calculated that each person consumed as much as six bushels of wheat in the year. Therefore, every year some 80,000 more quarters of wheat were necessary to feed our increasing population. Now they would think that this would be of some benefit to those who went in for producing; but the importation of foreign corn was so great that it did not have much effect upon the farming interest. Then, if they turned to the meat supply of the country they found the ravages of cattle disease had alarmed our agriculturists; and they could not be surprised that they had done so. He was walking over some very good land in Huntingdonshire the other day, and he was told that many arable fields there had been up to within a very short time grass land, but since the ravages of the cattle plague in the year 1866 farmers had become alarmed, and in consequence they had turned them into arable instead of pasture. Now, it was very difficult to get an Act passed through Parliament in this country, and people said it was still much more difficult to do so when the Conservative Government was in power. But he was happy to say they had had the Cattle Diseases Act passed this year—a measure which he could not doubt would be a great benefit to the country. He trusted that all classes would unite in carrying out its provisions, and that for the future the country might have freedom from cattle plague, which undoubtedly was imported from abroad.

Mr. JOSEPH SMITH, at the same meeting, said:—The chairman alluded to the Prince of Wales having given countenance and support to the Agricultural Benevolent Society. Now he (the speaker) believed that to be one of the best institutions in existence, and he thought it was the duty of all who could afford it to subscribe to its funds. Depend upon it they would need its aid some day, for he ever, in the course of his fifty years of business life heard of such—he did not like to use the word lamentations, but—feeling of discouragement and deadness prevailing among the tenant farmers of late. They often took their corn to market and found they could not turn it into money on any consideration. This present year was worse than any of the others; and therefore it was the duty of everyone who could to subscribe to the Agricultural Benevolent Society, for its wants would go on doubly and trebly increasing. One other remark the chairman made, showing how hard it was to get an Act passed through Parliament. He (the speaker) thought rather to the contrary. He thought they had been almost inundated with Acts of Parliament during the last twenty years, and the worst of it was that many of those Acts were not worth the paper they were written upon. Mr. Round spoke about the reasons why more capital was not applied to the land; but, as they knew, nearly a whole session was taken up in passing the Agricultural Holdings Act. Now, he happened to farm under several landlords, and every one of those landlords gave him notice not to touch it. He defied any one to tell him that the tenant farmers of Essex were any better for that Act. Then the new Highway Act came into operation, and he had heard it spoken of very slightly indeed. It was not appreciated. He did not know what it was or what it would prove to be, but he was told it would add materially to the expense of the county, from the fact of half the cost of maintaining the main roads, which had hitherto been borne by the turnpikes, falling legitimately now upon the county.

At the meeting of the Evercreech Agricultural Association, on October 18 the MARQUIS OF BATH said:—He should like to say a word or two as to the causes to which the present bad prospects of agriculture were owing. No doubt they were caused to some extent in consequence of the bad harvest, to

a certain increase in the rates, and to an increase in the cost of labour. He thought, also, they must consider the general depression of trade throughout the country. The consuming power of the country as far as agricultural produce was concerned had enormously diminished during the last few years. He had heard it said free trade and American competition were at the bottom of the low state of agricultural business. He did not wish to speak dogmatically, as this was a matter to be thought over and considered, but he thought they had not suffered much from these causes. They should recollect that under a system—he would say boldly—of free trade the benefits we had received had been enormous. The fact was the benefit the manufacturing and commercial classes received was so great that it rivaled upon agriculture. It was the prosperity of those classes which made the prosperity of agriculture between the years '52 and '72, when (during 1872) times began to get bad. A gentleman, who spoke with authority, said a short time ago the wages in many parts of Yorkshire were reduced 50 and 55 per cent. That meant, the incomes of people who consumed a great quantity of agricultural produce were diminished, and the loss they suffered consequently fell back upon the farmers and the landlords. He did not contend it was the case, but it was possible if there was the same consumption, the same amount of money to expend now as there was a few years ago, there would be enough to purchase both produce from abroad and the produce grown at home. He did not wish to allude to any painful questions, but he could not help thinking the strikes which had taken place in the labour market, and which affected various manufacturing interests, had injuriously affected agriculture. He alluded just now to personal expenditure, and he ought not, perhaps, to omit all notice of what might be called national expenditure. This was of many kinds, and clearly, when they had to meet with bad times and diminished incomes, that expenditure should be reduced.

Lord EUSTACE CECIL, M.P., at Hatfield Broad Oak, on Oct. 22, said:—I have been trying to think what pleasing thing I could say about agriculture at this moment, and I think I may congratulate you upon the whole upon having had a better harvest than you have had for the last two or three years. That is not saying much, but I say it with all the more pleasure because some of our urban friends have an idea that farmers are inherent grumblers, and that their representatives are always ventilating their grievances more or less in Parliament. Now, that is a very mistaken idea, and I would say that I think farmers have had a very great deal to grumble about lately. First of all, they have had three very bad seasons; then they have had considerable difficulties in the labour market; and lastly, they have had to compete against the importation of an amount of foreign produce that has been perfectly overwhelming. But as regards the first difficulty I think I may go back to the old proverb which says that it never rains but it pours; but there is this consolation for us, that it cannot pour for ever, and we may hope that whatever it is, whether it is the spots in the sun or some other cause, that in a short time we shall have more favourable seasons. As regards the difficulties in reference to labour, I have great confidence in my own countrymen, whether of the labouring class or any other class; I think they are coming to their senses, and they will fully, by degrees, understand, if they have not already understood, the difficulties of their employers, and that they will be ready to admit that a man has a right to a fair day's wage for a fair day's labour, but no more. The last difficulty is perhaps the most troublesome of all, and I am not astonished that people should have very serious apprehensions when they read of the tons upon tons of dead meat that are brought in from America—from Texas—and of the bushels and quarters of corn that are brought in from every part of the world, because whatever the advantage is to the consumer—and no doubt we are all consumers, and therefore the advantage is very considerable to us—at the same time the difficulties of the producer are not diminished. Then, again, when we take into consideration the difference of climate which exists in every part of the world and generally in favour of other parts, when compared with England, we must acknowledge that the British farmer is very seriously handicapped in the race. It is very true that Mr. Mechi and those who write and agree with him, in truly patriotic strains, constantly point out that

if the agriculturists and the capitalists only knew it, there are mines of gold in the waste lands of the country, but unfortunately Mr. Mechi, charm he never so wisely, does not convince those whom it is necessary to convince. Old birds, I fancy, are not caught with chaff, even plausible and well put as his is. But they know that farming does not pay any very considerable profits even at the best of times, and therefore they quite understand and conceive that even Mr. Mechi may have taken an exaggerated view of the case. However that may be, there is no question that the difficulties are very great and the prospects are not always bright. But still, gloomy as the prospect may be, again I say I have full confidence in the energy and perseverance of my countrymen. If corn will not pay, then market gardening will. At all events, some way will be discovered to make both ends meet. I have the fullest confidence that the British farmer will surmount all these evils. All I would say to him is, let him rely upon himself, upon his own energies, don't let him always rely upon legislation in Parliament. Parliament may do something, but it can do very little after all. What little it can do I think has been done within the last few years. I recollect perfectly well four or five years ago, at a meeting at which I was present at Salfrou Walden, a gentleman who is known very well to you all, Mr. Odams, asked for three things. He asked for an amendment of the licensing laws; he asked the greater security for the tenant; and he asked for the slaughter of all cattle at the port of disembarkation. Well, all these things have been done to a certain extent. All these things have been legislated upon, and as far as it was possible to meet the conflicting interests that exist in Parliament. I am quite sure everybody listening to me knows that there are a great many conflicting interests, and it is very difficult to please everybody. As far as that could be done it has been done, and when I mention the subject of the Contagious Diseases Act, I can only say, and I say it with hearty sincerity, how much we ought all to feel obliged to my honourable friend and colleague, Sir Henry Selwyn Ibbetson, for the great pains and patience with which he undertook all the clauses of that Bill. I think there is this to be recollect'd, that whatever changes may have taken place in the Bill—and changes were necessary, or otherwise it never would have passed—that all the presumption lies in favour of slaughter at the port of disembarkation. All cattle must be slaughtered, and that is a great principle to have got admitted. Personally, looking through that Bill, there are many things that I should like to see stronger. We know, however, that we cannot have it all our own way, but I am very glad to see one thing has been admitted, and it is a matter upon which my hon. colleague can be far more eloquent than I can, for he understands the minutest details of that Bill, and that is that cattle in transit shall be properly inspected and taken care of. My opinion is that a great deal of disease is caused through want of proper care on the part of the railway authorities and others, and that if we have an inspection we shall have a great deal less disease than we have had. At the same meeting Sir HENRY SELWYN IBBETSON remarked:—Every department, whether it is commercial or agricultural, is seriously depressed. Reasons of all sorts may be given for it, but I confess I have often thought that much of our present depression is owing to the extraordinary amount of wealth that was produced in a few months during the years 1874, 1875, and 1876. At that time the country was essentially rich, money seemed to be flowing in every direction, wages rose all over the country, prices rose with them, and the result has been that when that was a fictitious burst of wealth, what was really the spending of capital instead of the spending of income, was found out, the reaction took place. In many of our manufacturing districts, the numbers of new efforts that have been started in order, as it was thought, to make this sudden wealth and to reap this harvest of fortune, broke down from the supply of those manufactories being more than the demand for their produce, and prices have not fallen in proportion to the reduction that has taken place in the wealth of the country. There is no question, whether that is the reason for it, or whatever other cause there may be, there is a great depression, there is a great reduction of wages throughout the country, there is a great reduction of wealth—far more than there is a proportionate reduction in

our extravagance of living; and to that I attribute more perhaps than to any other cause the present continued depression in our trade.

At the dinner of the Cannock Agricultural Association Mr. R. H. MASEN said he was not an alarmist, but he was unable to join in that common expression, "There is nothing to fear from without." The consumer had every right to expect that his daily food should be regularly supplied; but they in that room had to look at the question from another point of view—not as consumers, but as producers. What did they produce for? They produced for the supply of food for the people of this country; but they also had another object in view, for when trying to feed the people they were at the same time trying to do something for themselves. One was the first law of Nature, and as soon as a man forgot himself they might rely upon it there was no good to be got from him. Politics being excluded, he should be sorry to encroach upon forbidden ground, but he wished to refer briefly to one of those Acts, which, as Lord Hatherton said, in speaking of the Weights and Measures Act, men had a peculiar way of evading—he meant the Agricultural Holdings Act. That Act, as they were aware, was a permissive Act, and one from the operations of which many landlords had freed themselves by giving the required notices. To the landowners he wished to say that he thought the present was a wrong time to expect from their tenants more than they could give. He had heard many people say—"We must have rents reduced," and he knew what that meant. He would rather they had freedom of contract and freedom of cultivation. He knew perfectly well that there were some restrictions necessary, but what he wanted to see was this—farms given to respectable, trustworthy men for them to do the best they could for the land, and that those who did not do as they ought to do should have their farms taken from them. If such a principle as that were adopted he believed there were very few men in England but what would farm better than they do at the present time.

STAINED BARLEY.—Barley damaged in this way by wet is not suited for malting, although by careful manipulation it is possible to establish a proper germination. If the barley has only got wet in the course of harvesting, there is not so much fear of bad results, as the drying influence of the atmosphere will remove the superfluous moisture; the great danger is that the barley may heat after being stacked; in this case the grain will probably commence to germinate, and after it has once sprouted and been checked, no efforts of the malster will avail to produce a fresh germination. Barley which has been saturated with wet is liable to be covered with microscopic fungoid growths, and the stained appearance is due to these; in the subsequent processes of malting and brewing mould develops, and as a consequence, lactic acid is formed. Although it is quite possible to convert stained barley into malt, yet it is not advantageous to make the attempt, for experiments have shown that malt made from partly-germinated grain never yields the same amount of extract as that from sound barley. As to the alterations in the constituents of the grain, we are not aware of any investigations bearing on the point; but probably there is a slight development of lactic acid, and some change effected in the composition of the albumoid bodies which destroys the vitality or power of germinating originally possessed by the barley.—*Brewers' Guardian*.

FRENCH AND ENGLISH SERVANTS.—It is worthy of observation that the author of an admirable little volume on the domestic life of the French people attributes many of the most striking excellences of French servants to the elevation bestowed upon them by the doctrine of equality of classes. "The respect," he tells us, "which they have for themselves generally induces them to respect their masters. The English servant is always struggling to maintain his imaginary dignity by sticking out for the infinitely small privileges which, by degrees, and under the pressure of necessity, have been conferred upon him; the Frenchman, feeling that his rights as a man are absolutely on a par with those of his master, attaches vastly less importance to his rights as a servant, and is consequently ready to do whatever you ask, provided you only ask in a way which pleases him." This passage is well worthy of the consideration of the sages of social science.—*World*.

REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING OCTOBER 28

Fine autumnal weather has prevailed throughout the past week, and the rainfall has been slight, but sufficient to be of some service to farmers in enabling them to commence wheat-sowing on the heavy lands. Now that October is drawing to a close, it is time this important operation was terminated, as an unfavourable change may take place in the weather at any moment, and the advantage of early sowing can hardly be over-rated. Satisfactory progress has been made with field-work generally, and the agricultural operations usual at this season of the year have been carried on without hindrance. Scotch advices also continue favourable, and the weather has been all that could be desired for the growth of turnips and potato-lifting, while the grass is plentiful, and the pastures still afford a nutritious bite for stock. Supplies of English wheat have been light, although farmers have had plenty of opportunities for thrashing, still, their not having taken advantage of them can scarcely be wondered at, considering the London average price of wheat is 5s. 7d. per qr. less than that of barley. Some improvement has been noticeable in the condition of the offerings, although it has been but slight, and prices have undergone no further decline. In all probability values have at last touched their lowest point, and it is difficult to believe that with the diminished imports and presumably increased winter consumption close upon us, a reaction from the long continued state of inactivity and consequent rally in prices can be far off. The imports of foreign wheat into London have been upon a more moderate scale than of late, last Monday's returns showing little over 36,000 qrs., while the subsequent arrivals up to Friday have been about 42,000 qrs. Although fully sufficient for our requirements, supplies such as these are insufficient in themselves to exercise any depressing influence on prices, but the week's business has again been of so meagre a character that the wheat has been a source of profit to granary-keepers rather than merchants. Some steadiness was indeed apparent during market hours on Monday, as there was a good attendance of country millers, who took advantage of the low ruling prices to purchase with more freedom, but this temporary support having been withdrawn the trade has since relapsed into its previous inanimate condition, sales having been effected with the greatest difficulty during the remainder of the week. Indian wheat is beginning to arrive more freely, for which there has been some Continental inquiry, but not much demand from English millers, at any rate off stands, considering the prohibition they have hitherto entertained for this class of produce. The quantity afloat to London is nevertheless very light when compared with that of last year, the figures being 26,713 qrs. on October 21st against 258,344 qrs. at the corresponding date in 1877. Feeding corn has not been any brisker than wheat. Fine barleys have maintained Monday's full prices, but maize has ruled very dull, and although a rise of fully 6d. per qr. was quoted in Liverpool on Tuesday, no corresponding improvement has taken place at Mark Lane. Oats have shared in the prevailing dullness, and the pressure of continued heavy supplies has deprived the trade of anything like activity. The sales of English wheat noted last week were 50,434 qrs., at 39s. 0d., against 42,299 qrs., at 53s. 7d. in the previous year. The London

averages for the week ending Oct. 26th were 38s. 11d. on 2,073 qrs. The imports into the United Kingdom for the week ending October 19th were 1,045,537 cwts. wheat, and 145,514 cwts. flour. Last Monday's market was fairly attended, and with moderate imports of wheat and barley buyers showed rather more inclination to transact business; at the same time the demand was entirely of a retail consumptive character, although the general tone was steadier than during the preceding market-day. The week's supply of English wheat was 7,361 qrs., and with a small show of samples fresh up on factors' stands, prices underwent no further depression, but sales progressed slowly, and there was little life in the trade, many of the parcels offered being in poor condition. The total imports of foreign amounted to 36,032 qrs., Russia contributing 9,700 qrs., the United States and Canada 7,605 qrs., and Germany 5,881 qrs. There were also about 6,000 qrs. from the East Indies, and 3,415 qrs. from Japan. A steady consumptive demand was experienced for all descriptions at the full prices of the previous Monday, all intervening depression being recovered. The sales made were numerous, but not in themselves large, as they only represented the requirements of the country millers. The exports were 2,770 qrs., against 2,830 qrs. in the preceding week. The arrivals of home-grown barley amounted to 6,123 qrs., and there were 19,671 qrs. of foreign reported. Malting sorts maintained previous currencies, but grinding descriptions were neglected, and the turn lower to sell. Maize, of which the week's supply was 25,127 qrs., gave way 3d. to 6d. per qr. for all except the finest lots of old corn. The imports of oats were heavy amounting in all to nearly 92,000 qrs., and under pressure of such liberal arrivals the trade ruled slow, but the quotations of the previous Monday were, as a rule maintained. On Wednesday the return showed 130 qrs. of English wheat, and 14,490 qrs. of foreign. The market was most scantily attended, and business was almost at a stand-still, but in the few sales made Monday's prices were obtainable, both for wheat and spring corn. On Friday the supply had increased to 720 qrs. of home-grown wheat, and 41,960 qrs. of foreign. A decidedly firmer tone was apparent in wheat, and sales progressed steadily at fully Monday's prices. Spring corn was quiet, but not quotably lower, and maize was occasionally rather dearer. The imports of flour into the United Kingdom for the week ending Oct. 19th were 145,514 cwts., against 155,174 cwts. in the previous week. The receipts into London were 22,809 sacks of English and 3,676 sacks and 11,017 barrels of foreign. A firmer feeling has been noticeable in the trade, and although no actual advance has taken place, both sacks and barrels have steadily supported Monday's quotations. The week's arrivals of beans were 45,078 cwts., and of peas 34,798 cwts., showing an increase of 510 cwts. on the former, and a decrease of 5,385 cwts. on the latter. No change has taken place in the value of either article, but both are held firmly, with a moderate inquiry. The deliveries of malt were 15,836 qrs., and the exports 1,150 qrs. Very little change can be noted in this branch of the trade. The finest sorts are held for higher prices than buyers seem disposed to give, and secondary qualities have met with very little attention. The agricultural seed trade has been extremely

dull throughout the past week, and where sales have been effected, prices have, generally speaking, favoured buyers. The offerings of English red clover have been very light, and the prices asked above buyers' views. No further decline has occurred in American, some export demand for the Continent having supported values on the other side. In alsike and trefoil, there has been nothing doing, and the demand for all other varieties has been of a most restricted character. Provincial trade has shown little activity of late, and advices from the principal country markets have reported a slow sale for wheat and spring corn, at occasionally rather lower rates. On Tuesday, however, at Liverpool there was a steadier feeling for wheat, both on spot and for future delivery, and American sorts were in fair request at 1d. per cental more money. Flour also exhibited a hardening tendency, and barley commanded fully former values. Oats were dull, but maize with diminished shipments from America, and less pressure to sell, realised an improvement of 6d. per qr., new mixed closing at 23s. to 23s. 3d. The week's imports included 57,000 qrs. of Wheat, and 33,000 qrs. of Maize. At Newcastle the trade has been rather firmer for Wheat, but sales have been mostly in retail. Maize has steadily supported late rates, but spring corn and flour have ruled dull. At Hull and Leeds English wheat has been in good request at fully previous currencies, while foreign has also been firmly held. Fine barley and maize have been fully as dear, but other sorts of feeding corn the turn cheaper. At Edinburgh the market has been liberally supplied with grain from the farmers, and wheat has sold slowly at 6d. to 1s. per qr. less money. Barley has given way 1s. per qr. and beans 2s. to 3s. per qr. on the week, but oats have, been more inquired for, and prices have favoured sellers. At Leith the weather has been showery, but there has not been sufficient rain to impede agricultural labour. Wednesday's market was moderately attended, and with fair arrivals from abroad the wheat trade ruled quiet, Scotch being quoted 1s. per qr. cheaper, and foreign in retail demand at previous prices. Flour was unchanged, but Scotch barley receded 1s. per qr. Beans were also the turn cheaper, and other descriptions of feeding corn unaltered in value. At Glasgow the grain trade has been characterised by great depression during the past week, and business has been almost at a stand-still. The arrivals of wheat have been light, and in the small trade passing at market on Wednesday, last week's prices were maintained. Increased steadiness has been observable in maize, for which an advance of 6d. per qr. from the lowest point has taken place. At Cork the grain trade has ruled quiet, but a rather firmer tone has prevailed in the wheat market, and a moderate consumptive demand has been experienced at fully late rates. The inquiry for Maize continues light, and a reduction of 6d. per qr. has been necessary to effect sales. At Dublin on Tuesday there was a limited business done in wheat and maize, and prices underwent no quotable alteration.

The following are the reports from Mark Lane during the past month:—

Monday, October 7.

The arrivals during the past week have been: English Wheat, 7,125 qrs.; foreign, 36,859 qrs. Exports 4,432 qrs. There was a large supply of English Wheat at market this morning, and very little improvement was observable either in quality or condition. The best lots sold slowly at a decline of 1s. per qr. on the week, while inferior parcels were quite neglected. Of foreign the arrivals were fair, and with a good attendance of millers a quiet consumptive demand was experienced at late rates. Country Flour 13,513 sacks, foreign 5,375 sacks, and 6,131 barrels. A slow sale for both sacks and barrels at about

last Monday's currencies. English Barley 1,757 qrs., Scotch 2,191 qrs., foreign 23,774 qrs. Maltling sorts were unchanged, but grinding varieties were 3d. to 6d. per qr. cheaper on the week. Malt English, 12,356 qrs.; Scotch, 376 qrs.; Irish, 24 qrs. Exports, 500 qrs. In moderate request, at about previous quotations. Maize, 8,019 qrs. The trade was very dull, notwithstanding the moderate arrivals from abroad, and prices were the turn in buyers' favour. English Oats, 142 qrs.; Scotch, 250 qrs.; Irish 55 qrs.; foreign, 56,462 qrs. Exports, 13 qrs. New corn generally was 3d. to 6d. per qr. cheaper, while some descriptions of new Swedes could be bought at 6d. to 9d. per qr. less money. English Beans, 1,478 qrs.; foreign, 78 qrs. A quiet demand at about late rates. Linseed, 6,675 qrs. Exports, 628 qrs. Without alteration.

Monday, October 14.

The arrivals during the past week have been:—English Wheat, 5,993 qrs.; foreign, 63,669 qrs. Exports, 2,830 qrs. There was a moderate supply of English Wheat at market this morning, and the best lots realised last Monday's prices. Inferior qualities, of which the bulk of the offerings consisted, were neglected and scarcely quotable, but the tendency of prices was again downwards. Of foreign the arrivals were liberal, and with a somewhat thin attendance a quiet consumptive demand was experienced at barely late rates for all except the choicest parcels of all old corn, for which previous prices were obtainable. Country Flour, 19,924 sacks; foreign, 3,056 sacks and 16,673 barrels. A slow trade at a decline of 6d. per barrel and 1s. per sack. The nominal top price of town-made was reduced from 43s. to 40s. per sack. Barley, English, 2,619 qrs.; Scotch, 1,329 qrs.; foreign, 18,146 qrs. Maltling varieties were quiet, and grinding sorts again the turn cheaper. Malt, English, 14,277 qrs.; Scotch, 865 qrs. Exports, 551 qrs. Business was quiet, and quotations underwent no alteration. Maize, 36,748 qrs. All parcels of really sound Corn were fully as dear, but where sales of inferior qualities were pressed, sellers had to submit to a slight reduction. English Oats, 1,745 qrs.; Scotch, 431 qrs.; Irish, 210 qrs.; foreign, 65,624 qrs. Exports 44 qrs. With continued liberal arrivals from abroad, sales were difficult to effect, except at a reduction of fully 6d. per qr. on all new corn and in the case of new swedes 1s. to 2s. per qr. less money was accepted. English Beans, 1,919 qrs.; foreign, 2,420 qrs. A quiet demand at about late rates. Linseed 36,889 qrs. Unaltered.

Monday, October 21.

The arrivals during the past week have been: English Wheat, 7,361 qrs.; foreign, 36,032 qrs. Exports 2,770 qrs. There was a small supply of home-grown Wheat at market this morning, and sales progressed slowly at about late rates; of foreign the arrivals were moderate and with a somewhat scanty attendance, a quiet consumptive demand was experienced at last Monday's full prices, the intervening depression of Friday being recovered. Country Flour 22,809 sacks; foreign 2,676 sacks, and 11,017 barrels. A slow sale for both sacks and barrels at former currencies. English Barley, 2,968 qrs.; Scotch, 155 qrs.; foreign, 19,671 qrs. Maltling varieties were fairly steady, and grinding moved off quietly at about late rates. Malt, English, 14,423 qrs.; Scotch, 1,263 qrs.; Irish, 150 qrs. Exports 1,150 qrs. In moderate request at last week's currencies. Maize, 25,127 qrs. Fine old corn in granary was no cheaper, but where sales were pressed by ship and to arrive, prices slightly favoured buyers. English Oats, 796 qrs.; Scotch, 316 qrs.; foreign 91,703 qrs. Exports, 25 qrs. Under pressure of continued heavy arrivals from abroad the trade was inactive,

THE FARMER'S MAGAZINE.

C O N T E N T S .

NOVEMBER, 1878.

PLATE. — G L E N G Y L E .

	Page
DESCRIPTION OF PLATE	315
WEIGHTS AND MEASURES ACT, 1878	315, 362, 386
THE NEW HIGHWAYS ACT	318
GENERAL VIEW OF BRITISH AGRICULTURE	319, 380
ECONOMY IN SEWAGE DISPOSAL	328
AGRICULTURAL TABLE TALK	329, 334, 388
THE BOOTH MEMORIAL	330
FREE TRADE IN LAND, NO. XII. AND XIII.	331, 366
SALE OF THE MIDDLE PARK STUD	338
SALE OF THE HOPTON SHORTHORNS AND CLYDESDALE HORSES	339
THE HOLKER SHORTHORNS	340
THE GORDON CASTLE SHORTHORNS AND LEICESTERS	341
AGRICULTURAL SOCIETIES	342, 372
LIVE STOCK NOTES	346, 370
DISEASED ANIMALS AS HUMAN FOOD	347
LIFE IN NEW ZEALAND.—NO. III.	348
MEAT IMPORTATION AND STORAGE	351
THE DAIRY SHOW	352
CONTAGIOUS DISEASES (ANIMALS) ACT, 1878	357
EMIGRATION OF PAUPER CHILDREN TO CANADA	358
THE CONDITION OF CANADA	359
OUR STIFF CLAY DIFFICULTY—HOW IT IS TO BE MET AND OVERCOME	360
THE AGRICULTURAL DEPRESSION	360
LORD TOLLEMACHE ON THE ROTATION OF CROPS	363
BIRMINGHAM CATTLE AND Poultry SHOW	363
THE GLASGOW BANK FAILURE AND THE LAND QUESTION	363
THE WHEAT CROP OF 1878	364
THE LATE MR. JOSEPH KAY, Q.C.	369
NOTES FROM NEW ZEALAND	371
CHAMBERS OF AGRICULTURE	373
ONTARIO PROVINCIAL EXHIBITION	375
LITERARY NOTICES	376
AGRICULTURE IN CYPRUS	377
MUSHROOMS	378
COMPRESSED AIR AS A MOTOR	379
REFRIGERATION IN THE DAIRY	379
PARIS EXHIBITION AWARDS	384
THE POSITION OF FARMERS	387
REVIEW OF THE CORN TRADE	390

IMPORTANT TO FLOCKMASTERS.

THOMAS BIGG,

Agricultural & Veterinary Chemist,

By Appointment to his late Royal Highness
The Prince Consort, K.G.,

LEICESTER HOUSE, GREAT DOVER STREET,
BOROUGH, LONDON,

BECS 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 contributive 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
8 lb. 30 " " " " " "	.....	0	3	0
8 lb. 40 " " " " " "	.....	0	4	0
10 lb. 50 " " " " " "	.....	0	5	0
20 lb. 100 " " " (Case and measure	.....	0	10	0
30 lb. 150 " " " included)	.....	0	15	0
50 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. 600 " " " " " "	.....	2	5	0

Should any Flockmaster prefer boiling the Composition, it will be equally effective.

MOST IMPORTANT CERTIFICATE.

From Mr. HERFATH, the celebrated Analytical Chemist:—
Bristol Laboratory, Old Park, January 18th, 1861.

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 "yolk") in the skin, the

wool, or the carcass. I think it deserves the numerous testimonials published. I am, Sir, yours respectfully,

WILLIAM HERFATH, Sen., F.C.S., &c., &c.,

To Mr. Thomas Bigg, Professor of Chemistry,
Leicester House, Great Dover-street, Borough London.

He would also especially call attention to his SPKOFFLO, 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, 1866.

"Dear Sir,—In answer to yours of the 3th 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." "R. RENNEY.
"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, 25, £4, & 63.

GENERAL ADVERTISING.

C. H. MAY & CO.,

ADVERTISING OFFICES,

78, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1846.

APPOINTED AGENTS TO THE ADMIRALTY, TRINITY HOUSE, &c. &c.

ADVERTISEMENTS INSERTED

IN ALL BRITISH, FOREIGN, AND COLONIAL PAPERS,

TRANSLATIONS IN ALL LANGUAGES.

THE
ROYAL FARMERS' & GENERAL
INSURANCE OFFICE.

ESTABLISHED 1840
TO INSURE AGAINST LOSSES BY
FIRE AND HAIL STORMS,
AND TO GRANT
INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.
Deputy-Chairman—B. P. SHEARER, Esq., 47, Gloucester-place, Portman Square.
Thomas Henry Burroughes, Esq., 17, Lower Berkeley Street.
Richard L. Lovelaud, Esq., 4, Hare Court, Temple.
John Reddish, Esq., 9, Highbury New Park.
William Clutton, Esq., 7, Clifton Villas, Pease.
Major F. Anderson Stebbing, 4, Cleveland Gardens,
A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury. Castle Hill, Ealing.
E. J. Hawker, Esq., 37, Cadogan Place, Sloane Street

FIRE.—Insurances at moderate rates.

LIFE.—Insurances on equitable terms. Profits divided every five years.

HAIL.—Crops insured against Hail Storms at 5d. per acre.

LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand London, W.C., or of the Agents.

THIRTIETH EDITION.

WARREN'S FARMER'S ACCOUNT
BOOK.

PRICE:—Folio, for Large Farms, 8s.; Quarto, for Small Farms, and for Schools where Youths are trained for Agricultural Pursuits, 5s.

Also, Folio, with pages for a Weekly instead of a Daily Account of Labour, 7s.

Royston: JOHN WARREN. London: SIMPKINS, WHITTAKER, LONGMANS, RIDGWAY

J. C. NESBIT AND SON, Analytical, Agricultural, and Consulting Chemists (Manager A. Anthony Nesbit, F.C.S., &c.), undertake the analysis of manures, feeding stuffs, seeds, soils, waters, and all agricultural requisites. And may be consulted upon the cause of the failure of crops, or any questions on scientific agriculture. Laboratory: 38, Gracechurch Street, E.C. A list of fees sent on application.—[ADVT.]

No. 6, Vol. LIII]

DECEMBER, 1878.

[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.

CHAMPAGNES.

GRAND VIN DE L'EMPEREUR.

TRADE



MARK.

NON PAREIL.

A Splendid Wine equal to the Finest Brands, at half the usual Price.

Sole Importers of the Celebrated

GRAND VIN DE CHAMPAGNE.

TRADE



MARK.

ROUSSEAU AND CO., REIMS.

M A D E I R A

Of the **FINEST QUALITY**, in Quarter Casks and in Bottle, and every other description of Wines at the

LOWEST POSSIBLE PRICE,

CAN ALWAYS BE HAD OF

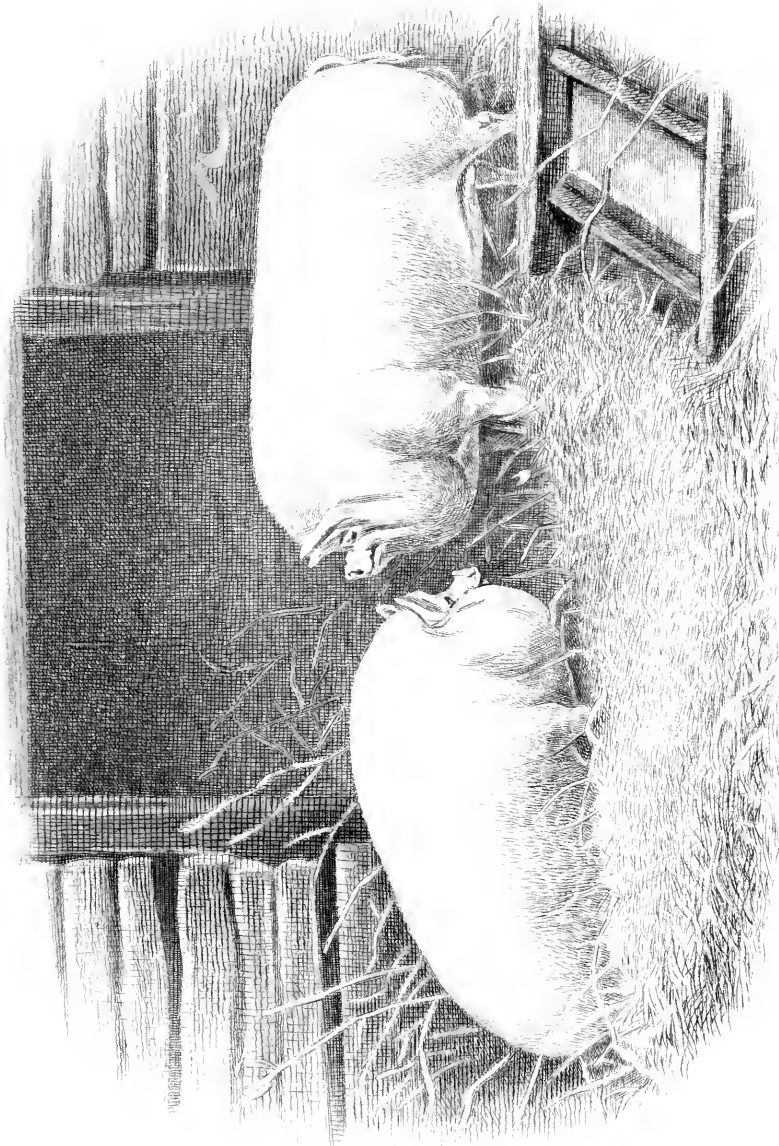
TUXFORD AND CO.,

WINE MERCHANTS,

48. Fenchurch Street, London, E.C.

Established 1847.

SAMPLES ON APPLICATION.



Two and a half of year



THE FARMER'S MAGAZINE.

DECEMBER, 1878.

PLATE.

OMEGA AND PRIDE OF OXFORD.

A BOAR AND SOW OF THE SMALL WHITE BREED, THE PROPERTY OF SANDERS SPENCER, ESQ.
HOLYWELL, ST. IVES, HUNTS.

Omega and Pride of Oxford were bred by Mr. Sanders Spencer, the Fisher Hobbs of the day, whose famous pigs of the small white breed have held their own at the principal agricultural meetings throughout the country, as will be seen by the following list of prizes. We give precedence to the lady, although it is custom with "boors" of any breed to make their better halves follow. In 1877 Pride of Oxford won the first prizes at

Northampton and North Walsham, and in 1878 at Devonshire, Bath and West of England (Oxford), Norfolk, Suffolk, Royal (Bristol), Hunts, Beds, Lincolnshire, Leicestershire, Yorkshire, and Northumberland, winning in all £74, while Omega won the first prizes for boars at the same meetings with the exception of North Walsham, Suffolk, Leicestershire, and Yorkshire, where he was second, his winnings being £61.

AGRICULTURAL SOCIETIES.

ROYAL OF ENGLAND.

MONTHLY COUNCIL, Wednesday, November 6, 1878.

Present:—H.R.H. the Prince of Wales, K.G. (president), in the chair, the Earl of Feversham, Earl Spencer, K.G., General Viscount Bridport, Lord Chesham, Lord Skelmersdale, Sir A. K. Macdonald, Sir W. Earle Welby-Gregory, Bart., Sir M. White Ridley, Bart., M.P., Sir Brandreth Gibbs, the Hon. W. Egerton, M.P., Mr. Amos, Mr. Aveling, Mr. Aylmer, Mr. Bowly, Mr. Cantrell, Mr. Chandos-Pole-Gell, Mr. Dent, Mr. Druce, Mr. Frankish, Mr. Hemsley, Mr. C. Howard, Mr. J. Howard, Mr. J. Bowen Jones, Col. Kingscote, M.P., Mr. Leeds, Mr. Martin, Mr. Masfen, Mr. Odams, Mr. Pain, Mr. Russell, Mr. Sanday, Mr. Sheraton, Mr. Shuttleworth, Mr. Stratton, Mr. Jabez Turner, Mr. Wakefield, Mr. Wells, Mr. Whitehead, Mr. Jacob Wilson, Mr. Wise, and Prof. Simonds.

Lord Windsor, of Hewel Grange, Bromogrove, was elected a life governor of the Society, and the following new members were elected:—

Ahlborn, Edward, of Eildesheim, Hanover.
Akenhead, Robert, of Otterington Hall, Northallerton.
Ashton, Edmund, of Abbey Field, Sandbach.
Barrow, Bridgman Langdale, of Sydaope Hall, Matlock.
Batty, Captain David Longfield, of Cherry Hill, Malpas.
Blakeway, William, of Wootton House, Craven Arms, Onibury.
Broughton, E. W. Delves, of Bryn Elwy, St. Asaph.
Brown, John W., of Manor Farm, Pewsey.
Bull, William, of Empshott, Petersfield.

Cahusac, Col. Wm. Leigh, of Pengethly, Ross.
Chance, T. H., of Gloucester.
Cheney, William James, of Gidding Grove, Oundle.
Christison, John, of Home Farm, Floors Castle, Kelso, N.B.
Crosland, John Smith, of Burhage House, Burbage, Hinckley.
Crutchley, General Charles, of Sunninghill Park, Staines.
Davidson, James, of Bank House, Aeklington.
De Laune, C. D. L. Faunne, of Suardes Court, Sittingbourne.
Douglas, A. P., R.N., of Strathendrie, Halcombe, Manawater, New Zealand.
Edwards, Arthur, of Fern Bank, Tunbridge Wells.
Eyton, Adam, of Plas Llanerch y mor, Holywell, Flint.
Farrer, Matthew George, of Epperstone, Nottingham.
Fellows, Herbert William, of Rickmansworth.
Fosbery, Captain W. T. E., of Warwick.
Garne, William Thomas, of Aldsworth, Northleach.
Geary, Sir Francis, Bart., of Oton Hoath, Tunbridge.
Gibbons, J. S., of The Leasowes, Halesowen, Birmingham.
Glenny, William Wallis, of Cecil House, Barking.
Gould, Albert E., of Poltimore, Exeter.
Gracie, George, of Uppat House, Brora, Sutherland, N.B.
Griffiths, Richard John, of Newcourt, Hereford.
Haggard, William George, of Rotherham.
Hurry, Wm. James, of Dairy Farm, Thorney, Camba.
Jeffreys, Robert, of Min-avon, Colwyn, Carnarvon.
Knight, A. Halley, of 62, Holland Park, London, W.
Lacoe, William Henry, of Oswestry.
Leigh, A. Egerton, of Acton Hill, Stafford.
Lister-Kaye, Charles Wilkinson, of Osberton, Worksop.
Low, Stephen Philpot, of Round Hill, Sydenham, London, S.E.
Matson, Merton, of St. Oyth, Colchester.
Miles, Sir Philip, Bart., M.P., of Leigh Court, Bristol.
Millington, David John, of Kirklington, Southwell.

Morgan, Henry, of Cefnairy, Newtown, Mont.
 Morgan, Sidney S. H., of Long Ashton, Bristol.
 Nichols, George, of Long Ashton, Bristol.
 Okes, John Charles Raymond, 39, Queen Victoria Street
 London, E.C.
 Ormandy, William W., of Beckside, Pennington, Ulverston.
 Pierreput, Hon. E. H., of Thoresby Park, Newark.
 Poltimore, Lord, of Poltimore Park, Exeter.
 Pratt, J. Randal Forster, of 35, Queen Street, Edinburgh.
 Rigg, Hugh C., of Crossrigg Hall, Penrith.
 Riley, Hamlet, of Brearley House, Luddenden Foot, Halifax.
 Robinson, George James, of Charley Wood, Rickmansworth.
 Sharp, W. F., of Didbrook, Winchcombe.
 Shenton, Isaac, of The Home Farm, Hints, Tamworth.
 Staunbridge, Thomas, of Aston Flamville, Huxley.
 Statter, George Frederick, of Park House, Whitefield, Man-
 chester.
 Stuart, William Dugald, of Tempsford Hall, Sandy.
 Symes, Alfred Osmond, of Kingston, Long Bredy, Dorchester.
 Talbot, George P., of Wentworth, Rotherham.
 Thomas, C. Howard, of Manor House, Burnett, Bristol.
 Thomlinson, John, of Armathwaite Castle, Carlisle.
 Thorburn, Robert, of Condoover Grove, Shrewsbury.
 Turner, Frederick John, of Mansfield Woodhouse, Mansfield.
 Villar, Harry, of Charlton Kings, Cheltenham.
 Wainwright, Charles R., of Supton Milllet.
 Walker, William, of Dunton, Northampton.
 Wellford, John, of Warwick Farm Dairies, Warwick Place,
 Paddington, London, W.

FINANCE.

Mr. RANDELL 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, Bull, and Co., the Society's accountants, and found correct. The balance in the hands of the bankers on October 31 was £2,334 11s. 6d. The quarterly statement of subscriptions and arrears to September 30, and the quarterly cash account were laid on the table. The arrears then amounted to £1,179.

This report was adopted.

JOURNAL.

Mr. DENT (Chairman) reported that the following entries had been received for the competition for the prizes to be offered by the Mansion House Committee in connection with the Metropolitan Exhibition:—

SEWAGE FARMS IN ENGLAND AND WALES.

Class 1.—Farms utilising the sewage of not more than 20,000 people, a piece of plate value £100; 4 entries.

Class 2.—Farms utilising the sewage of more than 20,000 people, a piece of plate value £100; 5 entries.

On the motion of Mr. RANDELL, seconded by Mr. WHITEHEAD, it was resolved, after some conversation, "That the prizes offered for market gardens and market garden farms (classes 3, 4, and 5) be re-advertised, and that the last day of entry be extended to November 30th, subject to the concurrence of those persons who have already made their entries." (One in class 4 and one in class 5).

The report was then adopted; and the bills for printing the last number of the *Journal* were ordered to be paid.

STOCK PRIZES.

Mr. CHANDOS-POLE-GELL reported that the Committee had revised the prize sheet for the London Exhibition, which would be printed and sent to members of the Council for consideration. The Committee recommended that Earl Spencer and Mr. George Turner be added to the committee.

This report was adopted.

LONDON EXHIBITION.

Colonel KINGSCOTE, C.B., M.P., reported that a communication had been received from the Essex Agricultural

Society, suggesting an amalgamation of their show with the Metropolitan Exhibition next year; and the secretary had been instructed to communicate with the secretary of that Society on the subject. The Committee had recommended the Mansion House Committee to vote an additional sum to that all ready granted, for prizes for foreign stock and produce. The Secretary was instructed to write to the Agricultural Society of France, inviting their co-operation and assistance at the Metropolitan Exhibition, and to request the Honorary Agent in England of that Society (Mr. W. Delano) to act as the Honorary Agent of this Society for that Exhibition. The Committee considered several matters of detail relating to the Exhibition, and especially questions of water supply, the provision of tramways for the use of the public, the establishment of a loan museum to facilitate a comparison of ancient and modern farm implements, the exhibition of bees by the Bee-keepers' Association, &c.

This report was adopted; and at the suggestion of His Royal Highness the President, it was unanimously resolved that the Exhibition should commence on Monday, June 30th, and close on Monday evening, July 7th.

IMPLEMENT.

Mr. HEMSLEY (chairman) reported that the Committee had revised the regulations for the exhibition of implements, and disposal of the silver medals, at the Metropolitan Exhibition, which would be printed and laid before the Council at the December meeting. A letter had been received from Mr. James Howard, of Bedford, asking that provision might be made for putting in motion reaping and other automatic machines at the Metropolitan Exhibition, and the Committee proposed that the stewards should make the best provision in their power for that purpose, and also provide a space for the movement of traction engines. The Committee recommended that an exhibition of the process of batter and cheese making should be carried on in the Society's yard during the Exhibition. This report was adopted after a question had been raised as to the movement of traction engines, whereupon it was explained that the Committee proposed to run only one at a time.

SHOWYARD CONTRACTS.

Mr. JACOB WILSON (chairman) reported with reference to the balance due to the Society's contractors for the Bristol meeting, and payment was ordered to be made in accordance with this report.

CHEMICAL.

Mr. WELLS (chairman) reported that the Committee had had an explanation from Mr. Christopher, the architect under whom the laboratory is being constructed, as to the cause of the backward state of the work. This he attributes to the delay in furnishing the ironwork for the roof. He believes the work will be completed by the end of the month. The Committee had received from Dr. Voelcker a report of the results of the experiments at Woburn, so far as these have been already obtained, and they recommend that a full and detailed report upon them be inserted in the next number of the *Journal*. The Committee had considered the suggestion made by Mr. Roberts at the general meeting in the Bristol showyard.—"That the Chemical Committee should obtain the consent of members who send materials for analysis to Dr. Voelcker, before publication of his report thereon;" but they could not recommend any alteration in the present system. This report was adopted.

EDUCATION.

The DUKE of BEDFORD (chairman) reported that the following six schools had entered 29 candidates to compete for the Society's Junior Scholarship at the examination

to be held on Wednesday and Thursday, Nov. 13th and 14th, viz.:—Aspatia Agricultural School, 4; Bedford County School, 2; Devon County School, 2; Glasnevin College (Dublin), 1; Sandbach Grammar School, 4; and Sarrey County School, 16. The usual examiners had agreed to act; and gentlemen invited had accepted the office of Honorary Local Secretaries. The Committee recommended that the Bewdley Grammar School be added to the list of schools entitled to enter candidates to compete for the Junior Scholarships. The Committee gave notice that at the next Council Meeting they would move for the renewal of the Educational Grant for 1879. The report was adopted.

VETERINARY.

The Hon. W. EERTON, M.P. (chairman) reported that Mr. Duguid had resigned the office of Veterinary Inspector, and that Professor Simonds had offered, on behalf of the Royal Veterinary College, his services pending the appointment of Mr. Duguid's successor. The Committee had therefore arranged that Professor Simonds should undertake the office of Veterinary Inspector till Dec. 31st, 1878. Professor AXE had been sent by Professor Simonds to examine into an outbreak of disease at Kent. Dr. Burdon Sanderson had reported that Dr. Greenfield had been appointed as his successor as Pathologist at the Brown Institution.

Dr. BURDON SANDERSON had presented the following report to the Committee:—

During the month of September an opportunity offered itself of inoculating twenty-seven animals with the exudation liquor of pleuro-pneumonia at a farm near London (that of Mr. Keevil of Kensal Green). In one of these animals the result of the operation, although performed in the usual manner by Dr. Baguid, was unfavourable. This looked for result, which was due to accidental infection of the cellular tissue in the neighbourhood of the puncture, compels me to admit that the operation is not so invariably free from danger as I hoped and believed. At the Brown Institution some of the inoculations performed by infusion into a vein failed to be harmless, but on the farm were the circumstances were less favourable, one of the twenty-seven animals died, and had to be paid for out of our fund.

Experiments have also been made at this Institution for the purpose of ascertaining whether, with due precautions, the usual and more simple method of inoculation could not be safely used, it having been suggested that the good results previously obtained were due not so much to the mode of inoculation as to the care used in operating. With this view five animals have been inoculated subcutaneously, with perfectly fresh liquid. At first no signs of local or general infection followed, but after a few days all become severely affected, and two out of the five died, a result which appears to be conclusive as to the impropriety of using this method.

There are now at the Institution four inoculated animals, the immunity of which I am very desirous to test by cohabitation with other animals. But in carrying out this purpose I find myself arrested by legal difficulties, and particularly by the Order in Council, which came into force on the 1st of October. According to this Order, no animal may be moved into any place containing infected animals. I therefore find myself compelled to recommend that these animals be sold.

During the past six months experiment have been continued as to the nature and mode of propagation of several anthracoid diseases. I am desirous to go on with these experiments during the present winter. Reports on them will be forthcoming before next spring.

I have, lastly, to state that the expenditure at the Brown Institution in connection with the experiments has exceeded the sum last received by £120.

The Committee gave notice that at the next Council Meeting they would move for the renewal of the Veterinary Grant for 1879.

This report was adopted.

SELECTION.

On the motion of Mr. DENT (chairman), seconded by

Mr. JACOB WILSON, Lord Skelmersdale was elected a vice-president of the Society in the room of the late Sir William Miles, Bart., and the Committee of Selection nominated a member of the Council to fill the vacancy created by the election of Lord Skelmersdale as a vice-president.

SEEDS AND PLANT-DISEASES.

Mr. WHITEHEAD (chairman), reported that the Consulting Botanist had examined many samples of seeds during the past quarter, and that he had found much unwillingness on the part of those who submit seeds for examination, to supply him with information as to their source. In one case of grass seeds, which were proved to be of especially bad quality, the sender refused to say from whence he obtained them. It is hoped that the members of the Society who send samples of seed to be tested by the Consulting Botanist will not hesitate to furnish such information as may lead to the prevention of the adulteration and killing of seeds. The Consulting Botanist submitted the following report affecting the production of new varieties of grain:—

Changes in plants are due to—

1. Soil, food, climate, &c. These belong to the individual plant, and are not transmitted to its descendants.
2. Sports, which arise without any apparent cause, and which are handed down to a larger or smaller number of the plants' descendants.
3. Cross-breeding, whereby more or less of the peculiarities of both parents are found in the descendants. Cross-breeding may be of three kinds—(a) of individuals of the same species, and this may either be natural, as in the case of plants which are actually uni-sexual, or artificial, when man intererces, and applies the pollen of one individual to the stigma of another; (b) of permanent varieties of the same species, as in cultivated plants; and (c) of different species of the same genus.

New varieties require to be tested by cultivation. Some of the descendants lose the character for which the variety is prized, and revert to the original stock; while others retain these qualities, and in some they may become intensified.

It is necessary to select the seed after each harvesting, in order to secure a uniform and permanent variety. Time is thus necessary to the production of a new variety. A variety secured by experiment in 1879 should be sown by the person who secures it for at least three years; that is, during 1880, 1881, and 1882, in order to establish its permanency, to get rid of the parent forms that may appear, and to secure a certain amount of seed. The seed might be sent after the harvest of 1882, and be tested in various localities by the Society in 1883.

In accordance with the above report, the Committee recommended the Council to offer two prizes of £25 and £10 each in connection with the forthcoming exhibition in London, for distinctly new varieties of wheat which shall combine the largest yield of grain and straw per acre with approved form and size, smooth and thin skin, full and white kernel, and high specific gravity in the seed, and with bright, firm, and stiff straw. The history of each variety must accompany each entry. One sack must be delivered to the Society, together with a sample bundle of the straw, before the 1st of October, 1879. A portion of each sample will be kept for comparison, and the remainder, divided into equal portions, will be cultivated in the ensuing season, in four localities differing in respect of soil and climate, to be selected by the Society. The prizes will be awarded for the best varieties of the crop of 1880, thus cultivated under the Society's auspices, if in the opinion of the judges they possess qualities which entitle them to distinction. The produce of the experimental crop of 1880 will be the property of the Society, and will be offered first to the competitors who submitted the seed. The Committee also recommended the Council to offer prizes of £25 and £10 for new varieties of wheat, upon the same conditions as those enumerated before,

except that the sample sacks shall be delivered to the Society by the end of October, 1882, and cultivated by the Society in the ensuing season. This will give time for the development of new varieties.

This report was adopted.

HIS ROYAL HIGHNESS THE PRESIDENT then said: It is my painful duty to announce to you the death of Mr. T. C. Booth, who has for ten years been on the Council of this Society, during which time he has been one of its active members, serving as steward of finance, also of implements, and chairman of several important committees. Of his work as an active member of the Yorkshire Agricultural Society, and other local associations, it is not necessary to speak. He is well known to us in regard to the untiring and unceasing efforts he made, in conjunction with Mr. Jacob Wilson, for the passing of a measure for the prevention of contagious diseases in animals, watching with unflagging attention the proceedings of the Committee of the House of Commons in 1877, and the passing of the Act this last session. I have always been told that he was a man of most equal mind and temper fair and unprejudiced in all matters, holding his own judgment and opinion, but always prepared to give way when shown to be in error—one with whom especially it was a pleasure to work.

The Earl of FEVERSHAM said he endorsed every word which had fallen from His Royal Highness; and added that the loss of Mr. Booth was severely felt not only by those who knew him, but by many others who received a benefit from that benevolent and warm-hearted character and nature.

The resignation of Mr. Milward of Thurgarton Priory, Notts, as a trustee of the Society, was received.

The following report from the Stewards of Implements on the trials of sheaf-binders, near Bristol was received and adopted.

The judges appointed by the Council of the Royal Agricultural Society of England to try the machines entered to compete for the gold medal of the Society offered for "an efficient sheaf-binding machine," are of opinion that the machine No. 2,875, exhibited by Waite, Burnell, Huggins, and Co. (McCormick's sheaf-binder), fulfils the conditions of the Society, and they award the gold medal to it accordingly. They also highly commend the sheaf-binder No. 2,853 exhibited by Walter A. Wood.

The following resolutions passed by the Council of the English Cart-horse Society were read:—

1st. That the Council are of opinion that it would be beneficial both to the breeders and purchasers if there was a class for *three-year-old* stallions, inasmuch as horses of that age are most marketable, but are not shown, as it would be useless for them to compete in the same classes as aged horses;

2nd. That there should be a class for Yearling Fillies;

and the Secretary was instructed to reply that these recommendations had already been adopted by the Royal Agricultural Society.

An invitation to the Society from the Mayor of Carlisle to hold the country meeting of 1880, in that city, was read and referred to the Committee of Selection.

The general meeting of members was fixed for Thursday, Dec. 12th, at noon; and the Council adjourned to Wednesday, Dec. 11th, at the same hour.

HIGHLAND AND AGRICULTURAL.

The first monthly meeting of the directors of this Society for the season was held on Wednesday, November 6, in their chambers, No. 3, George IV. Bridge. Reports on implements exhibited at Dumfries, and recommended for trial, were read. In regard to the two self-binding reapers of Mr. Walter A. Wood, London, and Messrs. McCormack, of Chicago, exhibited and recommended for trial at the Dumfries Show, the committee, while highly appreciating the skill displayed in the

construction of both machines, did not consider them to be sufficiently perfected as to enable them to recommend them in their present state to the farmers of Scotland, but recommended the directors to award to the exhibitors of each machine a gold medal. The Committee also recommended that a gold medal should be awarded for the two machines exhibited by Mr. Walter A. Wood, London, and Messrs. R. Hornsby and Sons, Grant-ham, which were tried at the same time as the self-binding reapers. R. quitions for a General show to be held at Kelso in 1880, signed by the proprietors, farmers, and others connected with the counties of Berwick, Roxburgh, Selkirk, and Peebles, were submitted. Dr. Aitken reported upon the progress made at the agricultural experimental stations, after which the Secretary stated that the examinations for the Society's bursaries took place on the 30th of October, when R. M. Malloch, Balhaldie, Bravo, Perthshire, passed for a bursary of £20; and David Wallace, Edgremmo, Leven, Fife, and Donald Brims, East Watten, Caithness, for bursaries of £10 each: James Sutherland, Wick; William Chalmers, East Watten; Alex. P. Reid, Keiss, Caithness; and W. R. Tait, Wick, were awarded £5 each.

BRITISH DAIRY FARMERS' ASSOCIATION.

The Committee of this Association met on November 4th at the Agricultural Hall, Mr. E. C. Tisdall, of Kensington in the chair, when the following new members were elected:—

Ackers, E. St. John, Frinknash Park, Stroud.
 Bartrum, Rev. E., King Edward VI. Grammar School, Berkhamstead.
 Bradford, Thomas, 140 to 143 High Holborn, and Manchester.
 Breeze, G., Ware, Herts.
 Camp, Thomas, Hatfield.
 Cluett, Reuben, Bank Buildings, Tarporely, Cheshire.
 Day, Gerard J., Horsford Hall, Norwich.
 Ferne, G. F., Dartmouth Grove, Blackheath.
 Jackson, Ebenezer, 1, Trump Street, Cheapside, E.C., and County Offices, Hertford.
 Kempton, G., 97, Englesfield Road, N.
 Mitchell, H., 56, Lime Grove, Lewisham.
 Murrell, W., Russell Street, King Street, Brighton.
 Parham, H. M., Gillingham, Dorset.
 Rintoul, Andrew, jun., Stanton House, Pembury, near Tunbridge Wells.
 Simmonds, James, Cherrimans, Hazlemere.
 Simmons, Wm., West Ford House, near Droitwich.
 Simonds, Professor J. B., Principal Royal Veterinary College, N.W.

The CHAIRMAN, in opening the proceedings, dwelt upon the growing importance of the Association, and the number of applications for membership which were being daily received. He considered that the basis of operations should be enlarged and extended, and that the Society should carry out its arrangements on a higher scale. Mr. Raffety proposed that this matter should be discussed more fully at the general meeting, which it was suggested should be held during the Cattle Show week, and finally settled for Wednesday, December 11th.

A resolution was passed expressing a desire for the Association to co-operate with the Royal Agricultural Society in carrying out the dairy portion of the great Metropolitan meeting next year; and the hon. sec. was requested to write to Mr. H. M. Jenkins to that effect, stating that, in the event of the offer being accepted, a certain number of the Committee would be appointed to act in accord with the Council in developing that branch of the show which is likely to be especially attractive, as representing the dairy interests of Great Britain.

A letter from Professor Simonds was then read, expressing his views on the importance of encouraging the breeding of goats in this country, and suggesting that a sub-committee be formed to put itself in communication with the Stock Prizes Committee of the Royal Agricultural

Society, with the view to decide upon a schedule of prizes for the Goat classes at the forthcoming London meeting.

Mr. STEPHEN HOLMES PEGLER, the hon. sec., explained that he had prepared a schedule for the consideration of the Stock Prizes Committee, according to a communication he had received from Mr. H. M. Jenkins, and that £25 had been subscribed by goat exhibitors towards the prize list; but that he would be glad to see the suggestion of Professor Simonds adopted. It was then arranged that Mr. W. Freeman and the hon. sec. should arrange to wait upon Mr. Jenkins with that object.

The question of the protest against the award of the gold medal in the trader's class was then brought forward it having been adjourned from the last meeting in order to have the opinion of all the judges of the class with reference to the merits of Mr. Webb's exhibit. After the letters referred to had been read some discussion ensued, and it was finally moved and carried that Mr. Webb should receive a special gold medal in place of the silver one awarded him for his stand of dairy produce.

The financial report of the show was adjourned until the next meeting. A resolution was passed with reference to the accounts of the late hon. secretary, appointing Monday next, at three o'clock, for him to meet the Committee of Inquiry, and hand over the balance of cash in his possession due to the Association.

On a motion by Mr. DYLE, seconded by Mr. RAFFETY, votes of thanks were passed to Messrs. Calvert and Co. of Manchester, for the very effectual manner in which that firm disinfected the hall during the Dairy Show; and to Messrs. James Gibbs and Co., of Mark Lane, for their kindness in supplying the cattle-cake gratis to the exhibitors of stock for consumption during the Show. A similar vote was also passed to Mr. George Hathaway for placing at the service of the Committee his steam-power churn.

The meeting then adjourned till Monday next, the 11th instant.

SHORTHORN.

A meeting of the Council of this Society was held at the Society's rooms, 12, Hanover-square, on Tuesday the 5th Nov. Present—Lord Skelmersdale, Colonel Kingscote, C.B., M.P., Mr. B. St. John Ackers, Mr. Hugh Aylmer, Mr. H. Chaudos-Pole-Gell, Mr. D. McIntosh, Rev. T. Stainforth, Mr. R. Stratton, and Mr. Jacob Wilson.

In the unavoidable absence of the Earl of Dunmore, the President of the Society, Lord Skelmersdale was voted to the chair.

The following new members were elected:—

Arzell, William, Jun., Hatherop, Fairford, Gloucestershire.
 Croomet John Capel, Bigendon, Cirencester.
 Lornby, E. J. Stanley, Dalton Hall, Burton, Westmoreland.
 Mashoy, Pierce, Kilmorna, Listowel, Co. Kerry.
 Pender, W. Kous Tresilian, Budockvean, Falmouth.
 Taber, James, Ravenhall, Witham, Essex.

EDITING COMMITTEE.

Colonel KINGSCOTE reported that during the three years for which the Committee were originally appointed they had met thirty-six times, and made thirty-five reports to the Council, and the Committee recommended that for the ensuing year the Committee consist of the Earl of Dunmore, Colonel Kingscote, C.B., M.P., Mr. H. Chaudos-Pole-Gell, and Mr. H. W. Beauford.

That the 24th volume of the Herd Book was in a very advanced state, and that its issue to the members would commence before the end of the present month, the Committee therefore recommended that, as soon as practicable, advertisements be inserted in the agricultural papers,

stating that entries for Volume 25 could be sent in, and that the latest date for receiving entries for that volume would be Saturday, February 1, 1879.

That the Committee had considered several pedigrees, and had directed the Secretary to communicate with the parties desiring to enter such; also that the Committee had had before them several pedigrees of American-bred bulls required to be entered in the Herd Book to complete the pedigrees of cows now in this country. These pedigrees having been properly certified to by the breeder or owner, the Committee had accepted them for entry in Volume 25.

That the Committee having considered the work carried on by the Secretary in connection with the Short-horn Society, and finding that the duties involved in bringing out the Herd Book, in addition to the great amount of correspondence, as well as the largely-increased responsibility thereby entailed, were not adequately remunerated, they strongly urged that a considerable addition be made to his salary, and that the Committee therefore wished to bring the matter to the notice of the General Purposes Committee.

This report was adopted.

GENERAL PURPOSES COMMITTEE.—Mr. JACOB WILSON reported that during the three years for which the Committee were appointed they had met 34 times, and made 34 reports to the Council.

That the Committee recommended that for the ensuing year the Committee consist of Lord Skelmersdale, Col. Kingscote, C.B., M.P., Mr. Hugh Aylmer, Mr. H. W. Beauford, Mr. C. Howard, Mr. D. McIntosh, Mr. G. Marton Tracy, and Mr. Jacob Wilson.

That the accounts for the months of August, September, and October, had been examined by Messrs. Quilter, Ball, and Co., and the Committee, and were found to be correct; that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £20 7s. 9d. during the past three months; that the receipts for the same period had been £128 6s. 6d., the balance of the Society's current account at the banker's being £251 17s. 6d., and £700 on deposit; and that the committee recommended that cheques be drawn for various accounts amounting to £68 1s. 4d.

That the Committee had had before them the list of arrears of subscriptions, containing the names of six members whose subscriptions were in arrear, and they had instructed the Secretary to communicate again with the six members referred to, and to report further to the Committee at its next meeting.

The Committee having received a recommendation from the Editing Committee with regard to the Secretary's work and its responsibility, recommended, "That from and after the 1st of January, 1879, the salary of the Secretary be increased to £400 per annum, and the Clerk's salary to £150 per annum.

This report was adopted.

The CHAIRMAN, in reporting the death of Mr. Thomas Christopher Booth, of Warlaby, a member of the Council and Vice-President of the Society, said how deeply he regretted having to make that announcement to the Council. He personally felt, what doubtless every one else felt too, that a very great loss had been sustained by the death of such a valued colleague.

Colonel KINGSCOTE concurred in every word the Chairman had uttered, and wished to add his voice in testimony of the worth of his late colleague, and the high esteem in which he was held. He knew that he had indeed lost an able coadjutor and a sincere friend.

The CHAIRMAN announced that the vacancy in the Council would be filled up at the meeting of the Council in December next.

ENGLISH CART HORSE.

A Council meeting of this Society was held on Nov. 5th at the Rooms of the Society of Arts, Earl of Ellesmere, President, in the chair. Among those present were Earl Spencer, Sir Gilbert East, Bart., Major Dashwood, Mr. James Howard, G. Street, John Treadwell, J. K. Fowler, and Mr. G. M. Sexton (Secretary). The following gentlemen were elected members:—Messrs. Cross and Hawkins, Lynn, Norfolk; Mr. Smith Richardson, Chatteris, Cambs.; Mr. G. W. May, Ten Mill Bank, Hilgay, Norfolk; Mr. Henry Neal, Welney, Wisbeach. Some very valuable information and work of Mr. Richard Reynolds, M.R.C.V.S., of Liverpool, was offered to and accepted by the Council, which put the Society in possession of the pedigrees of about 1,400 stallions, many of them of a very old date. It is expected that the first volume of the Stud Book will be published in the spring of 1879. The Council adjourned to meet on 10th December at the Agricultural Hall.

SMITHFIELD CLUB.

At a Council meeting held at the Agricultural Hall, Wednesday, November 6th, 1878. Present, His Grace the Duke of Bedford, President, in the chair, the Right Hon. Lord Bridport, the Right Hon. Lord Chesham (Vice-Presidents), H. Aylmer, E. Bowly, J. Druce, A. F. M. Druce, Walter Farthing, J. Ford, H. Gorrings, R. Garne, J. Greatham, B. T. Brandreth Gibbs (Hon. Sec.), R. Garrett, C. Howard, J. Howard, J. Hemsley, R. Leeds, R. H. Masfen, E. Paddison, Thomas Pope, James Rawlence, R. Stratton, F. Street, H. Tretlow, T. M. Garrett Taylor, Jacob Wilson, the minutes of the last Council meeting were read and confirmed.

The attention of the Council was called to the misapprehension that existed in consequence of the wording of special rule No. 2, viz. :—

2. That each exhibitor be required to certify that a dog animal to be sent by him for exhibition at the Smithfield Club's Show this year has not been, and will not be shown at any other exhibition after the 1st of November, 1878.

And the Council ordered that it be publicly announced that the last clause—viz., "will not be shown at any other exhibition after the 1st of November, 1878"—was intended to apply only to any exhibition between the 1st of November and the show of the Club this year.

The Council authorised the necessary communication as to holding the show be made to the Metropolitan Board of Works as the Local Authority.

A Committee was appointed, as usual, to make arrangements as to cattle conveyances for carrying the live stock to and from the Agricultural Hall.

The House List was prepared, of sixteen names, from which number the Council recommends the members generally to elect the eight members to serve on the Council, in place of the eight who retire by rotation, and are not re-eligible till after the expiration of one year.

Scrutineers were appointed to examine the voting paper, and to report the result to the general meeting.

The following were duly elected members of the Club :—

Robert Neame, of Fairbrook, Herhill, Faversham.
 Sanders Spencer, of Holywell, St. Ives, Hunts.
 A. M. Robinson, of Shirley Lodge, Milton, Cambs.
 John Pollok, of Lismany, Ballinasloe.
 John Gillett, of Oaklands, Charlbury.
 Major Chas. Brome Basford, of Cophorne House, Crawley Down, Sussex.

J. A. Smith, of Rise Hall, Akenham, Ipswich.
 Sir Frederick Fitzwigram, Leigh Park, Havant.

The beat thanks of the meeting were voted to His Grace the Duke of Bedford, the President, for His Grace's able conduct in the chair.

The Council then adjourned to December 10th, unless a meeting should in the meantime be ordered by the President to be summoned.

Farmers' Clubs.

CENTRAL.

The first meeting of the Farmers' Club for the winter's season, after the usual long summer and autumnal recess, was held on Monday, Nov. 5, at the Caledonian Hotel, Adelphi; Mr. J. Brown, of Elwyn Orchard, March, president for the year, occupying the chair. There was a numerous attendance. The subject appointed for consideration was "The Need of Greater Unity of Action in the Agricultural Interest," the introducer being Mr. J. G. Edwards, of Broughton, Stockbridge.

The Chairman said:—Gentlemen, I am glad to be able to meet you again, after what I may term the long vacation which we have gone through. I cannot congratulate you very much upon the condition of agriculture. I believe that the season we have just passed through will only add another year to the bad catalogue of seasons farmers have experienced for the last three or four years. Perhaps in some respects we have not been so badly off as we might have been. We have harvested a very good hay crop, and plenty of grass; but I do not quite endorse all that some newspapers report as to this having been a sort of prosperous year for farmers. The press has not been quite agreed on this subject; and I do not believe that agriculturists, however they may agree with the writer of the paper to be read this evening, will be of one mind as to what the press have said. I should like to see the press sometimes take a better view of the situation of the farmers than they have done of late. (Cheers.) They have taken too sanguine a view. At all events, we meet from time to time to discuss these questions, and if we cannot improve our circumstances by thus meeting together we can console one another a little. (Cheers.) Attempts have been made by the press to show that farmers might make one-and-sixpence out of a shilling. I do not think they have quite instructed us in the multiplication table at present. I find it as difficult to make one-and-sixpence out of a shilling as it ever was. I am sure that if we are all unanimous to-night it will be what we seldom are. (Laughter.) Mr. Edwards asks us to be more unanimous than we have hitherto been; and probably the best thing we can first do this evening is to listen to what he has to say; and I beg now to introduce him to you. (Cheers.)

Mr. EDWARDS then read the following paper :—

Are we the farmers at one? In other words, are we united amongst ourselves? Are we gaining or losing ground? How do we stand towards the landlords and the labourers? What influence have we in the House of Commons?

ARE WE UNITED AMONGST OURSELVES?—The answer to this question is to a certain point a matter of personal experience, and one county of England may in this respect differ from another. But in any case real union must discover itself, more or less, to the public, and bear fruit in common action for common objects. I myself can see nothing of the kind. Practically, we seem as far asunder as we are topographically; for instance, out of the whole body of farmers, how many belong to the Chambers of Agriculture? And of those who do belong, how many take an active part? Yet combination is the one condition which the severe jostling attendant upon our present forms of civilisation has made needful to all classes who are fain to hold their own. I was suggesting the other day to a neighbour, who is a large occupier, the desirability of the farmers round working more together. He quite agreed with me, but remarked, "When will you get them to do so?" So, to take a wider field, I cannot forget that in the county of Suffolk, though there are I believe, over 4,600 farmers and graziers, yet in the struggle with the labourers only 650 joined the common cause. This does not look like union amongst ourselves.

ARE WE GAINING OR LOSING GROUND?—To arrive at an answer here we must look back at the past. It is a mere

historical commonplace, that late into this century the tenant farmer had no separate political existence. His landlord treated him as the centurion of old treated his servants. The tenant voted with his landlord (if he had a vote, for so late as the Reform Bill of 1832 £50 tenants at will had none), just as he paid him his rent. No hardship was felt, no disgrace implied, in going to the poll as sheep to the fold. It was simply a part of the fitness of things. Such a condition appears strange to us; and if some such analogy has survived to our times, it has an antique smack of gigs and smock frocks. For the face of the world has changed. There were Tories in those days, and the tenants were humble Tories. If, once and again, they took their stand on any great principle, or if any popular cry called them to arms, ten to one the principle had percolated through the Tory squires, and it was round their standard that they rallied. And we must bear in mind that land was worth having in those days, and that war, which brought misery to many doors, brought at the same time grist to the mill. How long this spirit of submission would have stood the test of bad times is doubtful. Probably as it was the tenants, in common with other classes, would have kicked, but for the great local influence which stayed their stomachs and fortified their purses. This influence was of a very comprehensive character. If the landlords were king, the tenants were, at all events, viceroys. The labourer was virtually a fixture on the farm, his wages fixed out by a council of masters, his travels confined to the next market-town. If he wished to go further he went as a vagabond; if he fell out with his master he fell out with his bread-and-butter; the air, indeed, was free to him, but only his native air, the law of settlement bound him faster than bars or bolts. Patriarchal as it has been called, this system from his better side was beneficial and picturesque. Though tied in purse and person, the labourer might pass his days from youth to old age in the same service, a valued helper and a humble friend. On the other hand, there was ample scope for much grinding and petty tyranny under such masters, as the poet speaks of—

Creatures no more enlivened than the clod,

But treading still as their dull fathers trod.

Yet in spite of this, if England had continued devoted in the main to agriculture, we might have been patriarchs still. But as manufactures strided ahead they brought this chapter of our history to a rapid close. The demand for labour, which called men to the towns, compelled an amendment in the law of settlement; the introduction of railways fostered the movement; the abolition of the Corn Laws weakened the hands of the farmer; education made the labourer restless and ambitious; and the sum-total of these changes created a spirit of independence fatal to the continuance of these old semi-feudal ties. These ties, however, were finally snapped by the action of the Labourers' Union. This loss of local influence certainly counts against us. But what might have a check can only be regarded as a disaster, when we see what has been done in the meantime by the population of the towns—that population of which Mr. Cobden spoke prophetically as “not of the country party, but the people who live in towns and will govern the country.” They do govern, and when the labourer gets the franchise the coup of their power will be full. I do not think that I overrate this power. Take such a recent instance as the Contagious Diseases (Animals) Act. That Bill, though the country party had an overwhelming majority in the Commons, was so moulded by the men of the towns, that, whether for good or for ill, it might have been fathered by the members for Birmingham. This is a simple example of what our real rulers can do when nominally in the shade of Opposition. When in the full sun of public favour it is almost idle to remark on the manifold ways in which they have asserted and proved their predominance. All for the man, nothing for the master; the multiplication of charges on land, country interests labelled “Protection”—such is the will of the towns. And this will has a voice. The citizen has been up early and rested late to push his own views and those of his party, whilst the countryman has been grumbling at the weather or looking over a gate; the townsman has been crying himself hoarse over the beauties of free trade and the hideousness of protection, whilst the countryman has been hanging fondly over the beauty of a heifer or the symmetry of an ox; the mechanic has been writing articles, reading lectures starting

organs of opinion, whilst his rival has been nodding over the *Standard*, or siring his eloquence at a vestry, the town has been waxing, the country waning. Here, again, there is no ground for congratulating ourselves.

HOW DO WE STAND TOWARDS THE LANDLORDS AND THE LABOURERS?—We have with the former a debtor and creditor account, but I doubt the balance being in our favour. Leases, though more common than they were, are less beneficial, from the rise in the price of labour and the fall in the price of corn, whilst the restrictions on the method of cultivation remain; and the Game Laws, which were at one time harmless, have become oppressive from the undue preservation of game. This last grievance is aggravated by the fact that the holders of land are in many cases of a different class from their predecessors. Land has become a luxury, and it is bought, as men once bought tulips, not because the purchase brings fresh sources of interest, but because it is the fashion. By this means the country gentleman has been partially ousted by the capitalist, who takes his holiday in the country but makes his home elsewhere. Such investors may be very good landlords, but their sympathies with their tenants must be slight; and the latter are often left to the tender mercies of a strange agent, whilst the owner is fitting over half the world. As a set-off, the application of science and the attendant increase of outlay go to make the tenant a bigger and more cultivated man; whilst the need of concessions to let the poorer lands have otherwise made him more his own master. As regards the labourers, there is also a question of give and take. So far as direct influence is concerned, I have already contended that we have lost it, and owing to the bad feeling which has been generated, there is a loss of comfort into the bargain. But the labourers have at least been led to distrust the lessons taught them by interested and dishonest leaders, and the spirit of organization and discipline, which must form a part of any combined movement, may eventually make them more valuable labourers and better citizens. In the meantime it must be confessed that the process of improvement works slowly, and that the drawbacks present themselves every day. Of course the stimulus given to machinery at the expense of hand labour counts in our favour, but it does not, in my opinion, suffice to weigh down the scale.

WHAT INFLUENCE HAVE WE IN THE HOUSE OF COMMONS

There is much that is time-honoured and useful in the notion that the tenants appear in the House through their landlords. But this, too, in its present form is of the patriarchal period. We stand to them as the labourers stood to us. They have emancipated themselves, and so must we. With many fine qualities the squires of England are not persistent fighters; witness the cry of Lord George Bentinck, their chief, “What will become of the apathetic country gentlemen?” When a man makes a pastime of politics the professionals will beat him. It is the old story over again of Prince Rupert's horsemen pitted against Cromwell's Ironsides. I even doubt whether farming interests have ever commanded the entire sympathies of the country party. True, they fought a pitched battle over the Corn Laws; but when the day was lost they felt that they had done enough. Yet the abolition of the Corn Laws, as the farmer was the sole sufferer, gave him a strong moral claim on the public. When has that claim been allowed, much less pushed? I would almost say that the country party has played with the farmers. How often has the repeal of the malt tax been dangled before their noses, and how often has any step been taken to repeal it? The Agricultural Holdings Act may be viewed in the same light. This act was a crucial one. It was for the benefit of the tenants, and its very passing was a virtual concession of the principle involved. It was to be our Bill of Rights, and it was specially promoted by our nominal friends. Yet it was permissive, and Permissive Bills are sugarplums to stop people's mouths. “We asked for bread, and we received a stone.” The County Government Bill, as introduced by the present Ministry, was no better. It would be easy to enlarge on the studious regard of farming interests as shown in minor matters by the House of Commons, but the recital would be as tedious as the fact is irksome. So that this question is soon answered. To sum up, we are, from my point of view, disunited, disorganised, and socially and politically weak, and therefore there is a need of greater unity of action in the agricultural interests.”

What is the remedy? I prescribe healthy and vigorous

Political action. It will be said, "In the first, what you propose is not feasible; secondly, you are very well as you are." Why not feasible? Look at the labourers; see what they have done. It is true they have no members, but then they have no votes. With the votes the members will come. As they are, they have made it unpleasant for half the farmers in England, such is the magic spell of combination. Are we, who are better educated, richer, more leisured, with all the traditions and some of the shreds of power hanging about us, not capable of learning the lesson from the trades unions which they have learned? If Essex, Cambridgeshire, and Suffolk could hold their own in an impromptu fight, cannot the farmers in a body do as much when their whole future is at stake? I say we have the weapons, if we have but the heart to handle them. Then as to leaving well alone. Mr. Round thinks that, as we have a pattern member in Mr. Sewell Read, that ought to satisfy us. We, of all men, are not likely to gainsay the fact that Mr. Read is a pattern member. But he is a leader without an army, and I ask for him at least a body-guard. Whilst brewers, shipbuilders, manufacturers, lawyers, soldiers, sailors have many representatives to fight their battles, why are we to have only one member whom we can call our own? With a compact body of farmers in the House—it may be a dozen, it may be twenty—picked men, we could not fail to make ourselves heard. Working with the landlords on subjects of common interest, or acting alone, where those interests diverged, the practical knowledge of such men, with the whole agricultural class behind them, must tell. Even if the only result were that farming questions were handled by masters of the craft instead of by amateurs and manufacturing rivals, there must be gain so long as agriculture is a matter of importance to the nation at large. We do not want to shunt the landlords even if we had the power, but we do ask to share those political privileges which are our birth-right as much as theirs. They have invited us in the County Government Bill to sit beside them; let us stand beside them at the hustings. We must be able to speak in our own defence through our own men.

Whether this be the right remedy or no, assuredly we need some bond to knit us together, some rallying-point to unite our scattered ranks. Though there is much to be done in making up lost ground, one comfort is that only the will is wanting. The power is there waiting to be kindled into life. Unfortunately, what little activity we show dribbles away in petty centres. If we are to organise such a society as that which upset the Corn Laws, we must drop those amiable debating societies, which, like Diocesan Synods, talk, appoint committees, and part—alas! to meet again. We want that exuberance of life, that definite grasp of party interests, which characterises the manufacturer, and is the parent of all systems of combination. In a word, we want organised enthusiasm. But the start should be made soon. Fresh forces are trooping into the field, and the odds against us grow day by day. Still the prospect is not all dark. We have seen how a band of farmers, stung by a sense of common danger, could unite and win the day. What might not be done if the movement became national? If we could but cast off our petty jealousies, if we would manfully strive against the physical weakness of local isolation, if we would be content to serve as a means to rule, if we would cling to modern ideas as we do to modern machinery, what a powerful engine for good we might be to ourselves and to others! I say to others, for the rule of the towns threatens to become a popular tyranny which the country element alone can stem.

I have trespassed on your patience long enough, but I cannot help dwelling for a moment on the fair prospect which union amongst ourselves presents. I should weary you by a catalogue of the various blessings which might attend on this happy consummation. I will content myself with one, which more immediately touches ourselves. The Farmers' Club might then gain the support which I think it deserves, and with it "acquire" "a local habitation" as well as "a name."

Dr. VOELCKER said before they entered upon the discussion of that interesting paper perhaps the reader of it would allow him to make a slight correction. When he remarked that the agricultural interest had only one member to represent it in Parliament, he could not help noticing the round figure of his friend Mr. Phipps, and he felt certain that the farmers of England had a very good Parliamentary representative in that gentleman (laughter).

Mr. W. E. BEAR (Surbiton, Surrey) said:—There are few pleasures greater than that of hearing our own opinions well expressed, and Mr. Edwards has this evening put into words views which I have long held, and not seldom attempted in my imperfect way to propagate. Several years ago a few gentlemen joined me in an attempt to start a tenant farmers' combination, to be called the "Tenant Farmers' League." We were strangers to each other, and were brought together purely by the sympathy of our views—by our common feeling as to the urgent necessity for a combination of farmers for political objects. We drew up a full-blown "constitution," a list of objects and rules, and issued a number of copies inviting farmers to join our association. Our declared objects were such as I will guarantee that nine out of ten in this room would heartily subscribe to generally, if not to every one of them, including tenant right, freedom of cultivation, the prevention of cattle disease, and the reform of the Land Laws and the Game Laws. Well, gentlemen, our proposed League was a decided failure. We had not—at least I had not—much money to spend, and when we found that pecuniary support did not flow in very freely we paid for our circulars and gave up in despair. Several tenants wrote to express their sympathy with us, and a few sent subscriptions and promised to become members, if their names would not be published; but, on the whole, our grand scheme fell flat. It was a great pity. If that League had become a power in the country, as it would have become if farmers had joined it in sufficient numbers, the state of agricultural affairs might have been better than it is to-day. It would not have prevented bad harvests or low prices; but it might have prevented the shelving of tenant right in the form of a bogus Agricultural Holdings Act, and the perpetuation of cattle disease under the sanction of the imperfect measure passed last session. It might have given us a number of real representatives in the House of Commons, and in various ways—which I will not stop to particularise—it probably would have done good to the tenant farmers of this country. In those days tenants were terribly a raid of their landlords, and I fear a large number of them hardly feel quite their own masters even now; but farmers are much less in love with the land than they were, and are therefore less disposed to be kept under the thumbs of its owners. Still, I confess I have lost almost all hope of seeing the farmers combine to get their many grievances effectually redressed. Look at their conduct during the passing of the Cattle Diseases Bill. There never was a measure which met with more general approval than that Bill, as first introduced, did; and they came nearer to what Mr. Edwards has termed "organised enthusiasm" on that subject than I have ever known them to come since I first took an interest in agricultural affairs. Well, what did they do? In their Chambers, as usual, they made long speeches and passed resolutions before the fight came on; and when the battle was actually raging they went home and fell fast asleep (laughter). At least, if they were not asleep they might as well have been, for during the time that the Bill was passing through the House of Commons—its most critical period, when its enemies were storming against it, and its friends were weakly giving way step by step—I do not believe that a single public utterance was made by a tenant farmer in his own name outside the House, either on the platform or in the press. They actually let the case go against them by default. The agricultural papers, or most of them, were staunch and earnest; but they had absolutely no support from their readers. I don't believe there was a single letter in one of them from a tenant farmer on the subject of the Bill during the whole of the critical period referred to. I suppose the farmers, if not asleep, had all taken Sir George Jenkinson's advice, and were determined not to "embarrass the Government" (hear, hear). Our friends in the House of Commons followed suit. There was no agitation from outside to back them up, and they, too, appeared to be beyond all measure anxious not to "embarrass the Government." Yet their followers could hardly blame them, as they sent their leaders off to the fight, and stopped on the hills afar off looking at them, like special correspondents at the seat of war with telescopes (laughter). Gentlemen, there ought to have been a joint agricultural demonstration in support of the Government Bill just before it went into committee in the House of Commons, and if there had been such a demonstration I firmly believe that the measure would not have been spoiled as it has been. The Central Chamber and the Farmers' Club, I think,

failed in their duty on that occasion. They, like the scattered farmers were on the hills with their telescopes viewing the battle from afar. We want a band of farmers with resolute leaders—men with some “go” in them—in place of a lot of gentlemen who talk and talk and do nothing. Let us have a genuine tenant farmers’ political association—one in which the tenants will show that they can run alone, instead of being hunted in well-trained packs, as they are in the Chambers. Gentlemen, I have heard rumours of the formation of a new association of farmers for political and social purposes. I know nothing of it or of its promoters; but, in the name of all that is sensible, let us have no more of the “social” kind of thing. Almost all the talk of farmers hitherto has euded in a glass of grog and a cloud of smoke. Let them show that there is a little of the stuff of the old English yeoman left in the farmer of to-day. The men of Hampden’s time did not stop at home and do nothing when their leaders went forth to fight. Our fight is of a different kind to theirs; but unless we show a little of their unity, their self-sacrifice, and their courage, we shall continue to be the political nonentities which we are to-day—the laughing-stock of the civilised world (Cheers).

Mr. J. K. FOWLER (The Prebendal Farm, Aylesbury) said he wished to say one word in reference to the speech which had just been made. He quite agreed with Mr. Bear as to the great necessity which there was for an organisation, if he might so describe it, of the opinions of the farmers of this country; but he could not admit that the Farmers’ Club and the Central Chamber of Agriculture had neglected their duty with regard to the Contagious Diseases (Animals) Bill. They appointed a joint committee, which sat almost continuously, meeting over and over again. He himself and some others, including his late friend Mr. Booth, attended night after night in the lobby of the House of Commons, saw a number of members there in regard to the position of the Bill, and pressed upon them the necessity of adhering to its main principles. He might add that they did their best to make their views known through the medium of the London press. He had no wish to say one word against the metropolitan press as a body, but he must observe that if there was a great agricultural meeting in the country which was attended by leading members of the House of Commons, as soon as those gentlemen had spoken, the reporters got up and left the room, leaving the other speakers to talk away as they pleased, only to be reported in local papers. He wrote to one or two of the leading London papers on this subject, but his letter was not inserted, and he dare say others had done the same thing without any better success. He wrote to the London press because he thought it necessary that the inhabitants of the great towns of the North of England, and even those of the South and the West, should be made to understand that the tenant farmers had a great deal to say on the great and important subject, and also on that of the Agricultural Holdings Bill. Although the opinions of tenant farmers on those subjects has often been expressed in public speeches with the greatest ability, yet he had never known a single instance in which they were reported in one of the great London newspapers. (Hear, hear.) As regarded the question under discussion, he could quite corroborate a large part of what was said in the paper. He need but recall to their minds the most enthusiastic reception of the proposal for the repeal of the malt tax. Over and over again they met in large numbers for the discussion of that question, and on one occasion they had such a meeting in Freemasons’ Hall as was never held there perhaps before on a question of that kind. Probably there were gentlemen then in the room who were present at that meeting, and they would bear him out in saying that a more enthusiastic and important meeting could not have been held. But he regretted to say that on returning to their respective neighbourhoods they found some of their strongest opponents among farmers themselves—(hear, hear)—and it was partly owing to such opposition that at a time like the present they were prevented from selling off their farms excellent barley, discoloured to a great extent by the season, through the enormous, and he would say infamous, tax which was levied upon it. (Hear, hear.) There was then, a necessity for greater unity of action; but tenant farmers themselves were greatly to blame for its not existing. Other gentlemen in that room who were associated with them would testify that whenever they had tried in their respective neighbourhoods to benefit tenant farmers

they had given the cold shoulder to anything like an effort to secure united action. He could not understand such conduct. The questions to be dealt with had nothing to do with the question of a man’s being a Tory, a Whig, or a Radical; but there was a something which he could not understand at the bottom, preventing the attainment of that unity which ought to exist amongst them. He knew that there were many great and important agricultural associations in which, when some subjects bearing directly on the interests of tenant-farmers were brought forward, they were put down as being political. There were many kinds of politics connected with agriculture which required as much attention as the Afghan or the Eastern Question (Hear, hear). There were many questions that deeply concerned them upon which they ought to have greater unity of action. How that was to be brought about he would not pretend to say; but probably, through the exertions of the Central Farmers’ Club and the Chamber of Agriculture, which had ramifications throughout the country, agriculturists would in the end be drawn politically together in such a manner that the opinions of their brother-farmers in every district would make themselves heard and felt. One more remark before he sat down. He was not going to speak politically in that room, but he could not help remarking that the present Government had at all events listened to a great deal that they had said to them. They had brought forward a great many rural questions, a great many questions relating to agriculture, and had done their best to solve them. They had not had a Ministry which had done that before, and if they had failed in some things it was, he believed, in consequence of their having attempted too much, and not because they did not do their best to ensure success.

Mr. W. E. BEAR said he wished to explain. He did not say that the farmers had not spoken out and fought well for the Contagious Diseases (Animals) Bill, but that at a critical period there was not, so far as he was aware, a single meeting held, nor did he see a single letter in a newspaper, backing up the Government.

Mr. FOWLER said he differed from Mr. Bear on that point. Mr. MECHI said he had no wish to say much on that subject, having come there rather as a listener and a learner than as an intending speaker. They all knew what “unity of action” meant. It meant that a number of people having certain power and certain influence united together for the accomplishment of an object which they had in view. They knew how the thing was done in the case of the House of Commons. They knew that when a body were interested in a particular object, whether it were social or political, that House was almost overwhelmed with petitions which were got up by those people. But he had yet to learn that the agriculturists of England had flooded the House of Commons with petitions, and he thought that was their weak point. (Hear, hear.) If he wanted an illustration of the need of unity of action amongst agriculturists he might say that he had never seen united petitions to the House of Commons from the agriculturists asking that those manorial treasures which were poured into the Thames and other great rivers might through the introduction of a Government measure for that purpose, be sent in the proper direction, namely, the land, and thus made to benefit the farmers, the landlords, the labourers, and the public. He mentioned that merely as an illustration of what course ought to be pursued by agriculturists who had in view a common object. Farmers might constantly express their wishes through the organisation of petitions bearing thousands of signatures. It was in such modes that they might aim at securing the improvement of agriculture; but there was nothing scarcely of the kind. (Hear, hear.) There was no class of men in England that troubled the House of Commons so little as tenant farmers—(hear, hear)—and that was partly to be accounted for by their comparatively isolated position. If men farmed three or four hundred acres of land perhaps their nearest neighbour was a mile off, and hence they had not very frequent opportunities of meeting together to talk over matters in which they were mutually interested, and great allowance must be made on that account. Before the days of the penny postage the difficulty of communication and enlightenment was greater, but now light had broken in upon agriculturists as a body, and agricultural literature was in a more advanced state and much more widely diffused than it was thirty years ago. He had no doubt that as the influence of Farmers’ Clubs and

Chambers of Agriculture extended, and as intelligence increased, there would be much more unity of action than was to be seen at present. Such unity was, indeed, much needed at the present time. It was impossible for farmers to cultivate land well without proper security (Hear, hear). It was all very well to tell them that they must trust to a good feeling between landlord and tenant, but that was not sufficient for the purpose. As regarded freedom of action, did not every practical farmer know that events had greatly changed during the last thirty or forty years? (Hear, hear). At that period there was no Professor Voelcker to tell them how by the use of artificial manures and cake they might increase the produce of the soil; there was nothing to dress the land with except its own produce. All that was now changed, and they were overwhelmed with offers of bone and artificial manures to enable them to increase the fertility of the land. The idea of farmers, when straw was selling, as it had been lately, at £4 a ton, and they could get one or two tons per acre, having it all trodden under the feet of cattle, when, if half the money were spent on artificial manures, they could put the £2 in their pockets! He repeated that these were the times when farmers required unity of action in order that they might have proper security of tenure, in order that they might have freedom of action, to be used in a manner which would benefit not merely themselves, but landlords, labourers, and the community at large. Their position in that respect should be brought before the House of Commons by means of petitions, and if that were done a great step would have been taken towards the redress of their grievances (Cheers).

Mr. H. NEILD (The Grange, Worsley, Manchester) said he was ready to say "Bravo" to the words of Mr. Mechi, his speech being the best which he had heard from his lips for a long time. (Cheers.) They had to thank the introducer of the paper for the grave subjects of reflection which he had given them. No man could leave that meeting without taking away with him a deepened impression of some of the most important truths which their everyday experience was fast bringing home to the best of them. Allusion had been made to two parties—the landlord and the labourer. He fancied that when the landlord had got his rent and the labourer his fair wages—and he did not begrudge labourers their present wages, feeling that they were quite low enough—it would be found that the cost of production had almost overtopped that portion of the portion of the produce which was left for the benefit of the farmer. The farmers could not compete with the sort of things now going on. The fact which was alluded to must come home to every reflecting mind, that unless there were perfect freedom of cultivation and perfect freedom in the disposal of produce the farmer could not continue to face his unfair and unjust position. In the competition with foreigners English farmers were not equally weighted for the race; and yet, up to a recent period at least, no one could introduce the question of the pressure of the malt tax without being laughed at. The question was, how the farmer was to meet the difficulties of his present unfortunate position? As regarded barley, he was not a grower himself, but he felt great interest in the matter. When the present Chancellor of the Exchequer was appealed to in reference to the malt tax he admitted that its operation was unjust and unfair and oppressive to agriculture, but he said that the state of the public revenue necessitated its retention. Mr. Lowe said the same; and when he (Mr. Neild) saw that the revenue of this country depended so much upon the consumption of alcoholic drinks, he felt that it was high time to set about devising an improved system of taxation. (Hear, hear.) That subject was too wide for him to enter upon then, and he was too anxious to hear the views of farmers on the question of co-operation to attempt to deal with it. He felt that it would be of no use to run counter to the spirit of the landlords, without whom they could do little or nothing; but, happily, they had heard of one or two bright instances of landlords giving freedom of cultivation and freedom in the disposal of produce to their tenants; and he was confident that when that question had been brought properly before the minds of the landowners of this country as a body they would select and treat tenants accordingly. The laws relating to land were made at times which did not at all fit in with the present state of things. There was a voting power springing up which would soon come into play, and it would be well for the owners of land in this country to put their house in order. Nothing would

make them so strong and so powerful as the having a happy and prosperous tenantry, and that could only be the case when the tenant had the benefit of tenant right in the cultivation of the land which he occupied.

Mr. T. DUCKHAM (Baysham Court, Ross) said that he had listened with a great amount of interest to the very excellent paper read by Mr. Edwards, and he fully endorsed the compliments which had been paid to that gentleman by the various speakers. For many years he (Mr. Duckham) had felt that organisation was absolutely requisite for the agricultural interest. During the direful visitation of the cattle plague he took a very active part in the formation of the Chambers of Agriculture, and he had the honour of presiding at the two first meetings that were held in London for their establishment. Unfortunately there was always something that cropped up to obstruct action when an attempt was made to create an organisation that should be for the benefit of agriculture, whether it were for the various localities or were of a central character; and he was sorry to say that there was a strong feeling of that kind raised by certain parties who opposed the movement to frustrate the efforts that were made to establish the Central and Associated Chambers of Agriculture. Those who were striving hard for their establishment, and to make them what they should be—the mouthpiece of the farmers of England—were opposed. As Mr. Bear had said, another association was endeavoured to be formed in the shape of a Farmers' League. He (Mr. Duckham) was not aware that Mr. Bear had taken a prominent part in that matter, but he knew some persons who offered opposition; and he felt very much grieved at it, because he did feel, and still felt, that the organisation was a good one, and worthy of the support of the farmers of England. The voices of the Chambers had been felt in both Houses of Parliament; they had not been uttered without a great amount of respect being paid by the Government, both the present and the preceding one. Their voices (he said) had not been disregarded; but, unfortunately, there was something connected with the press that prevented justice from being done by it to the agricultural interest. Mr. Fowler had remarked that he had sent letters to the press which had been suppressed, or thrown into the waste-paper basket; and he (Mr. Duckham) was sorry to add his experience in the same way. He had written in as moderate a tone as possible, and made his letters as full of argument as he could make them; but he was obliged to admit that his communications had shared the fate of his friend Mr. Fowler's. Why that should be he could not understand, unless it was that the London press felt that they had an interest to serve by not allowing a fair and free admission of arguments in their columns. Mr. Bear had remarked that the Government were unsupported in their endeavours to pass the recent measure of legislation upon the cattle disease question. He (Mr. Duckham) had sent a petition, signed by several hundred persons, to the House of Commons, and other petitions were poured into the House from his county, and he believed they were from most other counties; but farmers could not come up from various parts of the country to attend demonstrative meetings week after week and month after month. That was impracticable, because they had business to attend to in the busy season of the year which it would not do to neglect. Many petitions were sent to Parliament; but, unfortunately, they were either unheeded or only headed down by others. He could not help noticing that one of the metropolitan members for the metropolis—Sir Charles Dilke—had boasted before his constituents that he had frustrated the efforts of the Government to pass the Contagious Diseases (Animals) Bill as it was originally proposed; that he and others had rendered the Bill so useless that the supporters of the Government measure did not care what became of it; and that it was thus that it passed through the House of Commons. He did not think that Sir Charles Dilke had ever expressed those opinions in his own publication, the *Agricultural Gazette*. That paper had been a consistent advocate of legislative enactments whose objects were to guard the herds and flocks from such visitations as farmers had suffered from so long. Yet Sir Charles was a gentleman who could oppose them in the House of Commons, and one who could uphold his conduct before his constituents and boast of having frustrated the efforts of the farmers of England. (Hear, hear.) He (Mr. Duckham) quite agreed with Mr. Edwards that there was more organisation required, and he would be delighted to

see something done that would give an opportunity for exhibiting greater unity of action amongst the farmers, whether it were by means of Farmers' Clubs, Chambers of Agriculture, or a Farmers' League. Let them be united, let them give each other their hearty co-operation, and then, instead of being as at present a bundle of loose sticks, they would be strong and powerful. (Cheers.)

Mr. B. HODGES (Vincent, Margate) thought that as that seemed a fitting opportunity for bringing forward subjects connected with unity of action among the farming community, which might be expected to produce certain definite results of a beneficial character, he might venture to occupy a few moments in mentioning a question which had agitated the agricultural mind in the county of Kent—the question of the present state of the law in regard to distraining for rent (Hear, hear, and cheers). He was not aware—and he supposed that others who heard the case were not aware, until they heard it stated explicitly—that the law as it now stood enabled the landlord to let his rent go into arrears for six years and then come upon any of the property on the farm and distrain for the rent which, through his own neglect, had become so far behind. There had been an illustration of how injuriously that operated in his county. He did not desire to mention any names, because they must all take a certain measure of reproach to themselves in the matter, inasmuch as that which had been done had been done legally. They were all able to exercise a certain amount of influence over the Legislature, and therefore they ought to consider themselves more or less culpable in allowing the law to remain in such a state that such an injury as he referred to could be inflicted (Hear, hear). It was nothing to the purpose to say that such cases were infrequent; they ought never to have happened—(hear, hear)—the law ought to have been so amended that no such injustice could have been perpetrated (Hear, hear). Many of them would be ashamed of such acts, and would not under any circumstances have endeavoured to recover the rent that was in arrear by the seizure of property that belonged to another person. He wanted to point out how injuriously the law operated upon the tenant farmers in giving undue weight to applications for farms from men of insufficient capital, and how much benefit would arise from a reasonable alteration which would enable smaller farmers to hire machinery which they now found it difficult to obtain the use of, because the owners of such expensive things hesitated to place them upon the land. The owners of machinery would probably for the future require a man who wanted to hire their tackle to pay higher rates or to give security, because they would be afraid of their engines being seized for rent. They had now all become awake to the danger, and this was one of those matters upon which it was very desirable the community in general should be informed. It was the intention of the Kent Chamber to bring the subject before the Chamber of Agriculture; but, as many of the members of that club were not members of the Central Chamber, that had seemed to him a fitting opportunity to state that that was one of the grievances which did exist, and with regard to which they were interested in procuring an alteration of the law; and he trusted that they would be sufficiently united quickly to accomplish that object (Cheers).

Mr. DUCKHAM: I rise to correct a statement. I am informed most positively that Sir Charles Dilke has no connection with the *Agricultural Gazette*, although he had a short time ago. I should have been very sorry indeed to have made an unfounded allusion to a gentleman connected with any portion of the press, and for it to have gone forth erroneously to the world uncorrected.

Dr. VOELCKER: I believe that it is his property, but that he has no direct control over it.

Mr. DUCKHAM: I was not far wrong, then.

Mr. T. B. DRING (Claxby, Alford) said that he felt somewhat perplexed that the vital part of the paper had not been much touched upon—that was the need of greater unity in the agricultural interest. If he were to ask what that meant probably the answer would be that the farmers were going back, and they were getting poorer and poorer. What could be done to improve their position? He did not see that by unity in the action of the agricultural interest they could improve their position very much. Neither did he see what the Government could do, or rather what they would do, to im-

prove the position of the farmers. The Government might, perhaps, take the burden of some of their local rates off their shoulders and place them on the Imperial taxes (Hear, hear). That might do a little good; but that which stung them in the face was the importation of cheap corn and meat. The Government might assist them in laying an importation duty on corn and meat, but they would never do that (Hear, hear). The farmers must not for a moment flatter themselves that the Government would do it. There was another question. Some said that landowners must reduce their rents (Hear, hear). He did not see that landlords were any better off now than they were forty years ago; for although they might receive 5s. or 10s. an acre more in rent their general expenses had considerably increased beyond the extra percentage they received from their farms. He did not believe that landlords were in a position to reduce their rents. Some, he would admit might be able to do it, but many had mortgages on their estates, including large farms, and could not afford to do it (Hear, hear). The servants in the house, and the cost of living were considerably more expensive than they were formerly. Some persons made a claim for freedom of cultivation for farmers, and a noble lord recently gave his tenants freedom for cultivation, so that they might be able to pay his rents. He (Mr. Dring) denied that freedom of cultivation would be of any advantage to agriculturists. (Hear, hear). As he understood freedom of cultivation it meant more crops and less fallows. That would make the land poorer and poorer; and if the tenant farmers became poorer and poorer they would have more difficulties pressing upon them, which they would have to meet before any great expenditure could be made on artificial manure (Hear, hear). Therefore he thought that the argument for freedom of cultivation failed. What, then, were they to do? They were met by foreign competition. America had got her railroads to the Far West; the Americans were continually building steamboats to bring over to this and other European countries the beef and the mutton and the fruit and other products that the people wanted to consume. Land could be purchased in America at 2½ dollars an acre. He could give an instance, which was a fact, of a gentleman who had a son whom he wished to fix in farming. He set him to learn the business of farming. He then bought him 23,000 acres of land in the prairies of America, which had a railway running through it, and was about 2,000 miles from New York. He (the son) ploughed the whole of it up; the year before last he sowed it with wheat; and having cut it with self-binding machines, he sent it to New York, and after he had received the money for his wheat and paid for his land, he had a net profit of £6,000 in his pocket. (Hear, hear). How was it possible for English farmers to compete against that? Or, again, could they compete with New Zealand and other parts of the world where land was at a very low price? As regarded the question of labour where land was at a low price, a friend of his made a long tour on the Continent. Labour there was at very much the same figure as in this country; land was very much cheaper. But the tenant, or the occupier, or the owner of the land got up early in the morning and took rest, ate, and worked hard; his wife milked the cows, and his family also rose early and worked late; and the produce of the farm came here and helped to ruin the English farmers. When he (Mr. Dring) came to look back on his boyhood days he found that the expenses had now very much increased; and they ought to take into their consideration the question of their expenses and what they ought to be. He thought they should amount, when their debts were paid, to 5 per cent. of real capital. Then came the question of value of their services. If they got up early, and paid great attention to their stock and to the various duties of their business, their services might be put down at £100 a year for every 300 acres. But if they wanted to keep a hunting horse, to give dinner parties, and to go to such parties occasionally, perhaps their services were of very little value. Their family expenses ought not to be more than the interest on their capital and the value of their services. He honestly thought that, with railways communicating to the ends of the earth, they had got into a position in which they could no longer compete with foreign nations unless they went back to what farmer's expenses used to be. He was not now speaking only of those who had independent means, but of those who had just enough to stock their farms. Such persons would certainly have to reduce their

expenses in order to meet the foreign competition. The Government and the landlords would not help them, nor would their combination. They would have to go back and retrench their family expenses; the piano would have to give way to the wash-tub—(No, no)—the whole of their expenses would have to be reduced; and, instead of having a groom and gardener, and a lot of other expenses that were needless, they must go back to the industry of their forefathers. If that were not done voluntarily the time would come when they would be compelled to go back, and the sooner they did it the better. (Hear, hear.)

Capt. CALDECOTT (Holbrook Grange, Rugby) wished to mention a remark heard by himself two or three hours before the meeting. A gentleman then said to him that he was afraid that Mr. Edwards was putting the cart before the horse, as he appeared to want to organise unity of opinion before they had tried to organise unity of action.

Mr. PICKERING PHIPPS, M.P. (The Grange, Collingtree, Northampton), said:—I cannot help expressing my great pleasure at having heard the paper of this evening. I think it has two great advantages. The first is that it is not inordinately long, and the second that it is very suggestive. And my impression is that if the Farmer's Club is to be of that use which it has been, and which I trust it always may be, it is of extreme importance that the papers read before this club should be of such a nature as to call forth discussion. I quite agree with what has been said about the advantage of unity of action amongst agriculturists. But I cannot help thinking that within the last few years there has been a vast improvement with regard to the unity existing among agriculturists. This may, perhaps, be accounted for in part by there being much easier means of communication than there used to be. At one time a farmer was pretty well isolated unless he chose to go to some considerable expense and trouble in order to meet his brother farmers. But nowadays, with railway communications and the reasonable cost of carriage, and with that popular class of carriage the third-class, farmers have opportunities of meeting which they had not before, and which I, for one, think they avail themselves of very considerably. For a long time there existed in this country only the agricultural societies, and it was distinctly understood that in those societies matters connected with politics—even agricultural politics—should be excluded. I, for one, think it was a point of wisdom on the part of those who instituted those societies to make such a rule, because those societies were intended to do all they could for the promotion of good farming, and breeding, and meat-producing, and were not intended to have any effect upon the politics of the nation. After that we had Farmers' Clubs introduced, of which this may be said to be the parent; and I am quite sure that those who are older in years than I am know that this club has during its existence done very much for the cause of the farmer throughout the land. After that we had a further organisation, and that was the Chambers of Agriculture, the idea being that Chambers of Agriculture should exist throughout the length and breadth of the land, especially for the purpose of taking up those subjects which were, as I think, properly eschewed in the agricultural societies and the Farmers' Clubs—I mean politics, and especially politics relating to agriculture (Hear, hear). The Chambers of Agriculture throughout the country have been of very great use, and, united as they are to the Central Chamber of Agriculture in London, they have had an effect—I can speak of it as an eye witness—a great effect in the House of Commons. (Hear, hear.) And believe me that the discussions of farmers themselves in the different Chambers of Agriculture throughout the land, and the result of those discussions, as seen in London in the Central Chamber of Agriculture, where important subjects are carefully considered and resolutions are passed upon them, are likely to have more effect upon the House of Legislature than the appearance of a few more tenant farmer candidates or representatives in the House. Not that for one moment do I think that it would be anything but beneficial to agriculture if we had more men in the House of Commons like Mr. Clare Swell Read—(cheers)—having a practical knowledge of agriculture, and the power and the will to express it on important subjects (Hear, hear). I am very much obliged to my friend Dr. Voelcker for referring to me as having taken some interest in farming. In my place in the House of Commons I did say a

few words upon the Contagious Diseases Cattle Bill; I exhorted the Government not to give up the principle of slaughtering the animals at the ports (Hear, hear). I believe that principle to be a right one. I would not have advocated it if I thought it would have an injurious effect upon the meat supply of this great country. I advocated it as the means—the only effectual means—of stopping the inundation of disease throughout the country (Hear, hear). I do not wish to go away with the belief that the Bill as passed is not an improvement upon former legislation. I think it is a great improvement. I believe that it will be very effective, and that it may do a great deal towards the prevention of the introduction of disease. (Hear, hear). And of this I feel quite sure, that such is the feeling of the British farmer, and such is the feeling of the British nation, that if this bill is found to be ineffectual for the prevention of importing disease then it will be in the power of the House of Commons to pass a Bill which will be more stringent in its provisions. (Hear, hear). There is a question which was moved this evening with regard to the Agricultural Holdings Bill. Although, as you know, I am a supporter of the present Government as a rule, yet I trust that I look upon matters brought before the House of Commons with a fair and discreet spirit, and with a desire to do what is right. I did feel it my duty, although I was not supported by a very large number of members, to divide the House on the question whether that Bill should be compulsory or not (Hear, hear). I did feel that to be my duty, because I felt that it ought to be a principle of law—a principle in the legislation of this land—that all unexhausted improvements should be paid for either by the landlord or the incoming tenant. (Hear, hear). Still I believe that although the clause was given up the passing of the Agricultural Holdings Bill was a great benefit to the country and to the farming interest. It called attention to the matter, and it enabled those who were connected with settled estates to act in a manner that they could not do before with respect to improvements; and the Bill also had a clause in it which introduced a twelve months' instead of six months' notice (Hear, hear). I should like to say a word or two as to the supposed necessity of substituting some new society or League, or new form of combination I believe, Mr. Chairman, it would be a great mistake if we farmers of England endeavoured to form any new institution, (Hear, hear). We have at the present moment institutions, which, if fairly worked, can do what is wanted. What we want is that the Farmers' Club should be strengthened, and that every farmer throughout the length and breadth of this land who has the means should become in some way or other connected with the club; and that members of Chambers of Agriculture throughout the country instead of being counted by hundreds should number thousands. It is very easy to propose new societies and to institute them, but the great difficulty is to support them. The establishment charges form a great proportion of the necessary expense, and you may depend upon it that if a new society is formed to do that which the old society would do as well you are only increasing expense without producing a corresponding result (Hear, hear). I have just heard some remarks made by a very practical man, with some degree of sorrow, and yet with a certain degree of gladness, I believe, that the British agriculturist will make any retrenchment he possibly can to meet the competition of the times; but the fact is this, and the means of communication in corn growing climes are becoming so great and the amount of corn grown is also so enormous, that the only favourable balance there is between us and those growers—namely, the cost of transit to this country, is through the increased means of communication becoming so small that I do not believe that, whatever may be done, it will be possible as regards the great staple of life, for the British farmer to compete fairly and profitably with the Continental grower. (Hear, hear). But, that being the case, it behoves us to look about us and see if there are no means whereby we can increase the production on our farms (Hear, hear). Perhaps in the state of transition they may cost us trouble and money to adopt; but still there are commodities at the present moment which the foreigner would be unable to compete with us in producing. We would allude for instance, to the growth of barley. We know that barley, if of good quality, still maintains a good price. I would also allude to the production of cheese, of butter, of beef, and, except as a matter of economy,

of mutton. Depend upon it the time is far distant when we shall prefer the products of foreign lands to those of our own. All that it requires is that we should put our shoulders to the wheel and do all we possibly can to promote means whereby we can produce products which are not so thoroughly in competition with those of foreign growers as the special commodity of wheat. There is another question which I think ought to have the attention of every tenant farmer of this country, and that is the local burdens which rest upon them (Cheers). These are very great; and depend upon it if no relief is to come to the British farmer by the reduction of rent—if no relief is to come to the British farmer by the reduction of the cost of labour—or at least but an inconsiderable relief—the only form in which relief can come for him is the reduction of the local burdens, so that the taxation of the farmer may in some measure bear a fair proportion to the taxation of those who are not connected with agriculture (Hear, hear). There can be no doubt that there is no man so heavily taxed as the British farmer (Hear, hear). His rates have increased for a long while. There has been a great effort on the part of the Local Taxation Committee in connection with the Chamber of Agriculture to prevent those rates from increasing, and they have in a great measure succeeded in preventing the increase of late years. Further, the Government of this country have, principally through their efforts, given something like £2,000,000 a year towards the reduction of the rates. But still there is a large margin of local burdens which might well be considered. I believe that at the present moment the English farmer's rates are far beyond those of any other class of persons; and, considering the competition to which he is exposed, I think the attention of the Legislature ought to be directed towards a fair settlement of that question, and that everyone throughout the country ought to pay rates in proportion to his ability (Cheers).

Mr. G. M. ALLENDER (Belgrave Mansions, Grosvenor Gardens) said if ever there was a time when British farmers could unite it was now; if ever there was a time when they ought to unite it was now. They ought to unite as one man and obtain the removal of everything that was unjust in imperial and local taxation—the malt tax and everything else; they ought to unite to clear them all away. That was their only possible chance. Rents would have to come down. Mr. Dring talked about increased private expenses of landlords not permitting them to reduce rents. If landlords could not support themselves by the rents of their lands they must work to increase their means, not expect tenant farmers to work for them. The importation of food had only begun. A fortnight ago, while in Paris, he was shown a contract entered into by an American house to supply the Austrian army with 1,500 head of cattle a day for forty days, in tins—making a total of 60,000 head of cattle. On Saturday he was asked to take part in a new undertaking for the cool transport of dead meat, and that very morning he had had a second undertaking of a similar nature, mentioned to him. There had been brought about by the Paris Exhibition, and were pending at the present moment, more schemes than could possibly be believed for the importation of food from the chief producing countries, and they would not see any change in the stream which was now setting in strongly towards this country for the importation of animals and agricultural produce. Every tenant farmer in England ought to become a member of the Central Farmers' Club, and so, like the members of all other trades, provide the machinery and the means for obtaining power in the legislature of the country.

Mr. C. HOWARD (Biddenham, Bedford) said he was somewhat amused at the speech of his friend Mr. Dring, and as he listened he wondered whether his friend would have made that speech twenty years ago. Since that time he had become a large landed proprietor, and he could not now see the necessity of reducing rents or of giving freedom of cultivation; and, occupying as he did such a high position, he had set himself to read the farmers of this country a lesson as to how they should live, and how they should spend their own money. Unfortunately for Mr. Dring's position in that matter, the men who lived at the expense of one labourer, and who did the work of two, were the most needy men in the kingdom, and those who enjoyed a decent social position felt the effects of agricultural distress the least (hear, hear). Talk about unity of action! He had heard that spoken of

for years in the Farmers' Club, and there they had a fine specimen of united action this evening. When one of those topics which had been a foremost question among agriculturists for many years past was introduced how was it treated? Mr. Dring altogether ignored it. He said, in effect, "Freedom of cultivation—what is the use of it?" They would be very much older before they were all of one opinion upon agricultural matters. He had heard a great many farmers—to his knowledge it had been done for thirty or forty years—grumbling and whining for help. He said they could help themselves. So long as men thought proper to run head-over-heels bidding more money for land than it is worth without any proper agreement, it could not be wondered at that landlords made the best use of the position they occupied. (Hear, hear). Then as regarded politics, he had lived long enough to know that they were of very little use to them as agriculturists. One thing was quite clear—that the farmers of England have put themselves under the banner of one or other of the great political parties; and if they were to ignore politics, and get men, not necessarily farmers, in every county in England to come out as independent members to serve the interests of agriculture in the Commons House of Parliament, they would then be doing themselves great good.

Mr. S. B. L. DRUCE said there was one point introduced in the paper read that evening to which he thought, as secretary of the Club, he ought for a moment to allude; he referred to the sentence, almost the last, which the paper contained. Mr. Edwards, in introducing the subject, after pointing out the necessity of greater unity of action amongst tenant farmers, summed up by saying that if it did nothing else it would give the Farmers' Club "a local habitation and a name." Something had been said that evening about the necessity of creating greater interest in agricultural associations generally. It would be one of the easiest things in the world for every gentleman who was a member of that club already to try and induce his friends in his own county who were not members to join it; and he was quite sure that they would have advanced one step, at all events, towards unity if, on their removal to larger and much better rooms on the 1st of January next, there were a large increase in the number of members. He trusted, therefore, that the result of that change would be to improve not only their own position as a club, but also that of the whole body of agriculturists in this country. (Cheers.)

The CHAIRMAN said they must all feel that they had had a very good discussion, although it had not quite ended in that unity which they all desired. He would be very glad to see a large attendance at the annual dinner of the club, at the Criterion, next month. Mr. Edwards would, no doubt, like to say a few words in reply to the remarks elicited by his interesting paper.

Mr. J. G. EDWARDS, in replying, said he had intended to say something in answer to what fell from Mr. Dring, but he was so completely answered by two of the speakers who followed him that there was nothing left for him to say. One word of explanation with respect to Mr. Phipps. He did not overlook the value of that gentleman's presence in the House of Commons, but he was a borough member, and was not sent to Parliament by farmers. At the same time he could not forget the service rendered by him to tenant farmers, by taking a division on the question of making the adoption of the Agricultural Holdings Act compulsory. As regarded what Mr. Caldecott said, he was not such a dreamer as to expect unity of opinion, but he did hope for greater unity of action, seeing how members of the House of Commons who differed individually could agree to work together. As to the press, if agriculturists made themselves more powerful through that unity which he advocated their speeches on important questions would be more likely to be reported. Their influence would then be more spread over the whole country. He hoped that some action would be taken in the matter, as otherwise his time would have been wasted in writing the paper and theirs in listening to it.

On the motion of Dr. Voelcker, seconded by Mr. Meehi, a vote of thanks was given to Mr. Edwards for his paper; after which, on the motion of Mr. Dring, seconded by Mr. Phipps, M.P., a vote of thanks was given to the Chairman.

Chambers of Agriculture.

CENTRAL.

The first Council Meeting of the Central Chamber of Agriculture took place Nov. 6, at the rooms of the Society of Arts, Adelphi, the chair being occupied (in the absence of the President, Sir George Jenkinson, M.P., through indisposition) by Mr. Pickering Phipps, M.P.

After the usual preliminaries,

Mr. Jabez Turner said he had that morning to carry out a duty which was of a very painful character, and he was sure the object of it would meet with a very cordial response from every member of that Council. Since they last met the cause of agriculture generally had sustained a very serious, a very severe, and he feared an almost irreparable loss by the lamented death of Mr. Thomas Christopher Booth (Hear, hear), who was so well known to every member of that Council, not only in his capacity as a breeder of Shorthorns, but as the champion of the rights of the English producers of cattle, of whatever breed, against the importation of disease from abroad (Hear, hear). He knew personally that the exertions which Mr. Booth underwent during the long and arduous time that he was before the House of Commons, in connection with Mr. Jacob Wilson, had a very considerable effect upon his general health, and in all probability it hastened the end which now as agriculturists they so much deplored (Hear, hear). The only reason he had for appearing before them that day to bring that question thus prominently forward, was that he thought that Council would feel that it was a duty which they owed to the memory of that distinguished man, not by any vote of money to aid in the memorial about to be raised, but by a unanimous vote of the Council to determine that a letter of condolence should be signed by the Chairman and sent to the widow and family. As regarded the terms of that letter, he had no doubt that the Chairman would be well able to express the feelings and sympathies of the Council and of agriculturists generally in reference to the services of the late Mr. Booth and the almost irreparable loss which they had sustained (Hear, hear).

Mr. Jonathan Dunn said that motion required no seconder, but as a matter of form he begged as a representative of the Yorkshire Chamber to be allowed to second it. Mr. Booth was well known as a resident in that county, but his name was also extensively known throughout England, and he believed there was a universal feeling of regret at his death among the local Chambers. His arduous and generous labours on behalf of agriculture generally, especially in reference to the protection of British cattle against foreign disease, were highly appreciated, and he was sure there would be a cordial assent to the proposal that a letter of condolence should be addressed to his family on behalf of the Council.

Captain Craigmie observed that it was almost certain that so much of the Contagious Diseases (Animals) Bill as was sanctioned by the Legislature could not have been carried but for the services rendered by Mr. Booth.

The Chairman said he was quite sure there would be no dissentient voice on that subject, and that anything they could do to mark their sense of the value of Mr. Booth's services to agriculture, and which might tend in some measure to alleviate the sorrow of those whom he had left behind, would be done with the greatest readiness.

The motion was then adopted.

In the absence of the Chairman of the Local Taxation Committee (Mr. Pell, M.P.), Capt. Craigmie presented the Annual Report of the Local Taxation Committee, which we hold over till next week.

Capt. Craigmie moved, and Mr. H. Neild seconded, the reception of this Report, and the motion was adopted with the understanding that any discussion on the contents was reserved for the Council meeting in December.

Mr. Caldecott observed that at the corresponding period of 1877 the Local Taxation Committee had a balance in hand of £455, while the balance now reported was only £307, adding, that unless something were done to increase the amount at the Committee's disposal they would be placed in a very awkward and inconvenient position, and their work might be impeded for want of funds.

The meeting then proceeded to consider "The Weights and Measures Act, 1878."

The Chairman, after alluding to the presence of Mr. Chatterton, Secretary of the National Association of British and Irish Millers, read the following resolutions, communicated by him as having been adopted at a large meeting of that Association held at Mark Lane on the previous day:—

"This meeting is of opinion that grain of all kinds, and the dry products thereof, should be sold by weight only. This meeting is of opinion that the cental of 100 imperial standard pounds would be the most convenient selling standard, and would be glad to see it become a legal denomination for general use."

"This meeting is of opinion that a deputation consisting of members of the Chambers of Commerce and Agriculture, Corn Trade Associations, and of the National Association of British and Irish Millers, be arranged to wait upon the Board of Trade, in order to secure the objects included in the foregoing resolutions."

In reply to a question from the Chair as to what course the Association which he represented intended to pursue in order to secure the co-operation of local Chambers of Agriculture,

Mr. Chatterton said he had addressed a communication to the committee of nearly all the local Chambers of Agriculture throughout the country stating that they intended to apply to the Board of Trade, and asking that the matter might be brought before the members. He had received about 20 replies, and probably within a few weeks the subject would have been discussed by most of the provincial Chambers, and he hoped that with such assistance they would be enabled to make a successful appeal to the Board of Trade. Probably some conclusion would be arrived at that day with regard to the period when the Board of Trade might be appealed to, and in that case the Association would endeavour to make arrangements accordingly.

The Chairman said they must all feel indebted to Mr. Chatterton for his courtesy in placing the resolutions before the meeting, and he had no doubt steps would be taken for enabling the Central Chamber to co-operate with the Association (Hear, hear).

Mr. Caldecott then moved the following resolution:—

"That this Council reiterates the resolution passed on November 2, 1869, to the effect that all solid agricultural products should be sold by weight only."

Mr. H. Neild in seconding the resolution observed that it was exactly the same as one passed recently by the Lancashire Chamber.

Mr. J. Howard thought the mover should explain what was meant by the resolution. He did not understand whether it was intended to express an opinion that it was desirable that corn should be sold by weight as was used by the cental, or whether what was meant was that Parliament should step in and determine that that should be done. They were very distinct questions.

Mr. Caldecott said the resolution was to the effect that agricultural produce should be sold by weight only.

The Chairman remarked that there was nothing in the resolution about the cental.

Professor Willis Bunn said it went far beyond anything in the Act. They were asked to declare in effect that the Act of 1878 was altogether defective and wanted amending. That Act did not say that all corn should be sold by weight, but left the matter open. What was now proposed was a new point of departure, and involved a very serious question.

Mr. Arkell thought there ought to be as little that was like revolution in agricultural matters as possible. He did not deny that they wanted uniformity, but there should be as little loss to the farmers as possible. He objected to people being compelled to adopt weight, and was of opinion that it would be sufficient to declare that a certain weight should be equivalent to an imperial bushel. He would move,

"That this Chamber is of opinion that an equivalent in weight of wheat, barley, and oats to the imperial bushel be fixed by the Board of Trade, and that the Council suggests 60, 50, and 40lb. respectively for those products." The quotations would be the same whether the price were given by the bushel or by weight, provided the Chamber and the Board of Trade could agree as to what weight should constitute a bushel of wheat, a bushel of barley, or a bushel of oats (laughter, and cries of "Impossible").

The amendment fell to the ground for want of a seconder.

Mr. D. LONG said the Gloucestershire Chamber had passed a resolution to the effect that any Act of Parliament which recognised measure as a standard of weight would be a mistake, and he believed it would be so because it would cause quibbling between buyer and seller. He thought that all agricultural produce should be sold by weight, not merely wheat, barley, and oats, but also potatoes, fruit, &c.

A MEMBER observed that there was nothing definite in the resolution.

Mr. J. HOWARD: Then what is the use of it?

Mr. CALDICOTT: It is only an expression of opinion.

Mr. BOWEN JONES wished to call attention to the fact that the resolutions on the agenda connected with that question were drawn up by the Business Committee in accordance with resolutions passed by local Chambers of Agriculture. He would also point out to Mr. James Howard and Professor Willis Bunn, that they were not contrary to the spirit of the Act of last Session. There was nothing in the Act to prevent weight only from being selected as the standard, and he believed the agricultural community were unanimously of opinion that selling by weight only would be the best system.

Mr. T. DUCKHAM said a similar resolution to that now proposed was passed by the Council eleven years ago. He would move as an amendment,

"That in the opinion of this Chamber it should be rendered compulsory that all solid agricultural produce should be sold by weight only."

The Act of last Session was merely a repetition of what had existed for the last 30 or 40 years, during which there had been a chaos of confusion throughout the length and breadth of the land.

The CHAIRMAN reminded the meeting that the Board of Trade had power to comply with the resolution as proposed, but had not power to make the selling of corn by weight compulsory.

Mr. Duckham's amendment, like the preceding one, fell to the ground for want of a seconder; and the resolution was adopted unanimously.

Mr. T. WILSON then proposed the next resolution, viz.:—
"That this Council considers that the cental of 100lb. should be the standard adopted."

He said he preferred the word "cental" to the words "100lb.," because the latter meant different things in different counties as used in the selling of corn. In Liverpool the cental had been in use for the last twenty years, and if everything were sold by the cental every one would know what he was doing.

Mr. T. DUCKHAM felt great pleasure in seconding that resolution in 1869, and equal pleasure in seconding it now. The cental would be the best for all kinds of cereals, and he hoped to see it made universal.

Mr. MASFEN moved as an amendment:—

"That it is desirable that the hundredweight of 112lb. should be adopted as more convenient than the cental of 100lb."

The adoption of the cental was, he observed, proposed in his Chamber on the previous Saturday, and the proposer found a seconder, but no other member voted for it. To make the cental universal would be to revolutionise the existing system of weighing throughout the kingdom—the ton of 2,240lb., the cwt. of 112lb., and the minor weights; and he thought the Council should pause before advocating what would require every one to get new weights. Liverpool was the only town where the cental was used at present; and he believed any attempt to enforce its use would meet with general disapproval among men who were largely concerned as corn merchants or as vendors of agricultural produce.

Mr. CHATTERTON said there was a strong majority at the Mark Lane meeting of the day before in favour of the cental, and not more than 50 persons out of 500 were opposed to it.

One or two gentlemen expressed their dissent from this statement.

Mr. ST. JOHN ACKERS in seconding the amendment, said it coincided with the opinion of the Wilts Chamber, which he represented. The Act of last Session did not prevent any measure which was now legal from being legal in future; all that it did, and that was done very properly, being to prevent people from selling by a measure which professed to be what it was not.

Mr. LAWOOD (Wilts) thought the resolution required careful consideration before it was assented to by agriculturists. It would certainly be more business-like for corn to be sold by the cental than for it to be sold as it generally was at present; but they must consider what a revolution the alteration would involve, and take a broad view before they voted for establishing an entirely new system of buying and selling. He thought it would be better to defer the matter until they had a money currency of a decimal character.

Mr. PELL, M.P., wished to say a few words for the purpose of clearing away misapprehensions which appeared to him to exist among speakers not only there, but generally throughout the country, with regard to the effect of the Act. He served on the Select Committee, and he knew that the Act was intended to be nothing else scarcely than a Consolidation Act (Hear, hear). It embodied a great many of the provisions of old statutes, and contained very little indeed that was new. What was new in it went in the direction of encouraging and promoting the adoption hereafter of the metric system; but there was nothing whatever that could compel its use. At the end of the Act there was a very useful table of equivalents belonging to the metric system, which was no doubt very instructive to the country, and might lead to the adoption of what was in his judgment the best system of weights and measures. The resolution now before the Council was, like that which had been adopted, merely suggestive. There was not a word in those resolutions which implied legislation. If there had been he should have opposed them, because he could conceive nothing more extravagant than to pass a Bill by which it would be made compulsory upon Englishmen to sell their corn by a cental of 100lb. or aliquot parts of it; but he thought the effect of passing the resolutions would be to encourage the general adoption of a system of selling by weight would be an approach at least to the decimal system. They should ask the Board of Trade to exercise the power given to it by the Act of verifying a new standard, and he thought the new standard should be not 100lb. but 50lb.

Mr. H. NELLIS said it was his intention to move that the cental should be recognised under the Act of Parliament as well as other standards. At Manchester there were no less than five different weights for a bushel of potatoes, and, considering what an immense amount of that kind of produce came there from England, Scotland, and Ireland, it was easy to see what difficulties must arise from that cause. It was estimated that about £4,000,000 was invested in the existing weights, and it was of course very undesirable that that capital should be sacrificed; but he believed that the matter might be so arranged by the Board of Trade that the present scales and weights would verify themselves.

Mr. JABEZ TURNER thought they ought to be very careful how they committed a representative body like that to any special arrangement which would make compulsory the use of any particular weight or measure (Hear, hear). He could not help thinking that the grievance complained of was somewhat of a sentimental one, and that the Act provided for all that was necessary as between buyer and seller (Hear, hear). It provided, as he read it, that a pound should be a pound, and that a bushel should be a bushel; it provided, in fact, that whether a man sold 100lb. or 20,000lb. of wheat the buyer should get 100lb. or 20,000lb. If the Manchester district or any other district wished to substitute 100lb. of the present standard there was nothing to prevent that now. A bushel was not a weight, it was a measure of capacity. A bushel of barley grain on good land was not the same weight as a bushel grown on fen land. They ought to be very careful how they imposed an additional burden on the British farmer by requiring him to buy new weights for every farm he occupied (expressions of dissent). At all events what was proposed would cause a great deal of trouble, and it would be better to do something for the relief of the farmer than to inflict on him an evil of that kind.

Mr. DUNN (Yorkshire) would be very sorry if the Council were to lose that opportunity of strengthening the movement for establishing uniformity. They had already passed a resolution declaring that it was desirable that all solid agricultural produce should be sold by weight. If they adhered to the pound of 16 ounces the present confusion throughout the country would continue; they would have one market selling by 60lb., another by 100lb., and another by 150lb., and when they took up a newspaper to ascertain the average prices

throughout the country they would have the same difficulty as they had at present (Hear, hear). The object should be to arrive at something like an equality of weight as regarded all kinds of produce. They did not want to sell by the pound, but to sell through some useful weight which could be adopted throughout the country. If the present agitation should receive general support the Board of Trade might issue regulations which would become something like compulsory throughout the country, and the result would be the establishment of general uniformity. The greatest practical difficulty connected with the adoption of 100lb. as the standard weight related to the capacity of the sack, but that was a difficulty which might be overcome.

The amendment was then put and negatived. The numbers being 10 for and 13 against it.

On the motion of Captain CRAIGIE, seconded by Mr. D. LONG, the following resolution was afterwards adopted unanimously:—"That the Council memorialise the Board of Trade to duly verify the cental as a new imperial denomination and provide a standard of one-half this weight."

The Committee was afterwards nominated, the members of it being Mr. W. Stratton, Mr. T. Duckham, Captain Craigie, Mr. T. Willson, Mr. Bell, Mr. Adkins, and Mr. Dunn.

The Council then proceeded to consider the next question on the agenda—viz., "What steps should be taken by the Council towards securing legislation, with reference to County government?"

Mr. H. NEILD thought the best plan of proceeding was for the Secretary of the Central Chamber to send a communication to all the local Chambers throughout the country, calling their attention to the matter, and asking them to lay before the Council at its next meeting their view, with regard to the County Government Bill. That he conceived would be the best way of preparing for action, and it was clearly very desirable that something should be done as speedily as possible to secure a better county representation in the administration of all kinds of expenditure, which were dependent on local rates.

The CHAIRMAN observed that there was a notice of motion on the agenda, that the Prime Minister should be requested to receive a deputation on the subject, and asked whether any gentlemen wished to move that?

Mr. CALDECOTT said the matter was discussed at the Warwickshire Chamber, which he represented, on the previous Saturday, and that Chamber expressed, in general terms, an opinion that it was desirable to urge on the Government the necessity of passing a County Government Bill, but not to ask for a deputation to the Prime Minister. He believed that such a deputation would result in nothing but a babble of confusion; because the different Chambers were not agreed as to the manner in which the object should be carried out.

The SECRETARY (Mr. Algernon Clarke) said, he had received communications from some of the associated Chambers; but they were of a very general character, and almost limited to a recommendation that some action should be taken.

Mr. H. NEILD moved a resolution to the effect that a communication should be addressed by the Central Chamber to all the local Chambers, requesting them to express their views on the subject of the formation of representative County Boards.

Mr. LYWOOD having seconded the motion.

Mr. W. STRATTON said he had no doubt the Government would feel obliged to Mr. Neild for what they would regard as an attempt to shelve the question for a considerable period (Hear, hear).

Mr. NEILD said he would withdraw his resolution if he thought that would be the case (Hear, hear).

The CHAIRMAN said the Secretary had informed him that the local Chambers of Agriculture throughout the country, having been invited to express their opinions on the subject, some answers had been received which were not very definite, and that the result was that the Business Committee, after full consideration of the matter, placed on the agenda, as being more in accordance with the views expressed than anything else the notice of the motion which had just been referred to.

Mr. PELL, M.P. said he did not wish to see any resolution at all passed on that question, because he thought nothing which they might do on that occasion, would at all accelerate the passing of a Bill. For his own part he was content to rely upon the fact that the Government made the Bill of last

session a Government measure, and that on a trial of strength in the House of Commons on the question whether it were desirable that such a measure should be passed or not, an enormous majority voted in favour of it. It appeared to him that the adoption of any such resolution as that on the agenda would imply a doubt as to the intention of the Government in reference to the future. In his opinion the sending of a deputation to the Prime Minister would damage the cause immensely. He was not inclined to join in any such deputation, but he was prepared to support a Bill drawn on the same lines, as that of last session, and he should feel greatly disappointed if such a Bill were not introduced by the Government.

The CHAIRMAN said he was sure it could not be supposed by anyone that the Chamber considered the matter one of no importance, on the contrary they wished to see a Bill passed as soon as possible.

Mr. LUNGTREES thought that the Council ought to take some steps in the matter. It had been widely reported that farmers did not care about the passing of a Government County Bill, and if the Council did nothing, then that idea might be strengthened.

Capt. CRAIGIE said he would move the following:—"That this Council confidently relying on the introduction early next session by Her Majesty's Government, of a County Government Bill, passes to the consideration of the next subject."

This amendment having been seconded was put and carried, the next subject for consideration being "The working of the Highways Act, 1878."

Professor WILLIS BUND said he wished to allude to one point connected with the practical working of the Act, of very great practical importance. The 26th clause provided for the making of bye laws by the county authorities, with regard to the vehicles which used the roads; but it appeared that the bye-laws of different counties might differ very much, and that a very serious burden, or difficulty would thus be thrown upon agriculturists. Under that clause, power was given to every county authority to fix the minimum of the tire of wheels. There was a little town in Worcestershire, the vehicles of which had to pass through four counties in order to reach a railway station, and the effect of having different bye-laws in each county with reference to wheels must be very serious. He would suggest, therefore, that a committee should be appointed by the Chamber to draw up a code of bye-laws suitable for general use, and forward them to the different local chambers for consideration, with a view of securing as far as possible, uniformity. There were great differences of opinion with regard to locomotives, and there, again, it was manifestly desirable that whatever rules were established should not be applicable only in one county. If farmers were compelled to provide new wheels for their waggons, that would be a serious practical grievance, and his object was to prevent evils of that kind.

Mr. JAMES HOWARD in seconding the motion said the advantages of uniformity were so obvious that he need not dwell on that point, and he thought the object would be best attained in the mode suggested by Professor Bund. When such questions as those just mentioned came before magistrates in Quarter Sessions they had great difficulty in dealing with them, and they were not easy questions, even for a practical man to solve. He had that morning met Lord Spencer, the Chairman of the Northamptonshire Quarter Sessions. His lordship told him that he was just then going to the office of the Local Government Board because he felt great doubt and difficulty with respect to that subject; and on his informing him of the proposition which was about to be made in that Chamber, he said that in his opinion its being carried out was very likely to afford great assistance to the magistrates in the settlement of bye-laws.

After some further discussion the motion was adopted, and the proceedings terminated with a vote of thanks to the Chairman.

EAST RIDING.

The monthly meeting of this Chamber was held at Beverley on November 2. In the absence of the President, Mr. W. Barnton, of Beverley Parks, was called to the chair. The

Secretary (Mr. Tom Turner) laid before the meeting certain orders made by the Privy Council under the Contagious Diseases (Animals) Act. He then stated that Mr. Norfolk, who had promised to read a paper at this meeting on thrashing machines, and their protection as contemplated by Act of Parliament on the subject, had been unable to finish it, and would defer the reading of it till the next meeting.—The Chairman alluded to the Weights and Measures Act, legislation with regard to the County Government Act, and the working of the Highway Act of 1878. The Chairman thought it was the duty of the Chamber to watch these measures very narrowly, and to take such measures with respect to them from time to time as might be desirable. A uniformity of weights and measures throughout the country would, he considered, be of great advantage. The Highway Bill was a most important one, and he believed when it got into working order it would be found to be a good measure. Referring to the Cattle Diseases Act, his opinion was that disease had very much decreased since the strict regulations with regard to their transit had been enforced.

HEREFORDSHIRE.

On the subject of the Weights and Measures Act this Chamber has resolved that all corn, fruit, and roots should be sold by weight and all liquids by measure, that a uniform standard of weight should be enforced, and that the cental would be the best standard. The Highways Act the Chamber declared to be not comprehensive enough, the exemption of quarter session boroughs from the rate was condemned, but the provisions of the Act as to excessive traffic and Eye-laws were approved.

NORFOLK.

The Highways Act, 1877, was discussed at a meeting of the Norfolk Chamber of Agriculture on November 2, Mr. R. T. Gurdon presiding.

The CHAIRMAN, who expressed an opinion that the Act could not possibly be worked without the formation of highway districts and the appointment of the sanitary committees of the Boards of Guardians as highway authorities in their unions, moved the following resolutions:—

"1. That this Chamber most strongly protests against the unfair proportions of highway expenditure which is to be borne by owners and occupiers of land, and which injustice is perpetuated by this Act.

"2. That this Chamber regrets that country representative boards have not yet been formed to control the management and carrying out of this and similar measures.

"3. That this Chamber, believing it extremely difficult to carry out this Act without the formation of highway boards, is in favour of their being formed at once."

Mr. C. S. READ, M.P., while thinking the Act an unsatisfactory one, considered that it ought to have a trial before highway boards were formed. It would be unjust to make parishes which now had good roads pay towards putting bad roads in other parishes in good repair; and, as the county authority now had power by a simple method to force parish authorities to do their duty, farmers should wait awhile before forming highway boards, which, in spite of the improvement now effected in the Act of 1862, he heartily detested.

The result of the debate was that the first two resolutions were carried, but the third was lost, an amendment being adopted in accordance with the views expressed by Mr. Read.

STAFFORDSHIRE

At a meeting of the Stafford Chamber of Agriculture on November 2, presided over by Mr. Hanbury, M.P., the Weights and Measures Act of last session was discussed and approved of; but a motion that the cental of 100 lb. afforded the simplest definition of weights for grain, flour, fruit, &c., was unanimously negatived, and an amendment in favour of the present 112 lb. was carried. It was also resolved, on the motion of Mr. Hanbury, to ask the Government to reintroduce the County Government Bill next session.

SUNDERLAND.

The quarterly meeting of the Sunderland Chamber of Agriculture was held on November 2, at Mr. Bell's, the Three Crowns Inn, High Street. In the absence of the President, Mr. E. L. Featherston, J.P., Mr. Sausfield Richardson, a vice-president, occupied the chair.

The SECRETARY (Mr. J. N. Lawson), reported the business transacted by the Council since the last quarterly meeting.

The CHAIRMAN said, with regard to the new corn market, the meeting was aware the Corporation had appointed a special committee to take the matter up. This he regarded as a hopeful sign, and no doubt after the November elections were over, they would hear something further on the matter. The Garrison site was the one under consideration at present, and the borough surveyor was engaged in preparing two plans, one for a corn market, and the other for a corn, vegetable, and dairy produce market. So soon as he had anything to report to the Chamber they might depend on his doing so. With respect to the appointment of an analyst to the Chamber, the Chairman moved that the Secretary address the Secretary of the Newcastle Chamber, with a view to obtain particulars in reference to the appointment of an analyst in that town.

Mr. HUTCHINSON seconded the motion, which was carried.

The SECRETARY laid before the meeting copies of the Weights and Measures Act passed during the last Session of Parliament, and which is to come into operation on the 1st of January next.

After a short discussion, Mr. PATTON HUTCHINSON moved the following resolution:—

"This meeting having considered the Weights and Measures Act, which comes into operation on the 1st of January, 1879, expresses general approval of it, and is of the opinion, if any standard weight is legalised, and made compulsory throughout the country, the cental of 200lb. would be the most convenient weight."

Mr. J. H. SPRAGGON seconded the motion, which was carried unanimously. It was agreed to send a copy of the resolution to the Central Chamber of Agriculture.

WEST RIDING.

A meeting of the Council of the above Chamber was held on November 1, at the Strafford Arms, Wakefield, Mr. F. Adley, of Cudworth, presiding. Some conversation took place in regard to the revision of the rules, and it was resolved to recommend that the number of members of the Council should be increased.

A resolution was passed approving of the Weights and Measures Acts, so far as it enforced uniformity of weights and measures.

On the motion of Mr. Wordsworth, a resolution was passed that the meeting considers it desirable that a comprehensive County Bill should receive the attention of Parliament. The working of the new Highways Act, which will also receive the attention of the Central Chamber, was also brought before the meeting, but nothing definite was agreed to, the opinion of the meeting being that sufficient time had not elapsed to allow the members to express an opinion on the subject.

WORCESTERSHIRE.

A meeting of the Council of the Chamber was held on November 2, at the Crown Hotel, Worcester, Mr. G. Whitaker-Wilson in the chair. The Weights and Measures Act was discussed at some length. The feeling was unanimously in favour of uniformity, but the proposal for the adoption of the cental did not find universal favour, it being thought by some speakers that the use of the hundred-weight of 112 lb. would obviate the necessity for the provision of weights. Ultimately, however, a resolution in favour of the adoption of the cental was carried. A discussion ensued upon the new Highways Act, and it was decided to support any resolution of the Central Chamber for securing uniformity of bye-laws throughout the kingdom.

GENERAL VIEW OF BRITISH AGRICULTURE.

PART III.

THE GOVERNMENTAL CONNECTION WITH AGRICULTURE.

There is no Minister of Agricul'ure in Great Britain, and no attempt is made by Government to interfere with the cultivation of the soil, or between the landowners, the tenants, and the labourers. There are no State flocks, or herds, or horse-breeding establishments, nor any State schools of agriculture. In Ireland such schools, and several experimental farms, were established at the cost of the Government, at the time of the potato famine. In the disorganised state in which that country then was some benefit ensued. But the general principle of our political system is that every trade and business should be self-supporting, subordinate only to the general laws, and controlled by the rule of free competition. The political influence possessed by the landed interests insures for them adequate representation in the Government, and their great wealth endows them with the means of promoting all objects of general interest to them as a class. The Royal Agricultural Societies in England and Ireland, and the Highland and Agricultural Society of Scotland, are the self-supporting national institutions of each kingdom for the promotion of agriculture. And, besides great provincial Societies in various parts of the country, there are in every county one or more local Agricultural Societies for the same object. These are all self-supporting, having neither stipend from the State nor being subject to its control. The good result of this principle is seen in the successful manner in which they have evoked friendly competition amongst all classes connected with the land, and disseminated in every part of the country a knowledge of the best breeds of live-stock, and of the most improved instruments and processes of agricultural development.

The only department of the State which has a direct connection with the land is the Inclosure Office, which combines several objects, more or less appertaining to landed property, but with no power to interfere except when applied to for the means of facilitating improvements. The costs of all proceedings effected through this department are provided by those who make use of it. Its original object was to promote the inclosure of waste lands, and thereby to increase the home produce of food, and afford increased employment to the agricultural labourers. These objects, so far as they were necessary, have to a great extent been otherwise accomplished, and the agricultural labourer has become happily independent of such aid. The duty of this branch of the Office now is not to promote inclosure with the object of dividing the land among severalty owners, except in cases where by no other means could its improvement be effected, but to encourage the improvement of "commons" under a system of regulation, by which the land may be drained, planted for ornament and shelter, and the surface be improved for pasturage, without excluding the public from its enjoyment by a division into severalty ownership. Advantage of the Office has from time to time been taken by Parliament for objects of an analogous character. The Drainage and Land Improvement Acts are administered by this Commission, the object of these Acts being, as already explained, to permit landowners to borrow money for permanent improvements, and to charge their lands with the cost of these on the principle of such annual payments as within a definite period will reimburse both principal and interest. The control exercised by the Government department insures that the proposed improvement shall be both beneficial and well executed, and that the future possessor of the property may not find himself on his succession called on to pay for unprofitable outlays made by his predecessor. But any Government control in such circumstances is really the fruit of the artificial system of entail and settlement.

The Office is also entrusted with the formation of commissions for the drainage of districts liable to floods, under which works embracing large areas of country are carried out under a general system, the cost being levied on the landowners in proportion to the advantage they receive. In the execution of this duty it has been found that the applicants in many cases have erred in not including the whole of the area,

which should naturally fall under one control, and so failing to secure uniformity over the whole of the catchment basin affected.

Floods in river valleys in autumn, and winter, and spring provide rich irrigation for the land, the mud in which subsides when the waters are for a time partially stagnant. They are very beneficial if not permitted to remain too long. Land subject to such floods should never be broken up from grass, as in no other way in this country can it be more profitably used. Before under-drainage became so general, the floods came down much more loaded with sediment, and therefore much more enriching than now, when the rains of the uplands pass through and are filtered by the soil. Summer floods are injurious, but they are rare, and if once in twenty years they injure or even carry off the hay, there is some compensation in the heavy crops of aftermath that follow. If the natural beds of the rivers were kept free from obstruction there would be far more benefit than injury from floods.

But in earlier times, before steam power was known, water-power was found a valuable aid for both mills and navigation. Weirs and dams were then constructed, and water rights have grown up which greatly hamper arterial drainage. Towns on the river banks, though generally built above flood-mark, are injured by long-continued floods; and their interests, as well as those of the land, are concerned in removing all artificial obstructions. There is no longer any necessity for these, as steam-power can everywhere be substituted for water-mills, and the tedious delays of barges be superseded by the quicker and more certain conveyance by railways. The barge navigation was attended by one benefit, as, in order to maintain the adequate depth of water, it was necessary to keep the bed of the river free from the natural growth of weeds which otherwise impede the current, and cause deposits of mud which gradually contract the outfall. Questions of compensation, however, arise when rights of any kind are touched, and hence the need of some authority to control and reconcile opposing interests.

The Inclosure Commissioners have power, upon application being made to them, to recommend the formation of drainage districts, which may embrace either the whole or a part of a river basin. So far as their experience has gone, it is in favour of placing each river basin as a whole system under competent authority, with power to that authority to form sub-districts for the management of each, with representatives at the general Board which controls the whole. As the object is not to prevent floods, but to limit the period of their stagnation, it is seldom that any great engineering operation is required.

Another most useful branch of the Office is the very extensive power entrusted to the Commissioners to carry out exchanges and partitions of land. By their aid any two landowners can, at very trifling expense, correct any irregularity in the boundary of their respective estates, or even exchange entire farms or estates. This may be done without any risk or investigation of title, by the simple process of attaching to the lands exchanged all the accidents of title, tenure, and incumbrance which formerly belonged to each other. The only questions requiring the decision of the Commissioners are: Is the exchange beneficial to the two estates? Are the parcels proposed to be exchanged equal in value? or within one-eighth of an equality in value? When satisfied of this, the Commission authorizes the exchange, and the one parcel immediately, for all purposes, takes the place of the other. So that if the title of either be thereafter found faulty, the person who may recover will have, not the land with the faulty title, but that which the Commissioners have put in its place, and clothed with all its liabilities. Certain notices must be given; the order of exchange is not confirmed until three months after the notice, and if during that period any person dissents who is entitled to any estate in, or charge upon, either of the lands proposed to be exchanged, the Commissioners withhold their confirmation while the dissent continues. From time to time the powers of the Commission

have been extended to comprise all cases omitted from the original statute. All hereditaments, corporeal and incorporeal, may now be exchanged with ease and at a very moderate cost. In quality in value to the extent of an eighth may be compensated by a rent-charge annexed to the less valuable and charged upon the more valuable property.

The extent to which this beneficial and inexpensive power is used is very considerable. It is mostly in the rectification of boundaries, or the exchange of intermixed lands, and in many cases to facilitate building operations, and embraces annually from 6,000 to 10,000 acres, having a value of from £100,000 to £500,000.

WASTE LANDS AND COPYHOLDS.

The past result of the inclosure of waste lands under the control of the Government may be learned from a return to an Order of the House of Commons, made in 1873, which showed the extent of common and common field lands then in England and Wales to be 2,632,000 acres, about one-fourteenth part of the whole surface of that country. Probably one million acres of the whole are capable of improvement by reclamation, drainage, or planting. Previous to the passing of the General Inclosure Act of 1845, 2,540 inclosures had been sanctioned by private Acts of Parliament, under which 2,142,000 acres of waste land were inclosed. The inclosure since 1845 have added 610,000 acres, so that up to the present time 2,757,000 acres altogether have been thus redeemed from waste.

The results of the inclosures since 1845 present some interesting facts in regard to the subdivision of land, and the addition made to the number of small landowners in the country, and the public works of improvement carried out under the process of inclosure, which are worthy of record. This is altogether independent of the individual and public advantages arising from the reclamation and agricultural improvement of the land itself. The 600,000 acres dealt with since 1845 have been divided among 26,000 separate owners, in an average proportion of 4½ acres to each lord of the manor, 2½ acres to each common-right owner, and 10 acres to each purchaser of the lands sold to de ruy part of the expenses. In many cases the expenses were raised by rate among the persons interested, but this was optional, since such persons had the alternative of selling a portion of the land for that purpose. With that object 35,450 acres were sold, chiefly in small lots, to 3,500 purchasers. The lords of the manors, 620 in number, received as compensation for their rights in the soil, on an average, about one-fifteenth of the acreage of the wastes. These wastes of manors were, under the Act of 1845, made subject to the setting out of allotments for public purposes, and in this respect were distinct from the commonable lands, which are undivided private property, and were not made subject to public allotments.

As this is the largest and most general distribution of land into small properties that has taken place in this country in recent times, it was desirable to know the quality and occupation of the persons into whose hands these lands have passed. To discover this, the legal description both of allottees and of purchasers of sale allotments, was taken from inclosures in which that description is given, one in each of the following counties, viz., Bucks, Cumberland, Chester, Devon, Essex, Hants, Herts, Lancaster, Norfolk, Oxford, Stafford, Sussex, Worcester, and, in Wales, Carnarvon and Carmarthen. Upon this basis, and so far as such an average can be accepted, the proportionate numbers of the different classes of the 26,000 landowners amongst whom the land has been divided are as follows:—Women and farmers, 4,836; shopkeepers and tradesmen, 3,456; labourers and miners, 3,168; esquires, 2,624; widows, 2,016; gentlemen, 1,934; clergymen, 1,280; artisans, 1,067; spinsters, 800; charity trustees, 704; peers, baronets, and sons of peers, 576; professional men, 512; and about 3,000 others in gradually diminishing proportions, but comprising nearly every quality and calling, from the Crown to the mechanic, quarryman, and domestic servant. The influence of this change has not been confined to particular counties, but has been more or less felt in all. It has made an appreciable addition to the number of small landholders in England, bringing upon hitherto comparatively unproductive wastes the individual interest and intelligence of a numerous and varied body of persons, by whose industry the best of these lands have been made not only useful to

their owners but have become available for sale and purchase, and, in their improved condition, for bearing their just share of county and parish rates and public taxes.

More than two millions of miles of public roads have been constructed in connection with these enclosures since 1845, at the cost of the common right owners, in addition to the numerous accommodation roads set out for their special use in giving convenient access to their several allotments. Other works of a public nature, such as embanking and straightening the course of rivers connected with inclosures, have been executed. The value of lands devoted to public objects, at the cost of the owners of common rights, is equal to one-eighth of the whole value of the land inclosed.

The total estimated value of the wastes inclosed amounts to £6,140,000. The value of the land taken from the best of this for public purposes (comprising land for recreation fields, gardens, public squares, fairs, schools and churches, burial-grounds, public roads, and other purposes) has been estimated at £282,140. To this must be added the cash, raised by rate, or sale of property, and expended on the construction of public roads and other public works connected with inclosures, £473,500, making together, £755,640. Comparing this with the fee-simple value above mentioned, it appears that nearly one-eighth of the whole value of the wastes inclosed has, under the direction of the Commissioners, and with the assent of the proprietary interests, been devoted to objects of public utility and convenience. Thus, in the course of one generation, an extent of land equal to that of a county has been redeemed from a condition of waste, and has been divided among a far larger and more varied body of landowners than that of any county in England. Valuable public works of great extent have been constructed, opening up for business and pleasure many otherwise inaccessible localities, and at no cost to the public. The area of production and employment has been increased, and in the same proportion that of public and local taxation has been extended. A great number of small landed properties have been created, and labourers' field-gardens in the rural districts have been afforded in larger proportion to the extent of the land than appears by the Agricultural Returns to exist elsewhere in England.

Though the best of the land was probably first dealt with, there can be little doubt that much of that which still remains uninclosed may be advantageously brought under the operation of the new law, which in the altered state of the circumstances since 1845, provides more fully for the public interests of the neighbourhood, and especially of large populations; and at the same time may yet be found, in less populous quarters, the useful instrument of affording some considerable extent of available land to the solid resources of the country.

Land or houses held by copyhold tenure may be enfranchised through the Copyhold Department of this Commission. These are held by record in the book of the lord of a manor, anciently on certain terms of service, now commuted into a money payment. The tenants of a manor, which was held by the lord from the Crown under ancient grant, gradually acquired the right to be placed on the court roll of the lord on the same conditions as their predecessors, and became entitled to demand copies of these conditions, which, so long as they were fulfilled, gave them a title to their estates. The conditions of the tenure are governed by the customs of the manor as shown in the rolls of the Manor Courts, and by constant and immemorial usage; and the title is simply a copy of the court roll, authenticated by the steward of the manor. Two conditions are essential: first, that the lands are parcel of, and situated within, the manor; and secondly, that they have been demised, or are demisable by copy of court roll immediately.

The ease with which a title can be given is the only advantage which this kind of tenure possesses, the uncertain nature of its services, reliefs, escheats, fines and heriots, and rights to timber, being a great obstacle to any kind of improvement. In 1841 the Legislature, with a view of removing these disadvantages, passed an Act for commencing manorial rights, and facilitating the enfranchisement of copyhold property. This was amended and extended by subsequent Acts of the Legislature. Since 1841 upwards of twelve thousand enfranchisements have been completed under the Copyhold Acts, and they are now proceeding, through the instrumentality of the Copyhold Commission, at an average rate of 600 a year. Besides these, a very large number have been effected throughout the different parts of the country, without the intervention of

the Office, owing to the stimulus to voluntary enfranchisement given by the Copyholds Acts. But though the number seems large, it represents probably but a moderate proportion of the whole, as wherever there is a manor there are many copyhold properties; and much yet remains to be accomplished before this injurious and obstructive kind of tenure shall altogether cease to exist. The Copyhold Commission was formed with the intention gradually to abolish copyhold tenure, beginning by offering facilities for voluntary enfranchisement, after which it should proceed to its object of extinction on the compulsory principle. Accordingly, after ten years' trial of facilities under the voluntary system, compulsory powers were given to either lord or tenant to demand enfranchisement, with further facilities again in 1858, which led to a rapid increase in the number of enfranchisements. Under the present Acts either lord or tenant (except where the copyhold is held without a right of renewal) may now apply to the Copyhold Commissioners to compel enfranchisement upon terms to be fixed by two valuers, one appointed by each, or by their umpire. And in small cases, not exceeding £20 of annual value, the amount may be assessed by a single valuer, nominated by the Justices of the locality.

The complete extinction of copyhold tenure is still far from accomplishment. And so long as any considerable extent of the land of this country, embracing a vast number of the smaller estates and houses, remains subject to manorial lines, whether certain or arbitrary—joint rights in timber, under which the tenant cannot cut without leave of the lord, nor the lord enter the land to cut without leave of the tenant; vexatious demands for heriots, and a species of control worse than double ownership—a very great bar is presented to the profitable use of such property, an evil naturally most felt in the populous parts of the country. The Copyhold Commission has now been in operation for thirty-five years, so that full time has been given to prepare and provide for the final extinction of this kind of tenure, as originally contemplated by Parliament. The simplest mode of doing so would be by enacting that within some definite number of years, say thirty, all copyholds then existing should become freehold. Till the termination of that period the right of either party to compel enfranchisement should continue, and the obvious interest of the lords to make the most of their opportunity would quickly bring about this transformation.

The Tithe Department of this Commission also administers questions connected with tithes for the support of religion.

CHURCH, CROWN, AND CHARITY ESTATES.

In the early period of Christianity in this country, among other ecclesiastical laws introduced from the neighbouring continent, the Scriptural principle of reserving for the support of religion a tenth part of the produce of industry was enjoined. This included not only a tenth part of the produce of the crops and stock payable in gross, but also a tenth of the clear gains from manual occupations and trades. This large proportion of the total produce of those countries which had embraced Christianity was apportioned, more than a thousand years ago, into four divisions: one to maintain the edifice of the church, the second to support the poor, the third the bishops, and the fourth the parochial clergy. Originally all the land in the country was titheable except such as belonged to the Crown and the Church itself. At the time of the Reformation much of the Church lands in this country passed into the hands of laymen, and continued exempt from tithe, and from various other causes a considerable proportion of the lands of the country has become exempted. As the country became more populous, and its demands upon the produce of the soil more difficult to meet, the payment of tithes in kind was found a great hindrance to improved agriculture, as men were naturally unwilling to expend capital for the purpose of increasing the produce, if another who ran no risk, and bore no part of the toil, had a right to share in that increase. Forty years ago it was determined that this should cease, and it was enacted that instead of payment in kind, tithes should be commuted into a payment in money, calculated on the average receipts of the preceding seven years, the actual money value to vary according to the annual price of corn on a septennial average, but the quantity of corn then ascertained to remain for ever as the tithe of the parish.

A very important change of principle here took place. Up to that time the income of the Church increased with the

increased value yielded by the land, the original object that the Church should progress in material resources in equal proportion with the land being thus maintained. From 1836 that increment was stopped. Since that time the land rental of England has risen 50 per cent., and all that portion of the increase which previous to 1836 would have gone to the Church has gone to the landowners. A tenth of that would not, however, by any means adequately represent the loss to the Church and the gain to the landowners; for the tithe in kind was the tenth of the gross produce, which was equal to much more than a tenth of the rent of arable land. In 1836 the money value of the tithe, as compared with the land rental, was as four millions sterling to thirty-three. In 1876 the tithe was still four millions, but the land rental had risen to fifty. If the old principle of participation had continued the annual income of the Church would now have been two millions greater than it is. Neither party anticipated a result to such an extent when the Tithe Commutation Act was passed, for not for twenty years after that time had the rent of land in England recovered the heavy fall it experienced at the close of the war in 1815. It was not until the vast development of industry, under a policy of free-trade, had so increased the general prosperity that the value and rent of land began steadily to rise. It then became plain that under the operation of a law intended simply to encourage agricultural improvement, the community represented by the Church, are gradually losing a part of their natural inheritance. The same change is in operation in the vicinity of the great cities and towns, where population and wealth increase and accumulate. An acre of land in such situations, which yielded in its natural state a rent to the landowner of £3, and to the tithe-owner of 10s., when converted to building, may produce a ground rent of £300, besides the reversion to the landowner at the end of a long lease of the whole of the property erected on it by his lessee. No doubt, since the Reformation, the Church has been limited by law to the agricultural increased produce, and was not entitled to demand a share of the building value. But it was not contemplated that the landowners should thus obtain the whole growing value of the land without leaving any part of it for the support of religion. The operation of this change has been chiefly in favour of the better class of lands, those which from their quality and position have risen most in value. On the poorest kinds of arable land—the cold clays and the thinnest chalk—the increased cost of labour has, in some exceptional cases, brought about a lowering of rent, while the tithe can undergo no diminution. The landowner in such case has to bear the loss, just as in the other he gets the gain.

In a country like this, in which the inevitable tendency of increasing wealth leads to the gradual diminution of small estates, there would be some considerable loss to the ranks of small resident proprietors by any change which should lead to the absorption of Church property. In every parish of the kingdom there is a resident landowner, who, as the clergyman of the parish, receives in residence, glebe, and tithe, about a tenth part of its rental, which he spends within it, and in return for which he is the minister of rich and poor. The number may be about 12,000 in England alone, with an average annual value of £300. As their income is in no way affected by the question of rent, their position is one of perfect impartiality between landowners and their tenants, and they are the natural friends of the poorer inhabitants. In proportion to the whole number of landowners in England the removal of this numerous body would strike out more than a fourth of those receiving above £200 a year, and probably much more than one-fourth of the resident landowners. This irrespective of the question of religion, would be a change of great magnitude in its social effect, which deserves careful consideration.

CROWN ESTATES.

Besides the domain and Great Park attached to the Royal Castle of Windsor, 14,000 acres in extent, there are comprised in the Royal patrimony upwards of 70,000 acres of land in the kingdom let in farms to agricultural tenants, and also house property in London, and land let on building leases, and considerably more than 100,000 acres of Royal forests. For the last twenty years this great property has been managed by two Commissioners, under the superintendence of Her Majesty's treasury, with great judgment and care, and at the moderate cost of less than 3 per cent. on the total re-

ceipts. The gross revenue has for some years shown a steady annual increase, and now amounts to £169,000. A large expenditure is annually made in maintaining and improving the property, but the surplus now paid annually to the Exchequer has risen above, and is likely to continue more and more to exceed, the annual amount of the Civil List. This is a sum assured by Parliament to the Sovereign, at the beginning of each reign, to defray the expenses of the royal household, by an arrangement continued from sovereign to sovereign from the time of the Revolution in 1688. The surplus income from the hereditary estates of the Crown, which was then precarious and uncertain, is by this arrangement during the reign of the sovereign paid into the public Exchequer, and a fixed sum of £555,000 is, in lieu of it, annually paid to the Queen for the maintenance of her State, and for the salaries and expenses of Her Majesty's household. In the period of forty years since the commencement of the present reign all expenses, both public and private, have largely increased, but no new demand on that account has been made on the public for an increase of the Civil List. And as the hereditary estates are now yielding to the public Exchequer more than it pays to the Queen, the remarkable and probably unique example is presented in this country of a great sovereign whose household and royal dignity are thus maintained without any cost to her subjects.

I am indebted to the Earl of Powis for the following interesting particulars in the business relations of the Crown with its agricultural tenants:—

The average rental of the agricultural land of the Crown Estates is at present rather more than 3s. 6d. per acre. Nearly the whole of it is let in farms of various sizes, on agricultural leases of 21 years' duration, subject to the reservation of all trees and substrata. The tenants are to reside on the premises; to cultivate according to the best mode of husbandry in the district; and within the last three years of the termination of the lease not to sow two white crops in succession, or to plant on the same land more than one crop of potatoes. The tenants to be entitled to one-half of the money expended by them in the last year of the term in the purchase of linseed, cotton, and rape-seed consumed on the premises, but not to an amount exceeding one-half of the average expenditure for such articles during each of the three preceding years. The right of shooting and sporting is not reserved from the tenants, except under very special circumstances. New buildings are constructed, and existing buildings improved, and under-drainage, roads, and other permanent improvements executed at the cost of the Crown. Terms of renewal are proposed to desirable tenants, two years before the expiration of lease.

CHARITY ESTATES.

The value and extent of land held in trust for charities in England alone is very considerable. Inclusive of rental-charges and fixed annual payments, the gross annual rental exceeds £1,558,000, derived from 524,000 acres of land, and the houses built thereon. Besides this, the Charity Trusts possess in Government Stock and other personality nearly £20,000,000, yielding an annual income of £640,000. Their total income from real and personal property is thus close upon £2,200,000.

This great property is held in separate endowments in all parts of England, in number estimated at about 50,000, which are administered by various bodies of trustees, such as municipal trustees, ministers, and parish officers, and in many cases by persons who may be termed private trustees, or such as are not trustees in virtue of holding any special office. These have been placed by Parliament under the general superintendance of a Government Department, the Charity Commission, which reports annually to Parliament upon the administration of the charities over which they possess necessary power of control.

The principal objects to which the funds were appropriated by the founders of the charities are education, apprenticing, and advancement of orphans; endowments of clergy, lecturers, and for sermons; Church purposes and repairs; maintenance of dissenting places of worship and their ministers; public parochial uses; support of almshouses and pensioners; distribution of articles in kind and money; medical hospitals and dispensaries. The property which has thus in the past been voluntarily devoted by benevolent persons as an endowment for charitable objects in England is equal to more than one-

half of that possessed by the Established Church. If we add the amount annually expended in the United Kingdom on the relief of the poor and in aid of education it appears that the annual expenditure on the objects of charity exceeds the whole cost of the civil administration of the country.

I have now brought to a close this general view of the present state of British agriculture, the preparation of which I was invited to undertake by the Council of the Royal Agricultural Society—very inadequately executed, I fear, but with as much care and accuracy as a wide experience enabled me to command. I have sought to place in a clear light the leading characteristics of our various systems as influenced by soil and climate, by the progress of population and wealth and its increasing demands, and the distribution of landed property and the relations subsisting between the classes engaged in its cultivation. I have entered with no inattention into those special features which chiefly distinguish ours from Continental agriculture, in order to facilitate comparison with that of other European countries. The Papers which are to follow will fully develop the several branches of the subject, each being the work of an accomplished writer specially acquainted with that part which he has undertaken. On this side of the law as affecting agriculture, the pressure of public and local taxation, the requisite amount of farm capital, and the general subject of practical agriculture, will each be comprehensively treated. The cultivation of fruits, vegetables, and hops will be described. The condition of the agricultural labourers will receive special notice. The influence of chemical discoveries on modern agriculture will be the theme of the distinguished Chemist of the Society, Dr. Vauquelin, and a description of the position and seditious usefulness of the Royal Agricultural Society itself, by the Secretary will fully complete the subject.

THE MEN-SERVANTS OF THE LAST CENTURY.

—One of the greatest social miseries of the eighteenth century were the men-servants. We all know the figure they make in the plays of that period; the impatient blackguards whom any gentleman at the present day would kick downstairs before they had been five minutes in his company. These are doubtless exaggerations; but the fact was, that in the fashionable world at that time a servant was under little more obligation to be civil to his master than a criminal is now to be civil to his law. He lived by society more than by any individual member of it. His red wages were the vice which were paid him by his master's friends; and a plea was then good or bad, not according to the character of the employer, the amount of work which he required, or the money remuneration which he paid, but according to the number and quality of his company. This system naturally led to servants being kept in great numbers. In the *Constantinople* we find a widow lady and her daughter, of good position, but not particularly rich, with four footmen in the house. They formed a society of their own, with their own rights and privileges, and could be as troublesome on occasion as the apprentices of London were a century before. They had the right of free admission to the upper gallery of the theatre. And when their riotous behaviour made it necessary to expel them, in the year 1757, it was not done till five-and-twenty persons had been seriously injured. As they lived principally on board wages, they had their own clubs and taverns, as indeed they have now, where they swore, drank, and gambled like their betters. Of the grievous burden which the system of valets entailed upon the poorer class of visitors, when money was worth double what it is now, innumerable anecdotes remain. Of these the most amusing is of Steele and Bishop Hovvly visiting the Duke of Marlborough, when, on taking their departure through lines of rich liveries, Steele found he had not got money enough for the whole number, and made the servants a speech instead, complimenting them on their critical powers, and inviting them all gratis to the Drury Lane Theatre to whatever play they might choose to bespeak. The worst of it was, that guests were expected to fee all the servants in the house, from the highest to the lowest; and Mr. Roberts has preserved a table of valets kept by one of the Barrill family, in which the gardeners, under-gardeners, cook, under-cook, errand-boy, and nurse figure with the chief domestics. The mistress, however, was very conscious of life, and is not dead yet. In fact, among one class of country servants, namely black-servants, it is hardly if at all, dated.—*Constantinople*.

LIVE STOCK NOTES.

My project I carried out by dint of rising early and sitting up late, both horrid arrangements in their way. I grew so excited in the investigation of the later bulls recorded in the pedigree of the Bona tribe to be sold at Major Rowley Conway's that I determined to start and see with my own eyes what the family could now be like, which was so famous in its origin, and of which no less than eighteen females were advertised to be sold. Of necessity I arrived late, and some sixteen lots were already done with. My impression of the herd, after some hours' study, was that they were a fine-grown lot (and so they should be on such limestone sward and with such a bracing sea air), but that they had no one prevailing character or type. They were nondescript in their appearance, with the exception of a few of really remarkable excellence. It was not like going to Towuley in old days, or Warlaby, or Fawsley. Whether this arose from the variety of bulls used, or what not, it is impossible to say. One thing that decidedly struck me, was the superiority in respect of short-leggedness (if I may be allowed the expression) and deep substantial build, of the old bought specimens to their descendants bred upon the place. Azues 2nd (Lot 3)—bought at E. Bates's sale, in 1857, for 45 guineas—was a solid symmetrical lump as ever four-year-old Hereford bullock was, with rather cock horns but such a skin!—may I say “sea-otter touch,” please? Certainly, sir, you may: for if you refer to Chap. xvii. of Scott's exquisite novel *Rob Roy*, the scene where the freebooter repays the bailie his borrowed “thousand marks,” you will read as follows: “And as you say (Nicoll) there's the thousand marks to be settled between us. Hee, Echin Mac Antalister, bring me my sporrans.” The person he addressed, who seemed to act as MacGregor's lieutenant, brought from some place of safety a large leathern pouch, such as Highlanders of rank wear before them when in full dress, made of the skin of the sea-otter, richly garnished with silver ornaments and studs.” I have been rebuked before now for speaking of an unknown animal when I first wrote “sea-otter,” for the parrots of the press, ever short of original matter, re-echoed the charge of my intelligent critic. I suppose Sir Walter Scott knew what he wrote to be correct. The description of this purse goes on to say, that it was guarded by a small steel pistol within, “the trigger, of which was connected with the mounting.” I have recently read of a purse thus protected having been sent to Lord Beaconsfield as a present. I wonder if the material was also “sea-otter.” I proceed, however, to deduce from Sir Walter's description that this eminent “lifter” of choice Lowland cattle had this purse provided not only for the “ill-got gear,” as the bailie said of gold pieces, but also being suspended before him, to keep his hand in as to the proper touch of an animal when he came to select—a plan and performance in milder degree imitated by a small West-Indian schoolfellow of mine, who when we went up to class invariably used to loose his belly-band and fill his waistcoat pocket with treacle, by sucking a finger-dip, of which he not only found solace during the difficult moments of Greek grammar, but also kept his taste in against his return to the island, where his future fortunes and occupation lay. Anyhow, until I can spy a better, I shall continue to use the phrase to indicate that delicious handling which all schools unite to praise, that is, when the thick mellow hide is covered with soft fur, through which an abundant crop of hair springs. You only need to see such a coat to know its value. You don't require to touch, except for the pleasure of it. To revert to this old cow, however, Azues 2nd had such a coat, and was in striking contrast to

a great number of the younger females shown, which were “slick haired” and hard of skin. That the multitude knew the difference, I saw not one of the chief Shorthorn breeders that I know by sight present, was evident, for when a youngster having “sea-otter” came to the front she was at once run up to about double the amount others of her age fetched, and yet having better backs. In order fairly to judge on this occasion I drew up alongside the passage into the well-ordered ring, and sucked the remarks (making occasional inquiry) of several farmers and butchers, who with the same purpose as myself had taken, like wise old trouts, the inflow of the brook to search. The average would certainly have been better had the youngsters' condition been better. Either they had been upon skim-milk diet, or they had been over-floured, which easily occurs. I was glad to note that several buyers bought a small bunch each of the same one tribe, for there were others of old descent besides the Bona gathering, and that Major Platt did pre-eminently well. His agent selected four Bona heifers and claimed the Waterloo bull, which was so excellent an animal that it is a pity Captain Conway included him in the sale at all, as his intention is, I understood, to go in for a new lot of more fashionable character. He would have done well to have retained half-a-dozen or so of the best of the Bonas, to have crossed them twice with this Waterloo bull, and then have gone on with the best Belvedere Duchess sires. He would soon have recovered a beautiful type. For the best Bates blood is like couch grass; it rapidly spreads over the outer surface, and within these Bonas there is an elementary substratum of the richest old blood, that of the Princess and Gwynne families. Well veneered goods are often admirable, but the polished heart of wood is better. Taking the first of the Bonas, Conceit (Lot 9), her sire is a Wildeyes bull; her grandsire a home-bred animal, tracing, however, to the Collings' herds; her grandsire was bred at Holker, of the Cleopatra line, and therefore full of Belvedere (as are its relations, the Kingscote Honeys); her great grandsire was a Waterloo bull, also, therefore, full of Belvedere; her great great grandsire was Booth's Monk, a noble animal full of R. Collings' Red Rose blood; then come Dan O'Connell and Mr. Whittaker's Lord Adolphus Fairfax, both celebrated animals, the latter used by Mr. H. Watson (an excellent judge and a distinguished breeder, well known in connection with the Bampton Roses) upon the cow Bracelet, whose dam by Waterloo (2816) seems to me to have been *own sister to Belvedere*, supposing the charge correct that in Belvedere's pedigree Angelina 2nd (her daughter) was wrongfully substituted for Anna by Lawnsleeves (365). These Bonas, then, need only a succession of Waterloo, or Princess, or Gwynne, or Duchess bulls, to wash out all intermediate inflow, and to restore them quite to the early excellence of their deep-milking ancestry. Major Platt has the game in his hands. Do what you will, it is so difficult to rear a herd alike in size and features! as the poorest possible milker will occasionally be the produce of an excellent one, whilst the grand-daughter again recovers the lost property—as even a human family scarcely ever shows two who could be satisfactorily matched in harness, were the old stone-hauling of Egyptian bondage to be renewed. So without excessive inbreeding it is very hard to secure a prevailing type in a herd, which is assuredly what gives it half its value. He starts with best advantage who, like Major Rowley Conway, makes a selection of females of one old tribe, and a bull to mate with them of fine character, and with much blood kindred to theirs in his veins. It is to me personally curious that Major Platt has taken these cattle to the very meadows where the good Dean of Bangor, to whose energetic impulse the rise and prosperity of the pleasant seaside place—Llanfair-fechan—on the

Menai Straits, is due, used to indoctrinate me—

“Then heedless of such things, now thirty years ago,” laying constant stress on the “wilful” omission of Downsleaves from B. yedire’s pedigree, which was a favourite subject with him for some reason. His pet bull was St. Albans (1412), the grandson of old Princess, and Conceit’s twelfth dam buck. It must be very satisfactory to the Shorthorn world at large that Colonel Gunter has determined to make an outbreak from the now too rigidly confined limits of Mr. Bates’s pet tribe. We all owe him deep gratitude for the present pluck with which he threw himself into the breach at Tortworth against the Americans. It is well, too, that the experiment, which, of course, some will censure, is to be conducted by one whose name stands so high for honourable behaviour in the Shorthorn market, as some buyers of his bulls are ever forward to testify of him. We shall be quite certain that the “so far and no further” is strictly observed. Whatever the issue of the trial, we can trust the details stated. In selecting a Gwynne bull and a Fawsley bull his object is clearly the restoration of the cow’s first requisite, the deep milking quality.

Instead of Fawsley I should rather have written Milcote, for it was from Mr. Adkin’s imposition of Accordion and Daybreak upon the Charmer foundation that the first Sweetheart sprung. That, if you will, was a bold step, though now condoned in consideration of the esteem in which Mr. Adkins was held as a breeder. It remains to be seen what will be thought of it by the gamblers, as those rich and enterprising gentlemen to whom as I think, the country owes so much for their determination to keep at any cost the best approved old strains as pure as they can be, with that exquisite taste which ever distinguish his writings, recently designated by one who has no objection whatever himself to take fifty guineas for a bull to the butcher worth twenty, but who objects to a thousand being given for a like animal, although the breed of the one in the county may be abundant and that of the other extremely scarce. This writer is nothing if he is not venomous! The only excuse for him in this instance is that he is apt to lose his way amongst words, as the famous Mrs. Rooney did in the novel of “Charles O’Malley,” and that possibly he did not mean by “gambling” what the ordinary world does.

In the showyard nowadays there is little chance of winning first honours with a cow that is not “good over the crops.” Now all milkmen tell you they must have their herd thin *there*. In the consideration of the Alderney it is the special point sought. Their best samples present a formation like the withers of a horse. Mr. Stratford, surely a good authority, says the Shorthorn cow should be comparatively light in front. It is quite possible to be “good through the heart” and yet “hollow behind the shoulder.” Take a carcass rounded as a roller over the crops, and another full through the heart but thin over the crops, and therefore probably good at the pail—when they are both fattened, and fatten they both will equally well when dry, how many more cubic inches of beef will be found on the round crop cow than on the other? Taking four inches square by an inch deep to represent a pound of meat, how many more such will the one afford than the other? And yet to get round crops and thereby an *additional half-sovereign* you forfeit milk for a cow’s life time. Have we not in our requisitions of the showyard gone a step too far in this respect. Should not the udder count?—VIGIL, Nov. 4.

EMIGRATION OF PAUPER CHILDREN.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Since I posted you my last on the above im-

portant subject my attention has been directed to a characteristic letter of Miss Rye—with the usual Scriptural and Heavenly references—sent to the *Times* from “on board the Polynesian,” a letter which seems to have proved a little too “tough” for even the strong digestion of the *Toronto Globe*, which, though organ-in-chief of the emigration interest, his, contrary to its usual practice, not reproduced Miss Rye’s epistle in its columns. My impression is that the immigration organ in this matter is wise in its generation.

The representations given and the estimate formed of Canada and its belongings in letters and lectures are often so wide of the mark that it is difficult to account for them on any principle of honesty. I am not in a position to impute conscious evil design to the authors of all the whimsical statements of supposed fact which are every season palmed off on the good people of England. But many of them are undoubtedly due to wilful and interested misrepresentation. Some of the statements in Miss Rye’s letter have astonished not a few people here. She says in excuse for the continued prosecution of her “mission”—in spite of the earnest protest of Canada’s best well-wishers—that this country, though more than thirty times the size of Great Britain, has only a population equal to that of London, and that its “only need” is a larger supply of men and women. Where Miss Rye gets her facts from I do not know. But it must be from peculiar sources. I can only say that if our population be small, it is far too large for our restricted labour and business market, as is shown by the fact that 500,000 of our people—chiefly young men—left us between 1860-70 because there were no openings for them in Canada. This outflow still continues. It is true the *Toronto Globe* lately said it had come to an end, but “facts” always lie handy for the *Globe*’s arguments. Indeed, of the statements of the professional immigration-promoters generally it may be said that truth with them is stranger than fiction. They are good at broad assertions and denials, but have a conspicuous aversion for details. The *Globe*’s statement about the cessation of the heavy annual exodus of Canadians cannot be accepted without collateral evidence, of which there is none to be had. It is certain there are 13,000 Canadian-born women now in domestic service in the States. And yet the agents and “philanthropists” tell us the demand for “girls and women” in Canada is boundless. Mr. Howland, one of our leading merchants, evidently does not believe the exit is over, for, at a public meeting not long ago, he referred to it as showing that there was no basis of justification for promoting emigration to Canada, and contended that till the Dominion could employ its own people to foster immigration was only to “deceive the immigrants.”

Miss Rye speaks of “a few” tramps and idlers, and adds the very extraordinary assertion that all workers in Canada “have enough and to spare.”

Two or three people have died of starvation in Toronto alone during the last few weeks. In Toronto last Christmas, about 15,000 out of 70,000 people were helped by the benevolent societies. This also has been denied by the *Globe*, so I will append the figures in black and white:—

The “Ladies Committee” supplied bread and meat to 1,500 distressed and “deserving poor families, whose names had been handed in by the Ministers of the Churches, and cases well investigated,” say	7,500
St. George’s Society distributed aid to	2,500
Houses of Providence, Industry, Newsboys, Orphans’, Girls’ and Infants’ Homes.....	914
Total	10,914
Besides these there were the poor patients in the	

General Hospital, the Hospital for Sick Children, Lying-in-Hospital, Home for Incurables, and the indigent families relieved by the Irish and Scotch National Societies. In view of these facts what does Miss Rye mean by telling the English public that every worker in Canada has enough and to spare?

Next as regards the "few tramps." In one county (Oxford) last year there were 504 committals to jail—of which 364 were for "vagrancy." The nationalities of these were about equally divided between Canadians and Old-Country men. Of the 504 prisoners 146 could neither read nor write—a fact, says the *Woodstock Review*, "calculated to shake our faith in the worth of our school system." Now, as there are about 50 counties in Ontario alone, one may form some idea of the usually average amount of vagrancy by people—labourers and mechanics—who strike across the country in search of some thing to do in order to provide bread for themselves and families. In 1874, 1,641 persons were in jail for vagrancy, there being no other way of providing for them in the absence of poor-houses; and 3,633 were confined for "drunkenness and disorderly conduct." The majority of these last were also of the vagrant class. On Christmas-Day that same year 500 poor English families in Hamilton and Toronto, representing about 6,000 persons, thankfully received a meal of bread and meat from the English Relief Society—the Scotch and Irish being assisted by their own organisations. Assuming the total of all nationalities to have been 10,000, this is one in nine, or 11 per cent., of the joint populations of those towns, while in England the entire indigent poor relieved from the rates in 1874 was rather over 3 per cent. In Montreal in the same year, besides 1,172 persons relieved by the police—one Night Refuge—the St. Bridget's, found itself called upon to give breakfast and lodging to 9,969 persons, with 4,525 extra meals to aged and infirm folks—*plus* permanent inmates. "These figures," says a Montreal paper, "tell a tale of suffering and want relieved which it is impossible to exaggerate." I could fill columns of your Journal with similar facts, but these will suffice. If Miss Rye does not know them she is not qualified for her self-assumed "mission." If she does know them her letter is extraordinary and inexplicable.

Further, Miss Rye contends that the immense amount of over-production which Canada exports in corn, cattle, and cheese, is a proof that immigration can't be overdone. The immigration agents use the same argument to entice English farmers out to buy properties and "choice investments" which the experienced sons of the soil have rejected, or want to get rid of. Farmers in England don't want to part with good farms, and they may themselves draw the moral when their presence—and capital—in Ontario, &c., are so earnestly solicited to purchase "sweet things" and "rare bargains" from cultivators who have thrown, or are about to throw, them up. Miss Rye is, however, sadly astray. There is *at times* a surplus of wheat here, but the amount of native produce exported is insignificant. The crop as a rule barely suffices for home consumption. The nominal "exportation" which Miss Rye and the immigration agents parade consists of wheat from the States entering Canada at one port and passing out of it by another. During the past 4½ years we have "exported" 55,004,905 bushels of wheat, and it may or may not surprise Miss Rye to hear that 44,807,027 bushels of it were imported by us from the States, merely passing through Canada *en route* for Europe. The same thing is now going on in Manitoba, where Minnesota wheat is brought in and sent out again as local produce by speculators who hold large tracts of land they want to sell to British and other "greenhorns." As regards

cattle we may be able to send 7,000 to 10,000 home-raised beasts a year, no more: anything (apparently) raised beyond that total is bought by speculative dealers in the Western and other States, and after being fed in stalls on distillery-swill and hay for a time is passed on to Europe, and chronicled as Canadian produce by the immigration agents, in paragraphs supplied, cut and dried, to the English journals, from the Liverpool and London Emigration Offices. If Miss Rye knew as much about Canada as she ought to do, she would know that timber, wool, and barley in the main make up our exports, and that the exportation of strictly "Canadian" corn and cattle—the latter especially—is small and insignificant. I may add that the gross liabilities of failed traders have been over fifty millions of dollars in two years (see Col. Shaw's report), a sum barely equalled by our entire "exports" of grain in that period.

I never have passed by the newspaper offices in Toronto and seen the rough, neglected, and heart-saddening rout of ragged outcasts of both sexes, waiting for the evening editions, without wondering why Miss Rye (who would not meet a more melancholy rout in St. Giles, or Whitechapel) should want to go 3,000 miles to find material for "philanthropic" effort. Let the children first be filled in these quarters. At a public meeting in Toronto, some time ago, Professor Wilson referred to the "large number of children" in that town, who were "not attending any school, and for whose moral and religious training no provision was made." From a report issued by a Toronto Benevolent Society, we learn that about 800 destitute children were under their cognisance in that comparatively small place. Seven hundred and nineteen illegitimate children from various parts of Canada were received into the General Hospital of the Gray Nuns, at Montreal, from January to December, 1875, of whom 631 died in the year. I could adduce many similar facts to open the eyes of confiding people in England who have been helping to export unhappy children to a colony which, to my certain knowledge, from observation and reading, presents year by year, and all the year round, social and criminal exhibits which, as Mr. Pell, the Secretary of the St. George's Society, says, should give ample employment to Miss Rye and others, without their compassing sea and land for additional raw material.

Pledging myself to the entire accuracy of all contained herein,

I am, Sir, &c.,

Ontario.

ANGLO-CANADIAN.

THE WRONG FLEA.—A rather amusing incident occurred recently at a show in Paris, where the wonderful "Performing Fleas" were being exhibited. One of the dear creatures, which acted as coachman to the great flea-coach, managed to hop off his box, and selected a rather stout lady, standing near, as his first resting-place. The proprietor of the show, who had spent much time and patience upon the education of this, his favourite insect, was *un desespoir*, and the lady was asked if she would mind making a search for the missing pet. She accordingly retired to a private room, and in a few minutes returned triumphant, carefully holding the captive in the most approved style. She handed him to the showman, who started and changed colour, and, returning the flea to the lady, remarked, "Je vous remercie, madame, mais, celle-là n'est pas à moi!"—*Maisfair*.

EMIGRATION TO AUSTRALIA.—Newcastle and Morpeth have recently been the centre of the operations of Mr. Henry Taylor, the Inspector of Emigrants for South Australia, who has been taking advantage of the hirings to secure a number of agricultural labourers to emigrate to the above colony. The state of the labour market is indicated by the fact that during last week not less than 4,000 or 4,500 have applied to emigrate. Navies and farm labourers, however, were the only ones selected.—*Echo*.

COGGESHALL ROOT SHOW.

The annual root show instituted by the late Mr. J. K. King was held at Coggeshall on Nov. 12. The show consists entirely of roots grown from seed supplied by Mr. King, and there are always a considerable number of entries. This year, however, although the season has been far from a favourable one for roots, there was a much larger number of entries than on any previous occasion; and the roots, for size, weight, and general excellence were above the average of such shows. There was an exceptionally fine array of mangels, the turnips and swedes being, indeed, in point of number, far behind. Great attention appeared to have been shown by the judges to the size of the roots, the prizes being almost invariably awarded to the larger specimens. Whether this is a correct principle is a moot point among agriculturists, but there can be no doubt, judging from external appearances, that the prizes were awarded to the very best and finest specimens. There were a few fine swedes, but the show of these could not bear comparison with the mangels in number or quality. The turnips, too, were very small, owing entirely to the wet weather which prevailed at the time when a dry soil was most needed. They were soaked and stunted, and did not begin to grow until very late—too late, indeed, to attain any considerable size. The silver cup was carried off by the trustees of Mr. W. R. Hall Dare, Wennington, for the twelve best roots of King's champion orange globe mangel. These roots were very large and fine, and formed an excellent collection, very uniform in size and weight. There were also exhibited some fine orange globe and long red mangels, not for competition, which had been grown by the Prince of Wales. Upon the same stands were shown some specimens of Messrs. Gibbs' pure feeding cake. One of the extra prizes was awarded to Mr. C. Warren, Little Hadham, Herts, for the eighteen heaviest King's swedes. The prize was well won, for these roots were very fine indeed. Roots were exhibited by Lord Rayleigh, Col. Brise, M.P., &c. The judges were Mr. E. Catchpool, of Feering; Mr. J. Moss, of Messing; and Mr. Jonathan Baker, of Stisted.

The following is the prize list:—

Orange Globe Wurzel.—1, the trustees of Mr. W. R. Hall Dare, Wennington; 2, Mr. J. Hutley, Rivenhall; 3, the executors of the late Mr. J. C. Circuit, Rainham; 4, the Rev. Canon Tarver, Stisted; 5, Mr. Percy Smith, Aveley; h. c., Mr. F. Brown, Felsted; and Mr. T. Seabrook, Boreham.

Yellow Globe.—1, the trustees of Mr. R. W. Hall Dare; 2, Mr. T. Seabrook; 3, Mr. C. Richardson, Terling; 4, Mr. R. Kettleby, Boreham; h. c., Mr. C. H. Spooner, Samford; c., Mr. T. Yeldham, Stambourne.

Orange Tankard.—1, Mr. B. C. Halls, Heybridge; 2, Mr. W. Brown, Blackwater.

Red Globe.—1, Mr. C. Richardson; 2, Messrs. B. and R. W. Dixon, Wickham.

Intermediate Wurzel.—1, the trustees of Mr. R. W. Hall Dare; 2, Mr. C. Richardson; h. c., Mr. T. Seabrook.

Long Red Wurzel.—1, Mr. C. Richardson; 2, Mr. O. S. Onley, Stisted; 3, Mr. C. Warren, Little Hadham, Herts; h. c. the trustees of Mr. R. W. Hall Dare, and Mr. R. French, Boreham.

Long Yellow Wurzel.—1, the trustees of Mr. R. W. Hall Dare; 2, Mr. C. Hall, Toileshunt Knights; h. c., Mr. W. Joyce, Waltham.

Roots grown with Adams' manure, supplied by Mr. W. King.—Silver cup, value £5 5s., offered by Mr. King, the Rev. Canon Tarver.

The 12 heaviest Wurzels.—Mr. J. A. Reid, Mid-Sanquhar, Ayr, Scotland.

Unrivalled Swede.—1, Mr. W. Fowler, Necton, Norfolk; 2, Mr. R. Campbell, Dunregit, Scotland; 3, Mr. J. Eccles, Grimmer, Scotland; h. c., Mr. W. R. Steadman, Stanway.

Skirring Swede.—1, Mr. R. Campbell; 2, Mr. H. Westroop, Mellord; 3, Mr. J. Pile, Beaumaster, Dorset.

18 Heaviest Swedes.—Mr. C. Warren.
White Globe Turnips.—1, Mr. J. Pile, Bradscote, Devon; 2, Mr. C. H. Spooner.

Green Globe Turnips.—1, Messrs. Dixon; 2, Mr. J. Adams, Stalford.

Green Kohl Rabi.—1, Mr. O. S. Onley; 2, trustees of Mr. R. W. Hall Dare; h. c., Mr. T. R. Moore, Felsted.

Extra prizes were awarded in the orange globe and yellow globe classes.

The judging being over, and some time having elapsed, during which a considerable number of visitors went over the show, an excellent cold luncheon was served at the White Hart Hotel. Hitherto the luncheon has been held at Mr. King's house, but on account of the recent bereavement in the family this course was not adhered to. An air of gloom was naturally thrown over the proceedings by Mr. King's recent death, but a large number of friends and customers had, nevertheless, gathered around his son and successor.—*Chelmsford Chronicle*

ARE THE ELEMENTS ELEMENTARY?—At the last meeting of the Paris Academy of Sciences, a note was read from Mr. Norman Lockyer, F.R.S., stating that he believes he has succeeded in proving that many of the so-called chemical elements are in reality not elementary at all, but compound bodies. M. Dumas, the accomplished French chemist, added that the conclusion reached by Mr. Lockyer is the result of three years' assiduous research, in which he has compared with the greatest care the spectra of the chemical elements with the spectra of the sun and other luminous celestial bodies. Mr. Lockyer announces that he will send photographs and other details necessary to convince the Academy, which, as he says, "will desire proofs" of a conclusion so extraordinary. If Mr. Lockyer can prove his statements it will give quite a new aspect to chemical science. The result, however, will by no means be unexpected by many of the most eminent exponents of the molecular theory; indeed, it is held that all matter may turn out to be varied forms of one primitive element. We understand that a paper on the subject will be read by Mr. Lockyer at an early meeting of the Royal Society.—*Times*.

MARRIAGE IN INDIA.—Let the shade of Malthus rejoice! In India, at any rate, that much-maligned divine's strong objection to early marriages is properly appreciated, as witness the following:—Twenty-five native students gave in their names at a meeting recently held in Calcutta as "willing to sign the pledge," not against liquor-drinking, but against early marriage. The following is the wording of this curious document:—"Deeply impressed with the pernicious character of the custom of child-marriage, and with the evils that have followed in its train, convinced of the solemn duty I owe to myself and to my countrymen to discourage, so far as may lie in my humble power, a custom so hurtful to students—so prejudicial to the best interests of my countrymen at large—I hereby solemnly declare that I will not marry, nor allow myself to be given in marriage, till I have completed the age of twenty-one years, my present age being ——" But, after all, twenty-one is not so *very* old, and the restraint which the young student imposes upon himself does not seem to me to entail a very alarming amount of self-sacrifice. But then the are fearfully precocious in India.—*World*.

GENTLEMEN HORSE DEALERS.—We unhesitatingly assert that no one who is a gentleman can, if he turns horse dealer, remain so, however much he may wish it, or try to keep himself from the numerous vices that attend this trade. It is an unequal fight surrounded on all sides by trickery and lying in every form. Sooner or later, he is bound to succumb, and, his self-respect once gone, we know the result; he is a lost man. That there are honest horse dealers that we do not deny; in fact, most of the leading are thoroughly trustworthy, but of them we are not speaking; it is to the gentleman ex-officer, who, unfitted for aught else, takes to the line of business, that we are issuing a note of warning, and if there be any who are meditating such a step, and who happen to read these lines we repeat *Punch's* oft-quoted monosyllabic advice, "Don't."—*Leader*.

REPORT OF THE LOCAL TAXATION COMMITTEE.

(Central Chamber, Nov. 5.)

The attention of the Local Taxation Committee has during the past Session of Parliament been directed to various measures of special interest to ratepayers. They cannot, however, congratulate their supporters on any such marked legislative progress as they were able last year to record in the passing of the Prisons Act of 1877. The introduction by Her Majesty's Government of a comprehensive scheme of County Government in reference to the carrying of an Act to amend in certain particulars the system of road management and repair, the renewed discussions on the valuation of property, and the increasing interest taken by Parliament in the statistics of local rates and local debts, are the principal matters which the Committee have occasion to notice. That these subjects received the consideration they did at a time when public attention was mainly attracted to Foreign policy and the imminent danger of war, is no doubt due to the real and intelligent interest at last excited in the once neglected questions of local taxation and local government. While making every allowance for the position of public affairs, and while thanking Her Majesty's Government for making a definite attempt to deal with the pressing question of local administrative reform on the lines indicated in 1877, the Committee saw with regret the withdrawal of the County Government Bill. They believe that this measure, though open to amendment, might, nevertheless, have been carried in the course of the Session; and they trust that its temporary postponement may not defer beyond 1879 the settlement of a question far too long suspended. Among the various measures, involving favourably or unfavourably the special interest of ratepayers, which during the past year demanded attention at the hands of the Committee, were:—The Training Schools and Ships Bill (withdrawn); The County and Deaf Mute Children (Education) Bill (withdrawn); The Public Health Act (1875) Amendment Bill (amended and passed); The Contagious Diseases (Animals) Bill (passed); The Valuation of Property Bill (withdrawn); The County Government Bill (withdrawn); The Highways Bill (passed); The Coroners Bill (withdrawn). The Training Schools and Ships Bill resembled the measure under the same name defeated in 1877. This proposal to train recruits for the Army, Navy, and Mercantile Marine at the cost of the county ratepayers was opposed by Mr. Phipps, a member of the Committee. Although retained, nevertheless, on the order book of the House of Commons throughout the entire session, and thus necessitating constant watchfulness, the Bill was ultimately withdrawn on the 13th of August. The terms of the Blind and Deaf Mute Children (Education) Bill were viewed as tending unduly to enlarge the scope of the provisions made under the existing Poor Law for such classes of unfortunates. Amendments were therefore proposed by the Chairman of the Committee and accepted by the promoter of the Bill. The measure was, however, eventually withdrawn in consequence of opposition in other quarters. The Public Health Act (1875) Amendment Bill aimed at securing the supply of wholesome water in rural districts. As originally introduced its clauses failed to remove the grievance felt as to the incidence of existing charges for this purpose. They inclined also to impose liability on the sanitary district generally, instead of on the particular properties benefited by the intended supply. The measure was submitted to a Select Committee, on which several members of the Local Taxation Committee served, and material improvements were effected in the terms of the enactment before it was eventually passed into law. Very useful suggestions are to be found in the report of this Select Committee for practical purposes; while those for rendering more equitable the mode of charging for supplies of water may not be found to be inapplicable for future extension to other special sanitary undertakings, which under the existing law benefit particular properties at the cost of other unbenefitted ratepayers. The special attention of the Committee was directed only to so much of the Contagious Diseases (Animals) Bill as referred to the cost of the local administration of the law, including the payment of compensation. The proposals of the Government left the charge for this purpose still a local one in respect of other diseases than cattle plague, but in view of the new and stringent powers of action conferred on the central authorities in the case of rinderpest the Bill

followed the suggestions of last year's Select Committee, and charged the compensation in such cases on imperial funds. This arrangement was supported by the Committee, and although opposed by Mr. Chamberlain and others—Mr. Gladstone, Mr. Lowe, and Sir W. Harcourt voting with him—the endeavour to shield the national purse from a liability so exceptionally national was defeated by 184 votes to 30. The Valuation of Property Bill reproduced for the sixth time since 1867 the proposal to frame one basis of assessment for local and imperial taxes, as is the practice in Scotland and in the metropolis. The present measure differed from its immediate predecessor in 1877 only in a very few points of detail. It allotted to the proposed new County Board—to be established under another Bill—certain rights of revising the lists prepared by assessment committees, and it followed a suggestion made last year by the Committee in substituting a formal registration of each Poor Rate for the troublesome ceremony of allowance by the justices. Although introduced on the 28th of January along with the County Government Bill, the Valuation Bill was not printed or proceeded with until a period of the Session when the prospect of passing the former measure appeared doubtful. Mr. Clare Read having interposed a resolution on going into Committee, pointing out the unsatisfactory character of any assessment reform which was not preceded by the formation of a representative County Board, his motion was defeated by 631 to 107, and a discussion of the details of the Bill was entered upon. General acknowledgment of the need of county supervision being, however, expressed, a special county valuation authority consisting of from five to nine justices, together with the chairmen of assessment committees, was proposed by the Government. The question also of adopting true rent as the basis of gross value was again raised, and received very large support; while attention was called to the defects of the measure in dealing with the assessment of railway and canal properties. Time, however, failed for the discussion of these points, and the Bill was once more withdrawn. The County Government Bill was introduced by Mr. Slater-Booth on the 28th of January, and attracted considerable attention in the earlier portion of the session. After careful examination of its provisions, the Committee felt fully justified in inviting for it a general support. Finding, however, that amendments in certain directions would greatly improve the structure of the measure, they issued and largely circulated an analysis of the Bill, with some criticism on the particular points indicated. The chief of these amendments, and one which was widely echoed throughout the country, referred to the substitution, in the interest of future administrative reforms, of the Poor Law Union for the Petty Sessional Division as the electoral area to be adopted. It was shown that the case of overlapping unions might, in such an event, be met, without insuperable difficulty, by a temporary arrangement pending an ultimate simplification of local boundaries. In other particulars the Committee recommended the transfer of the highway clauses of this measure to the Highway Bill, and they indicated possible improvements in the financial system to be pursued, in the periods of borrowing to be permitted, and in the audit to be enforced. While they believed that the magisterial quota of members fixed by the Bill might be legitimately reduced, they endorsed the proposals of the Government to employ a system of double or indirect election in the constitution of the Board. This provision, however, encountered opposition in some quarters, where a direct appeal to all the householders of the county was advocated as the proper mode of forming a representative board. Such a step the Committee, on the contrary, could not but feel might very greatly lessen the working ability of the new authority, and might be followed by the financial consequences which in other instances have attended the entrusting of control over local rates to a numerical majority possessing but little individual and immediate interest in the pressure of these taxes. Notwithstanding some opposition, both from opponents of any change of system, and from the advocates of a still more sweeping measure, the Bill obtained majorities of 231 to 63 on its second reading, and 214 to 44 in a subsequent debate. Its further progress was subsequently hindered by action on the part of some Irish members, apparently with the view of retarding an Irish measure of similar import; and either this delay, or the numerous amendments inseparable from the consideration of so large a scheme, induced the Government to withdraw the Bill for the Session. It is, however, to be

hoped that, as in the case of the withdrawal of the Prisons Bill of 1876, the measure may be re-introduced and carried. Until this is done little progress can be made in administrative reform, while every day's delay tends to complicate the task and render it more difficult. The Highways Bill originally dealt with only a minor portion of the changes in road legislation proposed this year by the Government, others being embodied in the County Government Bill. On the failure of the latter measure, however, several of its clauses were, at a late period of the Session, transferred to the Highway Bill and materially extended its scope. Among these the Committee have seen with satisfaction the extension of the area of charge for part at least of the repair of main roads—a step which it is believed will effect a transfer of something like £150,000 from the Highway to the general County Rates. The clause providing a new though limited power of recovering the cost of purely exceptional traffic may prove valuable in certain districts. The favour shown to the future amalgamation of highway and sanitary areas and authorities is also a step towards economy and simplification; while useful powers of control over defaulting highway authorities, and means of regulating and licensing the movement of locomotives on country roads, will be found in what is now the "Highways and Locomotives Amendment Act, 1878." On the other hand, it must be regretted that in several particulars the new statute cannot be viewed, and was not, indeed, claimed by the Government, as settling the question of highway maintenance and control. The failure of the County Government Bill has deprived the country of the special authorities to whose care was to have been entrusted the supervision of main thoroughfares; and the absence from the Act of any scheme for the general relief of ratepayers from the entire burden of road repair—often aggravated by the abolition of tolls—leaves still open the difficult but pressing question of contriving some more equitable system. Even the very modified proposals for permissive tolls, which found a place in the County Government Bill, are not repeated in the present Act. An unsuccessful endeavour was made to amend the Bill in this direction; but Mr. Yorke, a member of the Committee, was, under very disadvantageous circumstances, defeated by 70 votes to 29 in a suggestion of this nature, while a further scheme for adopting a system either of graded rating or local licences was, on technical grounds, refused discussion. The Committee, however, anticipate a strenuous effort being made on the re-introduction of a new County Board Bill to entrust, under proper safeguards, some such powers of indirect taxation to provincial authorities.

On one of the last days of the Session the Home Secretary introduced a measure to consolidate and amend the law relating to Coroners. This Bill was printed only with a view to elicit discussion during the recess, prior to legislation next year, and the Committee trust that its provisions will be carefully noted. The necessity for a reform in this department of our judicial machinery is generally acknowledged, and although the present proposal goes little beyond consolidation, and leaves the election of coroners to the county freeholders, it can hardly be supposed that this will be acquiesced in. Although the transfer of the cost of inquests from local to imperial funds was one of the claims made by Sir Massey Lopes in 1872 and accepted by the last Parliament, it has not in the present Bill met with practical recognition. The President of the Local Government Board was enabled this year to submit his annual statement of local finance to the House of Commons at the same time as the Imperial Budget was unfolded. While sensible of the acceleration thus effected in bringing to the notice of Parliament the growth and dimensions of local debt and local taxes, the Committee believe that yet greater prominence might be secured for information so important were the local budget to obtain an earlier hearing. On the present occasion the local statement was only begun shortly before midnight. It was thus deprived of the full report necessary to give the desired publicity to the figures and comments of the responsible minister. The annual blue-book of Local Taxation Returns for 1876-7 has also now been issued. With the aid of its figures the Committee have, as on previous occasions, appended to this report, in the same tabular shape as formerly, an approximate analysis of local revenue and expenditure, correcting in some particulars the official figures, and including the accounts of School Boards—the blue-book being a year in arrear—up to the same date as

those of other authorities. The revenues disposed of by local authorities show an increase in round numbers of three millions and a-half, two millions more than formerly being raised by loan, and three-quarters of a million more by rates. The Government subventions now exceed £2,000,000, while smaller increments are apparent in local indirect taxes and miscellaneous revenue.

A decrease in the Poor Rate proper, and an increased levy of rates by urban and school board authorities, explain the chief fluctuation in the charges borne directly by the ratepayers. To the last two classes of authorities is due also the chief increase in expenditure.

The outstanding debt of local authorities appears, by the analysis presented herewith, to have exceeded £108,000,000 in the year 1876-7, while Mr. Slater Booth indicated that the total at the present time may have reached £112,000,000. Parliamentary authority was also given this session for a further issue of £6,000,000 by the Public Works Loan Commissioners to local authorities during the current year, though it does not follow that the whole will be applied for on loans sanctioned to the full amount. The recent increase of the advances thus made from the public Treasury has been commented on, and local authorities generally have been credited with a too great readiness to avail themselves of this resource. It should, however, be borne in mind that in so far as recent advances are not met by sums repayable for older loans the entire growth of the past few years may be practically accounted for by the action of one class of authorities. Under the Elementary Education Act sanction had, up to April last been given for the borrowing of no less than £11,368,000 by English and Scotch school boards. The outlays thus incurred are in themselves justifiable, any loss to the taxpayer arising from the fixed rate of interest here payable to the Treasury, must nevertheless be regarded as forming the only alleviation of the heavy charge imposed on the ratepayer by the legislation of 1870. Large sums are now also being required for works of local improvement and for sanitary undertakings, and in view of the amount thus applied it may soon be expedient to recommend, as has been suggested from various influential quarters, some early inquiry into the specific results, by reduction of death-rate or otherwise, which can be attributed to the outlays incurred for the public health.

The recent progress in reducing both the cost of pauperism and the number of paupers in England, cannot but be a matter of satisfaction to the committee. Between 1871 and 1877 a sum of £1,048,000 has been saved in outdoor relief, while maintenance in the workhouse has only been augmented by £39,000 in the same period. On the 1st January, 1871, there were 1,083,000 persons in receipt of relief; on the 1st January, 1877, 736,000. Thus, allowing for the increase of population, there are now 30 paupers in each thousand inhabitants of the country, as against 43 in each thousand seven years ago. Attention was some time ago directed by the Committee to the advantages of a stricter administration of relief, and the results achieved in particular districts prove that even the above figures by no means represent the entire reduction which might, with firmness and judgment, be effected to the benefit not only of the ratepayers but of the entire community. While they do not doubt that improvements in the machinery of our existing Poor Law system, in connection with the classification of paupers and management of workhouses, will ere long come under discussion, they would repeat the advice they have formerly ventured to offer as to the necessity for a close adherence to the general principles of relief enunciated by the Poor Law Commission of 1833-4. In concluding their annual report the Committee have to invite anew the continuance of the support hitherto accorded to them, and to assure their former supporters that they are prepared to continue to watch all measures specially affecting the interest of ratepayers, losing at the same time no fitting opportunity for advancing the cause alike of local administrative and local financial reform.

ALBERT FELL, *Chairman.*

YOUNG IRELAND.—Elder Sister: "D. n't go out in the garden, Gussie."—Gussie: "Why not, Cis, it's a foine warnin'?"—Elder Sister: "How can you tell such naughty stories. It's been wet ever since I got up."—Gussie: "Sure, Cis, dear, it's a foine wet warnin', I mane."—*July.*

LIVE STOCK NOTES.

I was certainly the first to use the expression "sea otter" touch to designate that which used before to be called a "mossy coat;" wherefore "mossy," except for the *curl* it has, I cannot imagine. I am rather proud of the term, for it appears to its fond inventor exactly to express the idea of a good handling cowskin. "The fur," writes Bell in his excellent work on "British Quadrupeds," "of the common otter consists of two distinct and very different kinds of hair, the shorter being extremely fine and soft, the longer hair stiffer and thicker." This is an exact description of the best coat a Shorthorn or Hereford can have. If "T." can invent a better expression, I, for one, shall be happy to adopt it. The Irish otter, Mr. Ogilby (see Bell) says, "is to a considerable extent a marine animal, being found chiefly along the coast of the county of Antrim, living in hollows and caverns formed by the scattered masses of the basaltic columns of that coast, and constantly betaking itself to the sea when alarmed or hunted." Many persons made a livelihood by hunting it and "disposing of its skin!" "T." does not tell us whether the fresh water otter, which only visits the sea, has a skin, fur, and touch different from the real sea otter he describes. All I ever said was, a good Shorthorn should "touch like a sea otter," and so I say again (see Mrs. Brassey's "Voyage of the Sunbeam"). As regards "T.'s" criticism of my remarks on the conformation of a good milker, as opposed to a "round cropped" show cow, he appears to be getting out of his depth, and I advise him to return to shore.

Recently, after an absence of over thirty years, I made a tour in parts of North Wales, where during my boyhood the black cattle were mainly found. In one field I crossed close under the mountains, there were a dozen milking cows, one of which was half Welsh, one half Hereford, two half Ayrshire, and the rest a sort of milking Shorthorn. "Irish," the natives termed them. I have since observed these "Irish" on many Midland pastures. What does it mean but that Ireland is beginning to show in earnest the results of the importation of Mason's cattle as occurred at the celebrated Chilton Isle, and of the steady importation of Booth's blood of late years? Thanks again to those who by dint of trouble and expense keep up the fountain head of blue blood, from which these steams issue to fertilise the country far and wide. It is impossible—to do anything with corn now. Of necessity much land is being laid down in pasture all around. To people this, additional stock will be wanted. For years then, on this account only, it will reward the painstaking breeders to persevere in his determined course of "Excelsior" action. Let "ever improving" be his motto. One hears of late inquiry as to the efficiency of the male animal; as to how long a bull, for instance, may be of service. This depends upon how he is used in his youth. Fifty cows in a year one of our best breeders holds to be enough for any bull. Nor should a youngster be used until he got well over his first year at least. One has known them used, and successfully at eleven months. "The excesses of youth are a draft upon age payable with interest" wrote a philosopher. The remark is true in the case of animals as in the case of man.

I pointed out recently in your columns what an advantage it was to have breeding experiments conducted by gentlemen of acknowledged honour. It is often observed too, of Shorthorn breeders, that they exhibit an extraordinary amount of faith in one another's word. There have, moreover, been cases in which false pedigrees have been invented or attached to animals which had no more right to them than this pen. Knavery flourishes

and will flourish, it is to be feared, in every line of business. It is possible, however, in cattle to attain to a practical knowledge of types; and a diligent student, possessing a fair eye, may be pretty safe in his purchases. At a same time at some sales animals are for this reason more valuable than at others. At shows there is much cheating. One dodge, which has been very successful of late, is the borrowing and lending of animals. At the best country show the winner of the prize of the "best bull, cow, and calf," has been disqualified for *borrowing* the cow and calf to pair with his own, a really good bull. We shall hear more of it again; but it is rumoured that there is a gang of them, and that they have been sorting detachments from different herds, so as between them to sweep the board of prizes. Instead of lowering rent of farms, unless excessive, would it not be better for land lords to provide male animals of the best descriptions, and *oblige* their tenants to use them free of charge? Oligue I write deliberately, for I know cases in which most expensive horses and bulls have been provided, and the tenants will not use them: in a great degree from obstinacy and prejudice. Lord John Russell used to say that it took thirty years to produce a revolution of thought in England on any subject. That is too long a period, assuredly, now-a-days. Only think how much better the farming community would be in a few years, if holdings were made proportionate to a man's capital, and a free use of the best procurable male animals, free of charge, insisted on. A farmer would prosper, if he is ever to do so, in spite of himself. One great saving now, the greatest of late years, is the introduction of the three furrow plough. A friend watched mine with me yesterday on a stubble of stiff, rattey, clayey loam, with only three horses and a lad, cutting three clean furrows five and a half inches deep. He measured the furrow twice. What a saving this is. Then the live stock have to thank these cheap corn times for better doing. When wheat was at seven shillings, was not Indian corn at about five shilling? Now wheat has been about five, and Indian corn something over three shillings. So one gains on the one side pretty much what one loses on the other if we feed our stock well, and that stock be abundant. The American forecast has again come true. We have again dark, bitterly cold, wet weather! Happy are those whose mangels is stored and wheat sown. Thanks to Howard's three-furrow plough ours is in that case this year, as it never was before. Without it we should have had to buy a pair of horses.

How is it that cows which have slipped, or had dead calves, are so apt to keep turning on the hull afterwards? It is a fact that so long—as will happen sometimes for months after the regular period of parturition—as a cow retains within the womb a fragment of a dead fetus, not altogether clausd away, that they do not go bulling; but what one wants to know now is why, when they have slipped, do they keep continually going to bull? I should be glad of a hint what to do. I have just seen in several fields pens of miserable sheep on turnips, looking as wretched as they could. They cannot possibly thrive under such inelement hardship. When they have the opportunity see how they gather at once under the sheltering fences. Could not the corrugated-zinc firms prepare sheets with eyes to be slipped on to hooks stuck in poles along the top of the hurdles, so as to fall along the top of the pen, and keep off the draught—another length might be hung on so as to extend into the fold, and make a lean-to roof. The one pole would hold both the lines of sheeting. The poles could be laid on strong forked standard sticks run into the ground, just level with the hurdles, and the hinged-zinc sheets could be hooked on rapidly, as we slip a rudder on to a boat. If they could

be bought ready, people would soon use them, who would never dream of rigging them up for themselves.

A friend with whom I have just been discussing the dishonesty of the Hereford-cattle prizeman, informs me that the greatest possible cheating in that respect has occurred within his own knowledge. Numberless cups were won with pens, of which now a cork was borrowed, now a hen, &c. On one occasion this man exhibited this composite pair, winning first prize, and himself reporting the show to a poultry paper. The pair was run after for about ten sovereigns. Wrong birds were sold and sent,

and exhibited fine flesh at the Crystal Palace, when strong wonder was expressed that they ever could have been adjudged the first prize at a crack show. Of course, they never had one. The really successful birds had been returned to the lender. What stories he told, too, of splicing feathers, and pruning out combs! The cheating he did not hear of until the man who managed had left his place. How such dishonest conduct must handicap the fair breeder and exhibitor! There are some persons who, it is to be feared, cannot refrain from indulgence in clever trickery. About the best groom and coachman I ever knew went finally to an old dowager lady in a town, when he showed his triumphant skill by only cleaning the side of the horse and carriage which came round to the door. Of course it would have been nothing to him to have finished properly his work, but he could not have felt himself so clever then. One has often pointed out the neglected mares of Welsh mountain mares. I have just heard of the produce of one by a rough trotting cob, being sold to the artillery for fifty sovereigns, that was broken in at about two years old, worked hard at three in a miller's cart, going out in old lady's broughams of an evening, all dressed and dandy. He was pronounced by the buyer to be just the thing they wanted. Those Welsh carters trot so well, and are so full of spirit. I suppose worms and hedgehogs are live stock! The first are pulling into the soil in grand style muck which I spread over a field of platted wheat, under the idea that ploughing it in on lea makes the seed-bed light. The hedgehog—a youngster, too—has cleared off thousands of cockroaches, big and little, which were a pest and a torment to us in the kitchen: he has, however, turned in his toes for the winter.—VIGIL, Nov. 17.

NOTES FROM A CORNISH FARMER.

"Dreary dark November" evenings afford favourable opportunities for considering agricultural subjects, and these subjects require especial attention at this time, since many important changes must take place in agricultural matters, or much plain land go out of cultivation; such as diminution of our ever-increasing burdens in the shape of rates and taxes. Consumers appear to be ignorant of the fact that by taxing British agriculture they are taxing their own bread and butter. Freedom in cultivation of the soil and disposing of its produce, with long leases calculated to encourage increased expenditure, and at the same time protect the interest of landlords and tenants.

Great as the depression in agriculture is, I question if it is equal to that under which trade and commerce is suffering at the present time; and since amidst this general depression the price of beef and mutton continues remunerative, better times for agriculturists are, I hope, "looming in the distance." "Cheer, boys, cheer," especially in Cornwall, which is a breeding as well as a fattening county. There is no doubt but that the condition of Cornish agriculturists will compare favourably with those in other parts of the country who have to purchase stock at a high price for the purpose of making manure for their cultivated land, which the present low

price of grain and high price of labour renders unprofitable, notwithstanding that farmers in the eastern counties make five or six shilling per qr. more of barley than we make of wheat, while their barley is nearly double the price of Cornish, viz., 48s. against 26s.

Under existing circumstances, I am persuaded that the occupiers of land in Cornwall will do well to reduce their labour and manure bills till the land less frequently, and lay it down to grass in improved condition; age sets free and renders available the mineral constituents of the soil, which are indispensable to good healthy crops.

The interest of breeding stock—or rather fat stock—shows has been augmented this summer through the Paris Exhibition, but I am sorry for the credit of English exhibitors that they should not have forwarded their best animals—it looks rather selfish—yet I hear of some eminent sheep breeders who, after selling all they put to Paris at a good price, had great difficulty in disposing of those kept at home. May be the French are not very good judges of English stock. It was stated in your columns that the longwools were generally indifferent, including Leicesters, a circumstance to be regretted, since I am satisfied that the excellence of longwooled sheep generally cannot be kept up without occasionally introducing pure Leicester blood. It is, however, possible, that many critics of the present age are ignorant of its requirements carrying their thoughts back a quarter of a century, when the breeders' motto was "early maturity with aptitude to fatten;" but a great change has taken place in John Bull's appetite since that time, his stomach is now turned against fat; the agriculturist must therefore propagate animals calculated to produce lean flesh; this can easily be done by careful selections and judicious treatment of stock.

Up to a very recent period an egg has been the correct form of a Leicester sheep, but now since there is no demand for the fat on his carcass except for wheel grease, it had better be dispensed with and the food employed in the production of lean—one pound of the latter being worth four of the former. But in accomplishing that desirable object a change must necessarily take place in the appearance of the animal, and the egg shape give place to that of a brick with rounded corners, at which many old breeders would scoff no doubt: the soft "squampy back" once so much prized must be replaced by firm handling, as much for constitution sake as the production of lean flesh. This observation will apply with equal force to cattle, when the blue blood Shorthorns, the Duchesses, would according to Mr. W. H. Southam, be nowhere. Your correspondent "Vigil's" sea otter touch, indicates neither constitution nor lean flesh. I wonder he does not adopt the mole as a simile. I know of nothing softer; would advise him to handle one.

Now in order to get a predominance of lean flesh on cattle, we should not only breed from firm-fleshed animals, but they should be in lean healthy condition. Fat is disease, and the progeny should be reared and fattened in cool healthy situations, not in houses nor glass cupboards. In the cold quarters cattle will undoubtedly consume more food than if kept warm; but what folly to produce useless flesh. I carved a splendid round of ox beef, nicely corned and cooked, a short time since at our harvest festival to forty agricultural labourers, and I am certain that they did not eat one pound of fat, nearly the whole was left on their plates.

Now if agricultural labourers' can't eat fat beef, who is likely to? Common sense would therefore dictate the production of that which is eatable, and for which there is a ready sale. I ordered a neck of mutton the other day of my butcher, and I am sure that the lean—the only part that was eaten—cost half a crown a pound.

I need not say that it was not Down mutton so much prized in other parts of England. I asked an extensive Cornish cattle and sheep dealer some time since in the presence of a great number of farmers—all breeders of Leicester or Long-wooled sheep except myself—what sheep were worth per lb., when he said, “that depends on the quality I would give more for a 17 lb. per qr. Down, than I would for a 23 lb. per qr. Leicester.” But when I offer my Down for sale, I am invariably told by butchers that they are worth no more to them than Leicesters, nor even so much, as their mutton will make no more and their skins less; there is therefore no encouragement to supply Cornish people with good mutton.

Christmas fat stock shows are near at hand, and if townpeople are wise they will offer special prizes for well-formed animals carrying the largest quantity of lean meat, such as can be eaten, in comparison to the fat.

By the way, I observed in your correspondent Vigil's notes some time since that a great number of blue-blooded Shorthorn cows were dying of milk fever, at which I felt surprised, as the well-bred Shorthorn cows coming under my notice have invariably been bad milkers. Milk fever is, however, a serious and dangerous disease, but it can by proper management be easily prevented, although it is difficult to cure. I have been an extensive breeder of cattle upwards of 40 years. About 30 years since I lost three valuable cows one summer from this disease, but since that time, I have adopted a certain system of management, and by giving an inexpensive drink I have had no further loss in cows, nor have I had occasion to dose a calf for scour. My mode of treatment is referred to in an advertisement.

Much indignation is being justly expressed in reference to Mr. Duppa's mean conduct. A man would have been hanged a few years since for stealing one sheep, and now the law permits a person to appropriate hundreds belonging to another person. Surely it is high time that this unjust law should be altered, although it is to be hoped that few Englishmen, to say nothing of gentlemen, would be unprincipled enough to avail themselves of it. Similar cases of a somewhat varied character are, however, common in Cornwall. One has lately come under my notice. Some nine years since a hard-working, industrious agricultural labourer, who had saved some money, took a dear farm out of condition, and some friends, out of pure kindness, lent him money. The poor fellow laboured day and night to improve the farm, and pay his way if possible. In vain he asked for abatement of rent; but, to encourage him in his difficulties, rent was allowed to get in arrear until it amounted to two years, when the owners, finding there was just enough on the farm to pay it, unexpectedly without notice levied a distress—thereby incurring unnecessary expenses—sold everything on the place, and pocketed the money, leaving those who had advanced money to improve the farm at least 30 per cent., as well as manure merchants, without a farthing. Many of the better informed Cornish farmers, especially some great professors of religion, manage their affairs better, “by taking the benefit of the Act,” when the landlords can only come for one year's rent before other creditors. And it is said that some of these shrewd ones manage to make money out of the transaction, while cattle dealers, manure merchants, and other creditors frequently get fleeced. Whatever Mr. Knatchbull-Hugessen may say, no reasonable excuse can be made for landlords who allow their tenants to get three years in arrears for rent, as it is evident that they are not satisfied with a fair rent, which could undoubtedly be had from respectable men of capital, who would not only pay their rent with punctu-

ality, but tradesmen's bills, &c. While a landlord who hides an impostor on his farm is morally accountable for his actions, since he alone is aware of his circumstances; and it would serve such an one right if he got cheated of his rent.

I can't help thinking that the Kentish and Sussex farmers would have acted more prudently had they discharged some of their worst labourers instead of making a general reduction in their wages, since labourers too frequently receive the same pay while there is 25 per cent. difference in their value—this would be an encouragement to well-doing. With the present price of labour and produce, we must learn to do with fewer labourers, aided by machinery, expensive as it is. Agricultural labourers certainly never were so well off as they are at the present time, when regularly employed, and my men do not lose an hour in twelve months; if they do not earn half their wages they get paid in full. Such is the case with Cornish agricultural labourers generally, and I am surprised to hear that in Kent and Sussex, labourers lose more than a day per week on an average. Bread is now very cheap, and pork is selling in Cornwall at 4½d. per lb. by the carcass, while coal is not half the price it was a few years since, when the times being good, and labour plentiful, an advance in wages was not unreasonably asked for and given. It is, however, much easier to advance than to reduce wages, since an increase leads to more expensive habits. Few English labourers think of making provision for a rainy day, but regularly spend their earnings, however great, and soon consider them insufficient. Under those circumstances, I have no doubt, but that a great number of Kentish and agricultural labourers will prefer emigration to a reduction of wages; it will, no doubt, do many of them good, by increasing their activity, for labourers must work or starve in foreign lands.

Idlers are not wanted there, but people generally get well paid for their labour, especially in British colonies, where the sons of many of our nobility and others work like slaves, who would be ashamed to do anything at home.

That being the case it will be folly to expect the next generation of highly educated labourers' sons, after being kept at school until they are fourteen years of age to condescend to toil or attend on cattle at home—few of the uneducated *young agricultural labourers* will now attend on cattle, but prefer spending their time at the “pub” or some idle resort.

As a patriot I trust, however, that the day is distant when the rent of land or the wages of agricultural labourers will generally be reduced, especially the latter. “A bold peasantry, their country's pride, when once destroyed can never be supplied.” And surely three per cent. is not too much for owners or occupiers of land to expect to realise on their capital in this wealthy, highly-taxed country, while its money-ocracy, regardless of its general prosperity swell their capital abroad to improve foreign lands, in Peruvian, Egyptian, or even Satanic bonds could they be pounded simply with the view of getting a large amount of interest. What the agriculturists of this country chiefly require is a fair adjustment of taxation. Trade, and commerce, which has been enriched at the expense of agriculture ever since the repeal of the Corn-laws—or what is falsely called free-trade—should bear a larger amount of taxation for benefits received; but the reverse is the case. Farmers formerly received a higher price for grain after a bad harvest, like the past; then the whole community shared in the calamity, but now the British farmer has to “tread the wine-press alone.”

T. O., Nov. 14.

[Our correspondent has been misinformed as to the loss of time by Kent labourers. In some other respects, too, we differ from him.—Ed.]

FARMERS AND THEIR MEN.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—In respectfully submitting for insertion in your most instructive and influential Journal the sequel and complement of my letters to your contemporary the *Standard*, permit me to add that I fail to see where my logic trips in inferring that if seven times the value in food was imported in 1878 that came to us in 1840, and we re-exported none, we *consumed* seven times the value. If protection and prohibitory duties again arrested importation and we produced no more food at home, does it admit of doubt that we would again be reduced to the rations of 1840? It is true that facilities for importation, and greater cheapness, engender a marvellous amount of waste—a radical failing of our common people—and that the superior quality of meat, butter, cheese, &c., &c., gives much greater value in smaller bulk. But the expansive power of the British stomach under favourable conditions of access to supplies, is very much greater than would be believed by those who are not practically acquainted with the daily life of the masses,

I am, Sir, &c., SIDNEY SMITH.
The Manor, Feltham, Nov. 13.

The following is the letter referred to:—

If I am to measure the influence and circulation of your journal by the varied character and widely-extended habitat of the correspondents which your leaders and my letters on Farming have sent me, I might regard it as commanding and ubiquitous. From every quarter, and from "all sorts and conditions of men," I have received communications which testify to the deep interest the subject has awakened, and the endless variety of classes of society it affects. I had no idea, until the post showered their letters upon me, that the clergy were so deeply involved in the prospects of our domestic agriculture, and that our best skilled and amply provided tenantry were so entirely baffled by the difficulties with which they have to contend. Rectors, vicars, curates, whose income depends on glebe or land endowments, confess to me their struggles—some their ruin. In this, the metropolitan county, our most skilled and competent cultivators confess to large losses of capital extending over five years. One is £6,000 behind. Another, whose father made a handsome surplus on the same farm the son cultivates with at least equal skill, spirit, and economy, longs to be out of his lease, and states that his outlay amounts to £11 5s. per acre, with a yield of 28 bushels of wheat, at a present average of 6s. per bushel. A farmer in Hampshire of very large acreage, who and whose ancestors have held the same land for three-quarters of a century, owns to a loss of £2,000 in three years; while another in Norfolk, of an ample means and thorough skill, has in early manhood retired entirely from the occupation, satisfied, as he declares all his neighbours are, that the days of farming in this country are numbered. In Essex a farm offered for sale literally "dirt cheap" attracted purchasers; but they were repelled by the confession of the agent that he could not find a tenant. There is entire and unconcerted unanimity among them all as to the chief source of their difficulties. They all declare that wages have risen in the very ratio of the inefficiency of their men, that the latter are constantly plotting to take them at a disadvantage, and that in hay time and harvest the exactions they extort out of the necessities of the season convert any possible profit into a loss.

The great extension of the Joint-stock Company system which, in my earlier years, was not permitted by law, of the principle of limited liability, of deposits, joint-stock banks, paper money, and baseless credit, and the new habit of bankers deviating from legitimate business and sound principles of finance, to aid in great commercial and manufacturing speculations, have so extended venturesome and fictitious enterprise as to create an unnatural temporary demand for labour, and, consequently, to force up its price. It was not to be expected that men in the country, earning from 10s. to 15s. a week, should regard a prospect of 30s. or

40s. in the towns at steady and unflinching employment with indifference. It is a literal fact that in Great Britain, with an extension of the area of cultivation, there are fewer labourers on the land in 1878 by 133,000 than in 1831. But for that great urban demand, there was never anything in the incidence of the occupation of tillage that would have warranted the comparatively high rate to which farming wages were forced up. On the contrary, while every other commodity has greatly risen in price cereals have persistently fallen; and the facilities of transport by steam and rail and of communication by telegraph have rendered consumers entirely independent of the vicissitudes of our own seasons. Where the farmer should have been compensated by a higher price for his lesser crop, that natural law has been permanently defeated by the influx of grain from abroad. Every department of productive industry being at a standstill, or in a state of rapid retrogression, all orders of employers having reduced wages, contracted their operations, paid off workmen for whom they had no employment or worked short time, it followed that the demand for labour should cease to draw men from the plough-tail to the anvil, the mine, or the factory—that, indeed, the universal stagnation should throw many town hands back upon the rural districts. These contingencies conspiring with the ruinous prices of cereals to force economy upon the farmers, they have simply sought to re-adjust the price of labour to the prospects of a more plentiful supply and to their own reduced circumstances—an enforcement of an inexorable economical law which has been clamorously and irrationally resisted, with what excuse or justification I respectfully solicit space in your journal to examine.

The outside public of cheap and vicarious humanity mongers are never at a loss to make a present of their fine feelings to what they call "the working men." A has no difficulty in finding a reason why B should be relieved out of the purse of C. The question raised by these philanthropists by deputy is not whether, with wheat under 40s. per qr., the farmer can afford to pay his present wages, but merely whether the labourer can comfortably live on less. The question then remains, who is to make up the difference? Is a man to be paid, not according to what his services are worth to the master, but to his own wants and needs? Well, sir, who is to pay him? Is it the farmer's duty, any more than that of any other member of the community to find money for the full rations of the ploughman and his family? To pay the journeyman, not according to the value of his work to his employer, but to his ideas of what he needs, is to give him not wages, but alms. It is out-door relief, not out of rates to which all must contribute, but out of the tenant's private pocket. Can the farmer pay him—make bricks without straw? Nothing is more beneficent and yet more dispassionately merciless than the laws of nature. The sun that parches the unwatered soil, the tidal wave that sweeps away every created thing that comes within its course, the law of gravitation, are peremptory and inexorable. The farmer cannot produce the wages his acres will not yield, however much the outside Samaritans may cry to his men. "Be ye warmed; be ye clothed." The old method of supplementing was out of the poor-rate; and that is really sound political economy, if it be really true that the wages which the profits of tillage can alone afford are insufficient for the actual subsistence of the labourer.

But is that the fact? On this subject the grossest ignorance prevails. "Jeshurun waxed fat, and kicked." That is really the ailment of the order of wage receivers. Our public and individual extravagance are scandalous, and we put the blame upon the times. Let us reckon a little with history. At the beginning of this century, the weekly wages of the agricultural labourer did not average above 8s. In Devonshire they seldom exceeded 5s. Women weeded and hoed for 8d. per day or less, and in Ireland the ploughman took 6d. a day. The quartern loaf ranged between 10d. and 1s. 10d.; sugar was 10d. per lb.; tea, 7s.; coffee and chocolate, 2s. 6d.; soap was heavily taxed; salt paid a duty of 6s. per peck; the leather of shoes, the glass of windows and vessels, the bricks, tiles, slates, timber of houses bore a heavy impost. The newspaper was 7d.; advertisements, 2s. 6d. Meat, cheese, butter had on them an almost prohibitory duty. Yet the "working man" contrived to exist then, and to bring up a family. The bricklayers who built the Red Lion at Brentford were, when wheat was 115s. 5d. per quarter,

paid 2s. 6d. for a day's work, laying from 800 to 1,000 bricks. Their labourers received 1s. 3d. At Greenwich Hospital has been kept an exact account of the rate of wages current in the district—the highest metropolitan rate. In January, 1801, wheat was 139s. 4d. per quarter, and the London carpenter had a current wage of 18s. per week. Oddly enough, he now pays to the farmer just the odd 37s. 4c. per quarter; and, while reducing his time eight hours per week below that which was fixed at the beginning of the century, he extorts from 36s. to 42s. for smaller services than were rendered for less than half the money and at from two to five times the cost of subsistence. With all the primary necessities of life

at the extravagant prices I have indicated, the farm labourer on 7s. 6d. per week lived and left his likeness. Why cannot he now on 15s.? His grandmother hoed at 4s. per week; his wife gets 7s. 6d. In place of bad sugar at 10j., it may be had of better quality at 3½d.; tea at 7s. is superseded by the same article at 2s.; and coffee is less than half its former price. All articles of clothing have been equally cheapened. Above all, the quarter loaf is permanently at a maximum of 5d. in place of a range from 10j. to 1s. 10d. Notwithstanding the entire repeal of the duty on meat, butter, and cheese, these articles have alone risen in price—but why? Simply because the means of purchase from the relief given by the cheapness of other commodities has been so great, that for one who formerly bought butchers' meat, at least five do so now.

This neither earth is not a world of rose-water. Here is no liberal creed for anybody. Roast geese do not fly about with knife and fork, quacking "Come eat me." The Great Teacher prays only for "our daily bread."

"Give to nature but what nature needs,
Man's life were cheap as beast's."

If the profits of farming and the demand for labour will admit of it, by all means set the ploughman daily to roast beef and plum pudding. But the economy of human society does not admit of this. It is in vain for the labourer or his friends to say that he cannot live on less than his present guerdon. That class of society that can spare from their earnings and the decent subsistence of their families one hundred and forty-seven millions yearly for drink, and at least fifteen millions (retail cost) for tobacco, needs no commiseration. The truth must be held before the eyes of all the people. Plain living and high thinking are what we should aim at. The British peasant receives very much larger pay than his class over the world. The Italian gets scarcely one-fifth British wages—the Spaniard, the Russian, the Hindoo, who all send us grain, receive little if any more. French economists declare the Gallic freeholder to be worse off than our hiads. It is said that a butcher's shop is scarcely to be found in any place in Germany smaller than a town; and the bread of the peasantry is too black for the daintiness of the British stomach. It is a fact of which our rulers may well be proud—that a man may in this our England enjoy all the rational needs and comforts of life, and that many do so, without contributing one farthing to the revenue of the State. Every necessary of life, every raw material of production, is entirely free of all taxation—and the journeyman who pays to the revenue is a self-imposed contributor.

One word more. Public extravagance is the parent of personal and private profusion. Our Imperial and local burdens reach £115,000,000 yearly. How can enterprise and industry so handicapped bear up against the competition they have to sustain? If we had no foreign trade, prices among us would adjust themselves; but as the greatest exporter in the world, we must regulate our cost of production by the prices of our customers and rivals. We are all to blame—we Liberals more than you Tories—for this scandalous improvidence. Mr. Bright puts his finger upon this blot. But I must take leave to remind him and our party that the Duke of Wellington, under a dispensation of rotten boroughs and nomination counties, governed us at a cost of forty-eight millions; that the Liberals came into power with the watch-words, "Peace, Retrenchment, Economy, and Reform," and that Mr. Bright left office in 1873 with a revenue of seventy-seven millions, being twenty-nine millions in excess of that of the ante-Reform Parliament. Smoking and drinking cost us one hundred and sixty-three millions a year. The whole of this is absolute waste—worse than waste. It puts "a thief into a man's mouth to steal away his brains." It

produces incapacity for work, crime, insanity. It is, indeed, inconceivable that the energy and industry of any nation can support such an enormous dissipation of its resources. When to this is added the fact that we import 53 millions worth of cereals, and in all 99 millions worth of food, and in place of utilising the refuse to repair the exhaustion of our fields, we send the whole in sewers to pollute our rivers or to be lost in the sea, may it not be added that the force of folly can no further go?

SHEEP-DOG TRIALS.—The trial of sheep-dogs is a very interesting sight. I witnessed one the other day on Barbon Fell, the property of Lord Beehive, in Westmoreland. Half a mile of ground was flagged out on the rugged side of the fell. Two flags waved on the top; round these the sheep have to be driven. A small knot of wild Highland sheep clustered together at a distance; while on the extreme left are the judges, close to a pen made of hurdles, into which the sheep have to be driven. Fifteen minutes is the time allowed for each dog from start to finish. I arrived just in time to see the local wonder, "Flora," perform. She looks no beauty, as she follows closely at the heels of her master, a sturdy active shepherd, though she is wonderfully intelligent. Three sheep now appear far away on the right. A wave from the shepherd's hand sends Flora in that direction, slowly, silently, with a fox-like tread, her bright eyes gazing steadily, her sensible head held high in the air. She is trying to find the sheep her master bids her bring. As they come in view, like an arrow let out of a bow, Flora starts off with one bound; the sheep rush down the hill at a headlong pace, till a whistle is heard, and Flora pauses, stooping dead short. The sheep, surprised, stop to turn and look round at the enemy, as she again comes forward, this time slowly and carefully. The sheep retreat also more sedately; they turn off, afraid of entering the pen. Flora, nowise balked, with the patience of a human being, makes an enormous *detour*, and appears, to the astonishment of the foolish sheep, suddenly in their van. Again they retire, until, after many turns, marches, and counter-marches, they reach the pen. The sheep look at one another blankly, as sheep always do. One lies down; the other two make a violent dart on one side; but Flora, quick as lightning, baffles their tactics. A little more of such fencing, and a loud shout from the bystanders proclaim Flora's victory in the unprecedentedly short space of six minutes and a half. The sagacity and calm determination of the sheep dogs are truly admirable, and these trials are very popular with the shepherds, who are as keen about their favourites' respective merits as owners of thoroughbred racehorses. To increase the zest of the sport, Lord Beehive gives prizes for the best performers.—*World.*

BLARNEY.—Here is an instance of "blarney" which certainly merited the reward it received. The scene could be laid nowhere but in Ireland, and the hero, even in Ireland, could be nobody but a cabman. The fare for two people right across the city from one end to the other is fixed, with admirable simplicity, by the authorities at sixpence before ten p.m. and at a shilling after it. Two gentlemen accordingly at three a.m. of a winter's morning drove through the town and tender Paddy his legal fare of a shilling. He looks at the coin with mute stolidity. "Well," says the stranger, in amazement, "you're a wonderful man not to grumble." "What would be the use of my grumbling," says Paddy, brightening up kuowinziy, "when I see the other shilling shining in your honour's face?"—*Mayfair.*

WHAT ARE WE TO DO?—"Editing a paper," declares a transatlantic editor "is a nice business. If we publish jokes, people say we are rattle-headed. If we omit jokes, they say we are an old fossil. If we publish original matter, they blame us for not giving selections. If we publish selections, folks say we are lazy for not writing something they have not read in some other paper. If we give a man a complimentary notice, we are censured for being partial. If we do not give complimentary notices, folk say we are a hog. If we do not cater for the wishes of the ladies, the paper is not fit to tie up a parcel. If we remain in our office and do our business, folk say we are lazy for not mingling with our fellows. If we do go out, they say we never attend to our business. If we do not pay our bills promptly, folk say we are not to be trusted. If we wear poor clothes, folk say business is bad. If we wear good clothes, they say we never paid for them. Now what are we to do?"

THE WEIGHTS AND MEASURES ACT.

A public meeting of corn merchants, factors, millers, and others interested in the corn trade was held recently in the new subscription room of the Corn Exchange, for the purpose of considering the steps necessary to comply with the provisions of the above Act. The meeting was convened by the Committee of the London Corn Trade Association and the National Association of British and Irish Millers, the room being lent by permission of the Corn Exchange Committee. It had been advertised that Mr. J. G. Hubbard, M.P., would preside, and considerable surprise was therefore exhibited when Mr. Kressman, the honorary secretary of the London Corn Trades Association, proposed that Mr. Millis Coventry, a gentleman for 50 years associated with the London Corn Market, should take the chair. It was explained that owing to the meeting having been adjourned, the right hon. gentleman had a prior engagement in the country, and Mr. COVENTRY then assumed his seat amidst cheers.

The CHAIRMAN, in opening the proceedings, bespoke a fair hearing for everybody. For himself he had no decided views on the matter, and therefore felt perfectly impartial.

Mr. Alderman HADLEY moved:—"That this meeting is of opinion that grain of all kinds, and the dry products thereof, should be sold by weight only" (Hear, hear). They were aware that recently an Act of Parliament was passed that would come into operation on Jan. 1; that that Act of Parliament thoroughly revised all preceding Acts in reference to weights and measures; and that it laid down for the future a system which would compel uniformity of weights and measures throughout the kingdom. Many meetings had been held in different parts of the country to discuss the operations of that Act, and expressions of opinion had emanated from them that led to the idea that the time had arrived when uniformity should be adopted (Hear, hear); and they in the corn trade thought that the opportunity should be seized to introduce one system of weights and measures so far as their trade was concerned. He would not say the metric or any other system, but would simply ask them to come to a decision on the principle. Measure was an altogether delusive standard in the corn trade, as they might make twenty different kinds of weight out of a bushel, but if they adopted one kind of weight it would give them a standard from which they could not err. Through the operations of the Millers' Association something like forty towns in the kingdom had decided on adopting the principle of weight. If they carried this resolution in London it would have great weight in the country. The Board of Trade were only anxious to adopt the wishes of the country, and this year they were desirous of removing the various ambiguities and abuses that existed amongst them (Hear).

Mr. JOHN ROSS seconded the motion, which was supported by Mr. WILSON, of Birmingham, who said he attended not in his individual capacity as a miller and corn dealer, but as a representative of an important meeting held in Birmingham on Thursday, which was attended by members of the trade from Warwickshire, Worcestershire, Shropshire, Gloucestershire, Derbyshire, and Northamptonshire, and at which a resolution similar to that they were now asked to pass was carried. In many parts of the country where the process of measuring was retained, they usually sampled two or three sacks and then weighed the remainder. What was, that as a matter of common sense, but dealing by weight? (Hear, hear.) Most dealers preferred dealing by weight, as it was easy to put sacks on the scale, and they did not lose the one or two per cent. that was always the case in measuring and re-sacking. Independently of this, there were four or five interpretations of what constituted a quarter of wheat, and therefore for comparison quotations were of little value. These, amongst others, were the reasons for sounding the death-knell of selling grain by anything else than weight (cheers and no).

Mr. W. E. WILSON (chairman of the Birmingham and Midland Counties Corn Trade Association) supported the resolution. He remarked that a meeting on the subject in Birmingham last week was attended by gentlemen from Warwickshire, Worcestershire, Shropshire, Derbyshire, Lincolnshire, Northamptonshire, and Nottinghamshire; that the meeting adopted a resolution in exact accord with the opinions so well expressed by Mr. Alderman Hadley. The custom of measuring grain was exceedingly cumbersome. If they

wanted to check measure they took three or four sacks and weighed them, in order to detect any discrepancy. What was that but dealing by weight? It has been said that millsters would not take barley by weight. They took foreign barley in that manner, and he believed the large Burton brewers preferred taking home barley by weight, because they could easily put the sacks on the scale and get at the quantity. He never knew a man yet who measured one hundred sacks of grain without being short one or two per cent. Four or five different interpretations were given to the "quarter," according to the part of the country in which the term was used; and it was very unfair that the market should be depreciated simply because the natural weight of a quarter went down in consequence of the weather. The intrinsic value of grain in the market did not vary one shilling for weeks together, and yet the prices were written down four or five shillings in the circulars. These were sufficient reasons why they should sound the death-knell of selling grain otherwise than by the weight system. (Hear, hear).

The resolution was put and passed, with but one dissentient.

The CHAIRMAN asked the gentleman in question to withdraw his opposition in order that the resolution might be adopted unanimously, but he declined to do so.

Mr. SAMUEL SMITH (president of the Sheffield Millers' Association) moved the second resolution, as follows: "That this meeting is of opinion that the cental of 100 imperial standard pounds would be the most convenient selling standard, and would be glad to see it become the only legal denomination for general use." From his experience in the trade, extending over a long series of years, he was convinced that the cental or decimal system was the best that could be adopted ("No, no," and confusion, during which the chairman several times requested order). The cental system was best for the buyer, best for the seller, and best for the manufacturer of the article. (Renewed cries of "No, no"). He was only expressing his own opinions, and it would be quite right afterward for any gentleman to controvert them if he could (Hear, hear.) He repeated that the cental was a more practical and common sense method of buying and selling grain than any other with which he was acquainted. To show the confusion that existed in the country at present, he mentioned that in London they got 62lbs. weight per bushel, in Hull 60lbs., in Liverpool 10) or one cental, and in some local markets 64lbs. per bushel. He had heard it said that the change would interfere with the taking of farmer's averages for ecclesiastical purposes—(laughter)—but looking at the perfunctory mode in which those averages were now arrived at, he believed the change would be better both for ecclesiastical purposes and for the Government in collecting those agricultural statistics which were of such value to the nation at large.

Mr. H. C. WOODWARD (ex-chairman of the Liverpool Corn desired Trade Association), in seconding the resolution, said he proposed change as a corn merchant and an Englishman. It had been asserted that the Liverpool men wanted to thrust the cental down the throat of the trade (Hear, hear, and No, no). In answer to that charge, he need only say that the meeting in Liverpool was attended by Mr. Alderman Hadley from London, and also by representatives from Chester, North Wales, Lancashire, and Yorkshire, and that it was resolved to use their best endeavours to secure uniformity of weight, and to have a system which in ancient language, would be "easily understood of the people" (Hear, hear). It seemed to him that the Government would have done well to have brought the country by compulsory means out of the present Babel of confusion respecting weights and measures. What he would like to see was that the hundred-weight should mean the hundredweight, the quarter 25 lb., the stone, 10 lb., and the ton 2,000 lb. In conclusion he read, amid laughter and applause, an "epitaph on the old hundredweight."

Mr. S. W. KEENE, in proposing an amendment, remarked that the Corn trade of London must be surprised when the promoters of this meeting could not get one of their own body to come forward and to move and second this important resolution. It appeared that they had to go to Liverpool and Sheffield for supporters on a resolution which would to some extent revolutionize the grain trade. This meeting had been got up by the secretary of the London Corn Trade Association.

E. F.

tion on his own account, and by the Millers' Association ("Oh, oh," and "Withdraw"). He did not think that the Act which would come into force in the beginning of the year was at all understood. There was nothing in it which called upon the trade to adopt the cental. (Hear, hear.) It was an act to consolidate the law, and left the general principles respecting imperial weights and measures unchanged. Mr. Alderman Hadley said at Liverpool that the Act was a destroying and removing measure. Now, he would like to know whether destroying and consolidating were one and the same thing (A voice: "Read Section 19"). He was simply quoting Mr. Alderman Hadley's speech, in which he said the Act overthrew, destroyed, removed, and consolidated. How that could be he did not quite comprehend. (Laughter.)

Mr. Alderman HADLEY: It overthrows some Acts, destroys others, and consolidates the remainder (Hear, hear, and applause).

Mr. KEENE (continuing) said he would leave the matter, as he wished specially to speak about the cental in London. He contended that in London the cental would be found to be a small denomination to be of any use, and would give the trade an immense deal of trouble (Hear, hear, "No, no," and confusion). What was originally adopted at a meeting held in the metropolis was that there should be 500 lb., 300 lb., and 100 lb. He certainly thought, if they were to make any alteration at all, that that was the one that should be adopted. For many years they had been selling grain by weight in London, which made the resolution quite superfluous so far as this City was concerned. (A voice: "Foreign wheat"). Well, he was speaking more particularly of foreign wheat (Hear, hear). They had taken as nearly as possible the imperial measure, and found that it was an advantage. They would have the greatest difficulty to introduce the proposed change into charter-parties and bills of lading. From America, for instance grain came in weight of 480 lb. and it is much easier to sell at the same weight. Many men in Mark Lane were anxious to continue selling by weight as heretofore, and if any change was necessary in the phraseology, they had only to get some other word instead of "quarter" ("Cries of 'The cental,'" and "No, no"). The promoters of the meeting had at the last moment changed their own resolution, which was to be totally different from the one now submitted. Were they to be dictated to by the hon. secretary of the Millers' Association? ("No, no," and "Shame"). It was impossible that a meeting like this, got up hurriedly, should decide an important question affecting the whole trade, and be therefore moved as an amendment: "That this meeting is of opinion that it is inexpedient to make any change in the present mode of selling grain and flour by weight in London, but that a committee be formed to settle a local denomination to be used in lieu of the word 'quarter'."

Mr. JOHN ASKE, chairman of the arbitration committee, and one of the directors of the Corn Exchange Company, seconded the amendment. He ventured to say that if the London trade were polled, the majority would not be a trifling one which would vote for the retention of the existing mode of selling grain. Nine out of every ten would be in favour of the present mode (Hear, hear, and "No, no"). Did the gentlemen from Liverpool, Birmingham, and Sheffield, suppose for a moment that they knew better what were the requirements of the London corn trade than those engaged in it themselves? ("No, no," "That's not the question.") He represented the wholesale trade in feeding stuffs, such as oats, barley, and maize, and also many of the retailers, and he contended that there was a great difference between a mercantile selling in his office and the dealings of the lower branches of the trade, where grain was passed direct to the consumer. On these the operation of the cental would press very heavily (A voice: "How?"). Why, they would be obliged to have sacks for different weights, which would entail great inconvenience and expense. Men cutting would charge so much per ton—(Hear, hear, and "Oh, oh!")—and thus great confusion would arise. All these might be small things by themselves, but they amounted to a great deal in the aggregate. It was said that the millers wanted the change. He found that they did not (Hear, hear). He had asked two of the leading millers, who replied that they wished to retain the present mode of selling ("That's no argument;" "A corn mill says to the contrary.") Let the wheat trade adopt

the change if they chose, but let other branches alone. If the decimal system were to be adopted with regard to the coinage and all weights and measures whatsoever, there might be some reason for this proposal; but for the grain trade to rush and adopt the cental would be very wrong indeed. (Hear, hear, and "No, no"). Why place upon themselves letters they were not asked to wear by the Government? So far as he could judge, there was no good cause shown why the existing method of buying and selling should at present be disturbed. (Hear, hear.)

Mr. JULIUS KRESSMAN (hon. sec. of the Corn Trade Association) said that up to this time there had been no explanation of this Act at all. He had taken a great deal of trouble to understand it, and he found its purpose was to consolidate various existing Acts, to introduce a uniform system, to give permission to use the decimal system in quoting quantities and prices, and lastly, to legalise the introduction of the metric system as at present in existence in France. The Act said that the term "quarter" would in future be illegal, so that they must adopt a new denomination. The decimal system was in use in nearly every civilized country. It existed in France, America, Belgium, Holland, Italy, Switzerland, Germany, and above all others in a country which was considered barbarous, namely, Russia (Laughter and applause). If all these countries had advanced so far in civilization England should certainly get a bit of it (Hear, hear). Every man who had any education at all knew how easy it was to calculate in hundreds and thousands of pounds. It was a pity that London should be the last place to take up this matter; but his experience was that people in London would not do anything unless they were paid for it ("Oh, oh," and laughter). Would they have the decimal system? ("Yes," and "No, no"). Would they have the cental? ("No; we won't have it"; "We shall have it," &c.) Could they propose anything better? ("Yes," and "No, no") The Government were ready to grant the decimal system, and all they had to do was to ask for it. He cordially supported the resolution.

Mr. E. TAYLOR (Liverpool) distinctly disclaimed any intention on the part of the corn trade of that town to dictate in this matter. They only want a something plain and practical in place of the present heterogeneous muddle. Speaking of the cental after many years' experience, he could testify that it worked exceedingly well for wheat, and it would have been used long ago for other articles had it not been for the selfishness of a few people. In the north of Ireland the cental had been adopted unanimously (A voice: "For what?"). The grain trade. Let them try it London, and they would be satisfied that it was by far the best mode of trading (Hear, hear).

Mr. E. POWER, in supporting the resolution, said those who objected to any change in the old denomination committed a great mistake. They should not retain the name of a quarter as indicating weight. It must be a measure of capacity. If they passed this resolution, he felt that they would have adopted the essence of the whole question (Hear, hear). He was certain that there was more injustice done by the system of measuring than by anything else connected with the trade (Hear, hear).

Mr. JOHN WALKER considered the proposed change an unwise one. If it was necessary to do away with "quarter," it would be very easy to get another word. They should be conservative enough not to change things which did not require alteration.

The resolution was then put to the meeting, and carried by a majority. There were some calls for a division, but it was not taken. It was further resolved that a deputation consisting of members of the Chambers of Commerce and Agriculture, Corn Trade Associations, and of the National Association of British and Irish Millers, should wait upon the President of the Board of Trade in order to secure the objects comprised in the foregoing resolutions.

Mr. Alderman HADLEY, in proposing a vote of thanks to the chairman, said it was exceedingly gratifying that the meeting had been so successful in their endeavours. He had no doubt in twelve months they would all look back upon the proceedings of that day with feelings of great satisfaction (Hear, hear).

Mr. KEENE, in seconding the motion, observed that the London corn trade had been nowhere that day. They had

been beaten by the Miller's Association, aided by gentlemen from the country ("Oo, oh!").

The CHAIRMAN briefly acknowledged the compliment; and the proceedings, which lasted nearly two hours, terminated.

A meeting of the Sub-committee of the Hull Incorporated Chamber of Commerce and Shipping, appointed to consider and report on the Weights and Measures Act, was held recently. The results of meetings held in various other towns were read, the general tenour being in favour of the cental of 100 lb. as the standard for weights for corn, though in London a considerable minority was against any change from the present system. The feeling of the Sub-committee was rather against the adoption of the cental for anything except wheat (for which 500 lb. would be a fair unit), as the different qualities of grain rendered a sub-division of 100 lb. almost indispensable, and if any intermediate weight between full centals were requisite they might as well remain as they are at present. Moreover, in Liverpool, the head-quarters of the cental, only wheat is sold on that basis. It was also pointed out that as far as the Act of Parliament was concerned there was no need of any change whatever, all grain being already sold in Hull by "an imperial weight (the lb.) or some multiple thereof." As several members of the Committee were unable to attend it was eventually agreed to have another meeting next week, and then, if deemed advisable, to call a public meeting to have the question discussed.

AGRICULTURAL TABLE-TALK.

Speaking at the annual meeting of the Isle of Sheppey Agricultural Association at Sheerness, a few weeks ago, Mr. E. L. Penterton spoke at length upon agricultural topics, and dwelt particularly upon the labour question. He advised the labourers to think twice before they adopted the course suggested by agitators who were going about the country, and commended to their attention some remarks made by the speaker of the House of Commons recently. That hon. gentleman, two years ago, offered to take his employes into a sort of partnership, but they very wisely declined; and a short time since, when he met them again, he told them that if they had done the same as he gave them the opportunity of doing, they would, as events have turned out, have been the losers by the transaction. He thought the evidence of such witnesses ought to be taken before that of interested agitators. He was sure the farmers had made no unnecessary reduction in the wages of their labourers; they were bound to do it, as honest men, to pay their way. Wages had increased very considerably during the last twenty years, and he believed the present reduction would not press so very hardly upon the labourers. Mr. W. Dredes, M.P., referring to the agricultural labourers' agitation in Kent and Sussex, said he was sorry he could not congratulate them upon the commercial state of this country. All classes were passing through a certain state of depression, and, in addition to that, in some cases there was some danger of that depression being aggravated by a possible disagreement between employer and employed. But, in spite of all that appeared on the surface, there must be a certain substratum of good feeling still existing, judging from what he had seen that day, and, if associations like theirs fostered and took care of it, they would be rendering a permanent blessing to their country. The time had now come when those who, during the past years of exceptional prosperity had enjoyed an increase in the amount of their wage, must now look to take their share of the consequences of the existing depression, which, he trusted, would soon pass away. It was not until the farmers of East Kent had the last straw put upon their backs that they determined to appeal to those who are under them to help them out of their difficulty.

At the dinner of the Wenlock Farmers' Club, Sir BALDWIN LEIGHTON, referring to the legislation of last Session, said:—The Bill which had attracted most attention lately was the Weights and Measures Bill, and as they were aware, there had been a large representative meeting held in the country, at which two resolutions were unanimously arrived at, one being that it was desirable to sell wheat and other solids by weight, and also adopting, so far as the meeting

was able, the level-pound cental of 100 lbs., which he believed was the general feeling among farmers at the present time. This, he reminded them, was a multiple of the old weight. A cental, compared with the old bushel of 75 lbs., would be one and a third; four bushels would make three centals. Farmers had become more intelligent in regard to those matters of late, and there was an anxious feeling to adopt a uniform weight. If all the counties in England would only hold such meetings as those which had recently taken place in their own county a measure would be adopted by the Legislature, and farmers would be able to take up their papers and ascertain what the different selling prices of grain were all over the country. He next alluded to the Public Health Act, the passing of which was mainly due to the exertions of the senior member of the borough. He took an active part in promoting that Act during its progress through Parliament. That Act, he contended, would prove most beneficial to the farmers and labouring classes. The Carriage Disrepair Act had also been mentioned, to which he need not refer, and also the Highways Act. That borough was entirely excluded from the operations of the Act, but no doubt there were many gentlemen in that room who lived out of the borough but in the county who would be affected by it. He quite concurred with the views expressed by his friend Mr. DON PAVES at a discussion which took place in that room upon the subject, namely, that a great deal of economy would have to be exercised, and no doubt that was being done. He referred to the extra cost which in some cases would have to be expended upon roads, and remarked that before the Act was passed the whole of the expense of repairing such roads would fall upon the parishes, whereas had the expense would now fall upon the county.

At the same meeting Mr. JASPER MORE proposed the health of the Borough members. He approved of Colonel Bridgeman's advice to let them settle to foreign affairs if they wished. Perhaps they would give their views about Cyprus. If it was to be regarded as a no-eltern, he feared agriculturists might not like the terms, for we were tenants-at-will of that island, without any agreement for compensation for unexhausted improvements. He felt the club would be anxious to express a hope that Mr. Benson, who lately introduced agricultural legislation for their consideration, had not seriously suffered in their service, and that he would be soon restored to health. It appeared to him, when Mr. Benson spoke of past legislation, that it would be a good division of the subject if they could induce their members to speak on agricultural questions that had not passed into law. Lord Eliche, as a supporter of the Government, had lately called modern legislation on for farmers grandfatherly, but it seemed to him to partake of the nature of a conjuring trick, making you believe that you had something when you had not got it. It used to be said that you could drive a coach-and-four through an Act of Parliament, but a whole Parliamentary train was waiting to take Lords and Commons through the Agricultural Holdings Act when it passed, and the Highways Bill seemed to throw the rales from one hand, or, as farmers said, from one pocket to the other, and it would be interesting to see whether a traction-engine would drive through it. He should be anxious to know if their members could tell what had become of their old friend the mill-tax, which seemed to have been rocked to sleep since there was a sufficient surplus to make some persons hope it would have been reduced.

Mr. SCLATER-BROTH, in responding to the toast of the county members at the North-east Hants agricultural dinner recently, after referring to foreign affairs, proceeded to give a history of the changes which had taken place in his department since he was appointed Secretary to the Poor Law Board. The duty devolved upon the Board of administering the law relating to public health, the relief of the poor, and local taxation. Great results had followed the enactments which had taken place since 1875—particularly with regard to the sanitary condition of the country; and there was now a complete network of sanitary organisation. Local self-government was now full of energy, and he thought it desirable that further improvements should be in that respect deferred until the people showed a greater desire for them. With regard to the Valuation Bill, the circumstances of Hampshire rendered it of less value than it would be to many other parts of the kingdom; and with regard to the county and other rates little

Difficulty was experienced on account of the manner in which the valuations had been effected. With regard to the administration of the Poor Law, he considered it to be in a very satisfactory state. Nothing would be wanting on his part to improve the local government of the country and to remove all those grounds of irritation which must arise from time to time between different classes. With respect to the present depression in the agricultural districts, that was a fact which everyone must deplore; but he trusted that the depression was only of a temporary character. It should be remembered that the manufacturing interest had suffered from the effects of over-production, and that when one interest was affected all others must suffer. With regard to the irritation which existed on the part of the labourers against the farmers, he hoped that it would soon subside, and that the labourers would reflect that if the farmers could not afford to pay them the wages they were now receiving, they must submit to this reduction, and he should be extremely loth to suppose that any feelings of irritation between those classes would long continue. The hon. member after paying a high tribute to the admirable manner in which local government is carried on throughout the country, expressed a hope that it would long continue to be carried on in the same manner. Great progress had been made in that direction during the last ten years, and although he was anxious to promote still further improvement, he felt satisfied with the gradual progress which was now going on throughout the country.

At an agricultural dinner at Gloucester a few weeks ago, COLONEL KINGSCOTE expressed his satisfaction at the passing of the Contagious Diseases (Animals) Act, and said he felt sure that it would benefit producer and consumer. He regretted that the highways question had not been treated in a more comprehensive spirit, and that provision had not been made for the simultaneous abolition of turnpikes. Mr. Yorke said that though the Highways Act would in some degree mitigate the hardships arising from the dis-turnpiking of roads, yet he considered that a contribution of one-half the expense from the county rate was not sufficient, that there ought to have been a more stringent extraordinary traffic clause, and that quarter-session boroughs should have been included in the rateable area. In reference to the great depression of agriculture, he said he regretted that Mr. Gladstone abolished the registration duty on imported corn, as it was a duty which apparently caused no hardship to any one, and yielded something like a million a year to the Exchequer. At the present time we imported as much corn as we grew, and if that duty were re-imposed it would yield a revenue of two or three millions a year.

At the dinner of the Town Malling Agricultural Association, recently, Sir W. HART DYKE, referring to the agricultural labourers, said he regretted to see in the newspapers a report, which he hoped was not true, that some thousands of the labourers were to go to Canada, where they would cultivate land placed at their disposal. He could conceive no greater unkindness to the labourers than to send them to a new country, where they would have to start afresh, build their own houses, and be placed under far more straightened circumstances than they could possibly be placed in this country. Many suggestions had been offered for the cure of the present state of things. He believed himself that an agitation might be raised to ascertain matters connected with our imports and exports, and with reference to free trade. He thought it well that these matters should be thought of at a moment like the present. With regard to landlord and tenant, or employers and employed, any questions should be fairly and temperately gone into, and they should not come to any hasty conclusion. Because two years had been bad it did not follow that a landlord should lower his rents; it was, of course, well known to be to the disadvantage of a landlord with a large estate to have a bankrupt tenancy, but he thought it was early days to consider these matters in their more severe bearing.

M. E. Cazalet, the Liberal candidate for Mid Kent at the next general election, presided at a farmers' dinner at Wrotham

and dwelt at considerable length upon the depression which had fallen upon agriculture, and the remedy to be adopted. He prefaced his remarks by quoting statistics, showing that one-fifth of the whole capital of England, and one-third of the whole population, were directly interested in agriculture, and that during the last two or three years capital had been deteriorating in value. The depression was, he said, a natural sequence of the reaction coming after an era of great prosperity which followed the conclusion of the Franco-German war, superadded to a great European war. Three remedies had been suggested—a reduction of labourers' wages, economy in the farmer's household, and an application to the landlord for relief; and although a little might be accomplished in each direction, yet the position of the farmer would not be appreciably improved. The great difficulty after all to be met was that of foreign competition, which would naturally increase in extent, accordingly as the means of transit and communication improved. English farmers to hold their own would have to go in for increased production, and to do this they must turn their attention to the selection of seeds, and the use of improved machinery—and in this direction there was room for great improvement. Then, too, the farmer had a real grievance in the non-existence of agricultural training schools or colleges. Every other profession had its special schools but with one exception, and there the fees were high, there was no provision for giving a practical agricultural education. In that direction only might they seek permanent improvement. If we were to compete successfully with the other nations of the world, it would not be by having recourse to protective tariffs—that would be going backwards, and our motto should be "Forwards"—it would not be by reducing the wages of the labourer, or by mulcting the landlord, though the latter was fair game, but it would be by bringing to bear upon the great agricultural industry of our country more intelligence, more knowledge, and more thrift.

At the dinner of the Hiacford Club, a few weeks ago, Colonel BRISE said:—I do maintain that the interests of the whole agricultural community are identical. Before a man has taken his farm there may be a difference, but the interests of landlords and tenant must be identical after the applicant for the farm once becomes the tenant of the landlord. Having once become the tenant, I maintain that their interests are the same—that they not only row in the same boat, but must pull in the same direction. It is the case with every other agricultural class. The village tradesmen may have a difference of opinion as to the price of his goods, but his prosperity or adversity depends entirely on the prosperity or adversity of the agricultural interest. So it is with the labourer. The labourer perhaps may more often have a disagreement with the occupier—he often has to make a bargain with him—but the bargain once being made they row in the same boat and the prosperity and the adversity of the labourer depends on the prosperity or adversity of the whole, and not one part only, of the agricultural interest. I thought when you returned me to represent you in Parliament 10 years ago that you returned me to represent the whole of the agricultural interest, and not the views of any particular section alone of the agricultural interest. To the best of my ability I have endeavoured so to do, and I do not think if you had had a tenant farmer representing you you would have been able to raise the price of meat twopence a lb., or the price of wheat 5s. a quarter, or that you would have got any more relief from local taxation or the heavy burdens pressing upon you at the present time. But, gentlemen, I will also say this, that if you think your interests would be better served by the election of a tenant farmer to represent you, provided he is a member or eligible to be a member of the Hiacford Conservative Club, I shall not only be too happy to retire and make room for him, but if necessary will also subscribe liberally towards his expenses. I do not think, however, that you would find your interests would be better attended to than they have been by my colleague and myself. We have never shrunk from our duty of upholding those interests when called upon, and although our times are depressed and one vainly looks about right and left to find a cause, yet I think you cannot attribute it either to the votes of your present representatives or to the influence and policy of the Conservative government.

Agricultural Societies.

ESSEX.

At a meeting of the General Committee, at Chelmsford, the question of amalgamating next year's show with that of the Royal Society was discussed. It was ultimately resolved "That the Secretary of the Essex Agricultural Association be instructed to write to the Secretary of the Royal Agricultural Society and offer the following terms of amalgamation as fair and equitable: First, that the sum of £400 be contributed from the funds of the Essex Society, the conditions with respect to admission stated in the Secretary's letter being adhered to. Second, that out of the £400 contributed, not less than one half be allotted to prizes to be offered in the name of the Essex Society. Thirdly, that the members of the Essex Society stand on the same footing as those of the Royal with respect to entries. In the event of the Council of the Royal agreeing to these conditions, the Committee of the Essex Society will be prepared to recommend their adoption at the annual general meeting of their subscribers in the second week in January.

A letter was read from the Norfolk Agricultural Society, suggesting the formation of an Eastern Counties' Association in addition to the existing County Societies, the local Show not to be held when the Eastern Counties' Society visited a particular County.

The Secretary was directed to reply that the Committee were not prepared to entertain the proposal.

GLOUCESTERSHIRE.

The annual meeting of this Society was held, a few weeks ago, at Gloucester, for the purpose of considering the premiums to be offered for the next show and determining the place of meeting. Mr. B. St. John Ackers was voted into the chair. After some discussion it was resolved that the next show should be held at Cheltenham on the 15th, 16th, and 17th of July.

HEREFORD HERD BOOK.

A meeting of the Council of the Hereford Herd Book Society was held at the Society's Office, 20, East Street, Hereford, on Wednesday, October 30th, under the presidency of J. H. Arkwright, Esq. There were also present—Rev. G. H. Davenport, W. Stallard, T. Duckham, P. Turner, W. Taylor, W. Britten, J. Price, and J. H. Yeomans.

The Editing Committee reported that the certificates of entries for the 10th volume are—Bulls, 536; cows, 783. They are proceeding with the editing work, but the irregularity with which many breeders have filled up their entry papers has made the verification of pedigrees a work of time involving a good deal of labour. They have, however, now come to a decision in all cases as to the reception or rejection of entries, and hope to be able very shortly to place it in the hands of the printer.

The Finance Committee had a most favourable report to make, showing a balance in hand, after discharging their liability to Mr. Duckham; also showing a steady increase of members. The following were elected:—P. Davies, Dean Park, Tenbury; R. E. L. Burton, Shrawardine Castle, Shrewsbury. Life members: R. Bridgford, 30, Cross Street, Manchester; Mrs. Crawshaw, Dan-y Park, Crickhowell; J. T. Paull, Trelick, Grampound, Cornwall; T. W. Dent, Leighton Court, Bromyard; W. G. Holton, Trellasker, Grampound, Cornwall; J. Nott, Brampton Brian, Herefordshire; J. Gillespie, the Rock, Hatfield, Leominster; W. B. Peren, Compton House, South Petherton, Somerset; T. Wall, the Sheriffs, Kingston; R. Groves, Court Calmore, Montgomery. Messrs. Crane and Tanner, Shrawardine, Shrewsbury; B. Jones, Ensdon House, Shrewsbury; Mrs. Franks, Couad Harbour, Shrewsbury; A. Partridge, Discoyd, Presteign; J. H. Sunderland, junr., annual members.

SUFFOLK.

A meeting of the Committee of the Suffolk Agricultural Association was held recently, at the Town Hall, Ipswich,

to consider the date for the next show, Lord Waveney in the chair.

Mr. RICHARD GARRETT explained that finding that the date of the Royal Agricultural Society's Exhibition in London had been fixed for the 30th June, he had suggested to the Secretary (Mr. Bond) the desirability of calling this meeting. The Suffolk show of late years had been held in the last week of June, which would be interfered with by this fixture, but he believed it had on some previous occasions been held in the week preceding the longest day, and he, therefore, moved that the show for 1879 be held on the 19th and 20th of June.

Mr. B. W. COOPER seconded the motion, which was unanimously agreed to.

The CHAIRMAN referred to the question of the place, and the Secretary explained that the time had not yet expired for towns to apply. He had, however, been in communication with Lowestoft, and it was quite anticipated that that town would offer every inducement to the Society.

The SECRETARY then read a communication which he had received from the Secretary to the Norfolk Agricultural Association on the question of the proposed amalgamation of the various county societies in the East of England. The letter enclosed a copy of a report made by a sub-committee of the Norfolk Association, which was as follows:—

"That they are decidedly averse to an amalgamation with the adjoining agricultural county associations, and strongly advise that the county Society should be continued on the present basis; but they think it advisable that a larger and distinct Association should be formed to be called by some such name as the Eastern Counties Agricultural Association, holding its meetings annually by rotation in the counties comprised in such Association, the county meeting to be merged in the meeting of the new Association, the year in which it is held in such county.

"Your Committee are of opinion that in the event of the formation of the new Association the prizes of the county Society should be more generally confined to the county."

The consideration of the matter was deferred to a future meeting.

FAIR PLAY FOR FARMERS.—The farmer will have to understand that he, no more than anybody else, can pay more for a thing than it is worth. If the competition for land be great, the rent must go up unduly high, and no righteous law can prevent it. The law, however, ought not to lend a helping hand to either one side or the other in making a bargain, and it does, in this matter, lend some assistance to the lauded proprietor. Take the law of hypothec, for instance. The landlords say hypothec is entirely a farmer's question. Two cases selected from the number that have this year been before the Scotch Bankruptcy Courts will show the value of this assertion. Two years ago a farm in East Lothian was let to an offerer, about whom the landlord, asured of his rent by the stocking on the farm, purchased at the expense of others, did not take the trouble to ascertain that he was then insolvent. Farming with his creditors' money, the bankrupt—not, of course, known to be such—lost in the course of 1876 and 1877 £1,600, and being then unable to go on longer, he threw up his lease, leaving the farm in the market, where it still remains, and himself passed under sequestration. Small tenants are, it is said, encouraged, but at whose expense! A bankrupt examined in the spring at Perth explains this. The farming of this man lasted six years. Before that he had been a shepherd, but wishing to rise, he borrowed £200 (which he never repaid), and became a farmer. And a very pretty business he made of it. He kept, he said, no books; the farm never paid; sometimes he lost in the year "£200 and more;" and finally he wound up with a balance-sheet showing liabilities to the amount of £1,218, and miniature assets of £18. It would be difficult to contend, in the face of these cases, that hypothec has not in addition to its many other evils that of fostering unhealthy competition for farms, and thus adding unduly to rent.—*Scotsman*.

GREAT FALL IN PRICE OF PROPERTY.—At Dowd's Rooms, Edinburgh, recently, the extensive warehouses and granaries, covering an acre of ground, recently built by the late firm of Christie, Veitch, and Co., at Bowling Green-street, Leith, were sold by auction to Messrs. Cross and Donaldson, seed, manure, and oilcake merchants, Leith, for £7,300, which price includes, engine, boiler, machinery, &c. The total cost was about £14,000.

FRENCH STATISTICS.

The *Bulletin des Halles* has been at the pains of tabulating an estimate of the harvest throughout Europe; and such other countries as contribute to the European market. Below are given in their equivalent English terms the result of the harvest thus arrived at, and the approximate quantity required for consumption or available for export in each country, as the case may be:—

EUROPE.	YIELD OF 1878. BU-SHELS.	DEFICIT. BUSHELS.	SURPLUS. BUSHELS.
France	226,892,500	55,000,000	
Russia	214,500,000		44,000,000
Germany	123,750,000		
Spain	110,000,000		
Italy	104,500,000	8,250,000	
Austria	110,000,000		17,875,000
Great Britain ..	101,750,000	96,250,000	
Turkey	38,500,000		
Roumania	37,950,000		5,500,000
Belgium	23,375,000	2,750,000	
Portugal	8,250,000	1,375,000	
Holland	5,087,500	4,950,000	
Greece	4,812,500		
Russia	3,850,000		
Denmark	2,750,000		1,375,000
Sweden	2,337,500	550,000	
Switzerland ...	1,870,000	8,675,000	
Norway	275,000	825,000	
Various	550,000		
Total	1,121,000,000	178,625,000	68,750,000
U.S.A.	330,000,000		110,000,000
Algiers	20,000,000	1,375,000	
Canada	16,500,000		2,750,000
Australia	16,500,000		2,500,000
Egypt	11,000,000		
Various	8,000,000		
Grand Total	1,523,000,000	180,000,000	184,000,000

The three columns here given are preceded in the original by another estimating the average yield of each country; the total amounts to 1,561 million bushels. Now the total yield of 1878 being but 1,523 millions, there is a deficiency of 38 million bushels. Still, according to the table, the combined deficit of France and Great Britain will be covered by the excess of America and Russia, while the total available surplus is more than adequate to the requirements.

STRAINING AT GNAPS AND SWALLOWING CAMELS.—When the Scotch papers described what manner of men the City of Glasgow Bank directors were, a little fact came out which I hope will not be lost sight of. I call particular attention to it, because it looks more like a jest than the grim fact which it is. One of the directors always most sternly refused to read a Monday's newspaper, because it had to be printed on the Sabbath-day. This is almost like the jest that in Scotland the news are not allowed to lay eggs on Sunday. A Scotchman whom I know informs me that he was carefully trained as a boy to be a bank director, for he was not allowed to whistle to his dog on the Lord's day. He might call it in English, or call it in Gaelic, but whistling was devilish. It is to be hoped that the present exposure may have a good effect in reducing to its absurdity the Sabbatarianism which is the opprobrium of Scotch religion. These Scotch elders devour widows' houses without compunction, but they excommunicate a compositor who has an engagement on a daily paper, and therefore has to work on Sundays. I do trust that our friends of the Scotch press will use the present opportunity to give a death-blow to the degrading superstition which raises the fourth commandment into the greatest of all, and in too many cases makes it the substitute of all.—*World.*

FARMERS AND THEIR LANDLORDS?—As illustrating the wide-spread despondency amongst farmers at the gloomy prospect of agricultural affairs, the *Land Agents' Record* learns that the Nottinghamshire agent of the Duke of Newcastle has received something like 20 notices to quit from his tenants in that county alone.

THE OAT-BARLEY QUESTION.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I saw in your paper for Nov. 4, page 10, a letter headed, "Barley Grown from Oats." I enclose you my experience in an experiment made from eight to ten years ago, and carried out faithfully to a plan then laid down to ensure success. The land used for the trial was a chalk subsoil on my farm near Baldock, Herts.

About that time—I am not able to fix the year—there was much talk of barley from oats, and I have seen a sample said to be so produced. Thus the desire to test the method as it appeared to me, quite out of the natural course.

I sowed one rood of land with white oats in the early spring; properly cleaned it with the hoe, and cut the flag off three or four times during the first summer, and allowed no oats to come into ear. Some of the oats died during the winter. Those that remained alive I had hoed during the spring and early summer, looking for ears of barley to spring from the oat stalks. But not strange to say, as like produces like, oats came into ear instead of barley.

I had not the least faith when I planted the oats that barley could be grown from them. I merely tried the experiment to prove to my own satisfaction if it were possible to carry the theory out.

I am, Sir, &c.,

Baldock, Herts.

OLIVER STEED.

THE VINTAGE IN FRANCE AND GERMANY.—Messrs. Groves and Co., of 5, Mark Lane, have just issued their annual circular on the vintage operations, and state generally that the anticipations of abundance indulged in in the early summer have not been realised, and that, except in a few favoured localities, excellence has not been attained. In the Bordeaux district the vintage has been attended with varied success. The principal communes of the Haut-Médoc have again been fortunate, and the *recolte* there equals that of a good year. In the Bas-Médoc the result is different, the yield being only about half a crop, whilst that of the Côtes and Palus, and regions producing wines of the lower qualities, is still more unsatisfactory, and will not amount to a third, if even more than a quarter of an average. The vintage in Champagne has been completed under conditions far more favourable than the bad weather in the summer; and constant rains in the early part of the autumn led growers to anticipate. The new wines are better than was expected, and, without ranking as of a great year, may be described as elegant and agreeable. The Burgundy district was favoured by magnificent weather for some time previous to and during the vintage operations, so that the grapes were gathered in excellent condition; this was especially the case with the superior growths, which, as far as can yet be judged, promise to be exceptionally good. The yield of fine wines in the Côte d'Or is but a short one—hardly more than the third of an average. Of the medium and lower qualities there is a greater abundance, and they are of better quality than those of the last two years. The white wines are again unfortunate—in many vineyards almost nil. The Cognac vintage shows a marked deficiency, and the *recolte* of this year is much less than that of last; but the wines are good and will give excellent results on distillation. The vintage on the Rhine will be pretty nearly a complete failure, and on many properties will not repay the cost of labour. This is the effect of several causes, the chief of which is a continuance of rain and bad weather during the greater part of the summer, and the ravages of the "Sauerwurm," an insect which in many localities has destroyed the little fruit which, a month ago, gave promise of arriving at maturity. This misfortune has caused a general hardness in prices, and, with more activity in business, an advance in quotations, particularly of low priced wines, must be expected. The advices from Hungary are more cheering than from any other wine district, for the vintage there appears to have been a complete success. Old wines are, however, scarce, and the Austrian Government is purchasing so largely of cheap wines for military consumption, that it daily becomes more difficult to procure them at moderate prices.

THE SMITHFIELD CLUB CATTLE SHOW.

We are informed that there is every promise that the forthcoming show of fat stock at the Agricultural Hall, the entries for which are now complete, will be larger, if not more interesting, this year than hitherto. According to some daily papers, an experiment is to be tried which will excite some comment. It is intended, with the permission of the Privy Council, to form a separate class for the best specimens of Canadian cattle imported after the 26th inst., which in the ordinary course would be slaughtered at the place of debarkation. Before the cattle intended to be exhibited are allowed to be removed from the port at which they arrive there will be a strict veterinary examination. As a fortnight will elapse between the first day on which such cattle will be eligible to be shown and the opening of the show at Islington, it is believed that a sufficiently good selection may be made to give the public an idea of the condition in which these cattle usually arrive after their long voyage. The root, food, and seed displays will be greatly augmented this year, a greater amount of space being devoted to these exhibits; and the galleries and avenues devoted to the exhibition of agricultural machinery and the products of agriculture will include the usual display. The small hall will be occupied again this year by stands for the exhibition and sale of articles of a miscellaneous character.

AERATED BREAD.—The Aerated Bread Company, Limited, held its 25th Ordinary General Meeting at the Offices of the Company on Thursday, November 7th. Capt. Childs, Chairman of the Company, presided, and in moving the adoption of the Report he claimed that the Board had materially improved the position of the Company. Dr. Richardson, F.R.S. (a Director), congratulated the shareholders on the improvement which was taking place in the business of the Company. The late Dr. Daughli was one of those men who had devoted a life-time to the study of the health of the people, and in no respect had he succeeded better than in his successful endeavours to produce a perfectly wholesome, perfectly clean, and completely nutritious bread. By his simple, ingenious, and scientific plan, which the Aerated Bread Company still faithfully carry out in all its details, Dr. Daughli had replaced the old, but he (Dr. Richardson) could not say time-honoured system of kneading dough by the hands and feet of the workman. No hand or foot touched the dough to knead it in the Company's process, the whole being carried out by machinery. But more than this had been effected by the Company's system. As no yeast is used to ferment the bread, and thereby rob the flour of some of its nutritious parts, every kind of flour could be made into bread without the aid of chemical salts or adulterants, any of which, indeed, would be fatal to the success of the process. Referring to the Report of the Committee appointed to inquire into the dietaries of the prisons in England and Wales—and published this year as a return to an address of the House of Commons—Dr. Richardson said that the reporters, Messrs. Briscoe, Gover, and Bradton, in speaking of bread, had noticed with much effect the nutritive value of brown over white bread. They reported to the Government that the fish farmers in white bread amount to 7 or 8 per cent. according to the quality of the wheat of which it is made; while in brown bread, which contains the envelopes or coverings of the whole grain, "the fish farmers amount to about 10 per cent., and that while it is possible to live upon brown bread, without any other food, the health suffers and death finally ensues on white bread alone. They then went on to prove that in the manufacture of "whole meal bread" by the fermentation process, great difficulty is experienced. Owing to the presence, in the coverings of the grain, of a ferment called "Cerealin," a heavy loaf is produced, the cerealin acting like diastase on the starch in the meal, and giving rise to a viscid mixture which prevents the dough from rising, and they describe a rather complicated process by which through two intermediate steps the production of a light brown bread is secured. By the Company's process, all this difficulty is avoided and the whole meal bread made by it is simply perfect.

PUBLIC BEAUTIES.—Is it true that English ladies of beauty and position receive large sums of money from photographers for a sitting which puts larger sums of money into the photographer's pocket? I am quite sure it is not true; but I think it is a sad and a serious thing that such a report should be whispered about, and that the appearance of these portraits side by side with those of the ladies of the ballet and the *demi monde* should give a kind of support to the degrading rumour. A fashion of this kind is almost always progressive. Early last season our Court beauties were content if their simple face might be bought by admirers wholesale at ten shillings a dozen. The portrait was taken plain, and was such as any lady in private life might present to her friends. The public demands appears to have required more, and ladies of rank and position have assisted the photographers in supplying it. We have now portraits in fancy dress and in affected attitudes; portraits in which both their dress and the attitude have nothing to recommend them except that they assist to awaken cheap and vulgar admiration. Certain ladies may be congratulated on selling nearly as well as Miss Branscombe, who before she became photographic beauty had been very attractive in Page parts. Other popular favourites, commercially speaking, do not go off quite so well; that is to say, are not so completely the style that 'Arry cares to invest his shilling in. Still, their portraits are in brisk demand.—*Mirror*.

RECOLLECTIONS OF DOUGLAS JERROLD.—Jerrold would perceive the germ of a retort before you had well begun to form your sentence, and would bring it forth in full blossom the instant you had done speaking. When an acquaintance came up to him and said, "Why, Jerrold, I hear you said my nose was like the ace of clubs," Jerrold returned, "No, I didn't; but, now I look at it, I see it is very like." The queen of the actual resemblance was far less present to his mind than the neatness of his own turn upon the complainant. So with a repartee which he repeated to us himself as having made on a particular occasion, evidently relishing the comic audacity, and without intending a spark of insolence. When the publisher of *Bentley's Miscellany* said to Jerrold, "I had some doubts about the name I should give the magazine; I thought at one time of calling it the *Weds' Miscellany*." "Well," was the rejoinder, "but you needn't have gone to the other extremity." Speaking of a savage, biting critic, Jerrold said, "Oh, yes, he'll review the book as an east wind reviews an apple-tree." Of an actress who thought inordinately well of herself he said, "She's a perfect willow o' vanity;" and of a young writer who brought out his first raw specimen of authorship Jerrold said, "He is like a man taking down his shop shutters before he has any goods to sell."—*Recollections of Writers, by Charles and Mary Cowden Clarke.*

A SIGNIFICANT HINT.—This item is as seasonable as it is suggestive: A good natured Vernon doctor, after repeated losses, put himself on the night-watch, and presently a neighbour appeared, and culled an armful of dry wood, and started for home. Hastily loading himself with unseasoned fuel, the doctor followed, and the thief, having laid down his load before his door, the doctor stepped up and threw his on the top of it, saying: "There, neighbour, you must burn green wood a part of the time as well as I." Local history records that the doctor's wood-pile was never molested again.—*New York Tribune.*

GOLDEN SPARROWS.—The English sparrow in the Antipodes, with a short-sightedness of which I should not have supposed so acute a bird capable, has gone in for collecting bullion, a taste which must inevitably result in his extermination. I read that some snarl boys at Ballarat recently shot a number of sparrows, and they found two amongst them that had fine specks of gold as well as quartz gravel in their stomachic department. There is no accounting for taste, but I should have thought any sensible sparrow would have preferred grain to gold.—*Spotting and Dramatic News.*

THE RENTS QUESTION.—A correspondent of the *Sussex Daily News*, writing from south-east Yorkshire, says there are thousands of acres let at perfectly reasonable rents, but, at the same time, there are many farms which are over-rented and much above their legitimate value. "I will only add," he says, "that a firm stand has been made in this neighbourhood; a distinguished landlord has had, I hear, 40 notices served on him."

INDUSTRIAL ENTERPRISE.

At a meeting of the Social Science Congress a paper was read by Mr. David Chadwick, M.P., on the question, "What are the causes of the present depressed and stagnant condition of industrial enterprise, and what are the best remedies?"

It would be very easy in a general way, Mr. Chadwick said, to answer the first part of the inquiry—as to the causes of the present depressed state of trade—by simply replying "over-production." If that was the true general answer it might be interesting to inquire into the causes which had led to over-production in so many trades. The staple trades of cotton, coal, iron, and steel might be taken as fair examples. Referring to the increase in the production of coal and iron and the values during the past ten years, Mr. Chadwick contended that the increase in the price of coal for manufacturing purposes, principally for iron-making, was caused as follows:—The coalowners could not increase their output with sufficient rapidity to meet the orders, and they consequently advanced the price at the renewal of every contract from 12s. 6d. per ton to 32s. 6d. in 1873. It was reduced to 9s. in 1877. Bar iron advanced from £6 10s. in 1870 to £15 in 1873, and in October, 1878, is down to £5 10s.; and Cleveland pig iron, which in 1873 was selling at £25 15s., was now sold at £1 17s. Other descriptions of iron as well as steel and other metals and nearly every other production, had advanced and fallen in nearly the same proportion. South Staffordshire common pig reached £6 in 1845, fell to £2 5s. in 1852, rose to £6 10s. in 1872, and in October, 1878, is £2, the lowest price for 40 years. Coal in quantity increased in four years—1868 to 1872—from 103 to 123 million tons; and in value at the pit's mouth from 25½ to 46 1.3 millions sterling. In five years, to 1877, the quantity increased to 134 million tons, but the value at the pit was only 47 1.10 millions sterling. Iron in quantity increased in four years—1868 to 1872—from 4,970,000 tons to 6,740,000 tons, and in value from 12 1.3 millions sterling to 18½ millions sterling. But in the five years to 1877 the quantity decreased to 6,608,000 tons, and the value to 16.15 millions sterling, or a reduction in value of 2 1.3 millions sterling. The prosperity of 1871 and 1872 had upon the cotton trade a very similar effect to that which had been shown to have been produced in the case of coal and iron. The official returns showed the total quantity of raw cotton imported exclusive of that imported to be in 1868, 1,006,000,000 lb.; in 1871, 1,416,000,000 lb.; and in 1877, 1,185,000,000 lb.; showing an increase of 410,000,000 lb. in the four years 1868 to 1871, and a decrease of 231,000,000 lb. in the six years to 1877. Some of the causes of the inflation of 1872-3 might be generally stated to have arisen from:—1. The increased home and foreign demand for English products arising from the ordinary increase of population and from the good crops generally at home and abroad. 2. The extraordinary stimulus given to the foreign and colonial trade by the large amount of foreign and other loans. 3. The improvements in the manufacture of iron and steel and the abundance of capital available for home and foreign and colonial railways and other works. 4. The demand for coal, and especially for iron-making, overtook the supply, and the increased price for coal was at once extended to iron and steel, and affected cotton and other manufactures. 5. The profits of every trade and the rate of wages in every occupation for 18 months received an extraordinary advance, following and in some cases exceeding the advance in coal, and varying from 50 to 150 per cent. 6. The introduction of a large amount of capital into trading concerns by the facilities afforded for the establishment of joint stock companies, and by the system adopted at Oldham and other places of building and working mills by borrowing the greater portion of the capital on loan. The depression in trade which ensued after 1873, and which has increased yearly till the present comparative paralysis of 1878, might be stated to be due to—1. The three bad harvests, which Mr. Caird estimated had caused a loss of 87½ millions sterling. 2. Finance in India and China, and the fall in prices, and consequent unprofitable general trade with those countries. 3. Foreign competition, especially by the United States, and the heavy protective duties that country had put on cotton, silk, and woollen goods, and on iron, steel, and other manufactures. 4. That almost absolute loss of the demand for the United States for all the common descriptions

of cotton and woollen goods, carpets, and silks, and the entire loss of the American trade for railway rails and appliances, and for the greater portion of the common descriptions of steel. 5. The diminished demand of India for English cotton, cloth, and yarn, and for woollen and jute goods by the erection of mills in India. 6. The opening out of a large number of new coal-pits, the erection of new and the extension of old iron-works, the competition of new cotton and other mills, mainly by joint-stock and co-operative companies in Oldham and other towns. 7. The fear arising from the possibility of the war between Russia and Turkey involving England and other European countries. 8. The yearly increasing expenditure by the Government and of the people generally in luxuries. 9. The large amounts unsafely and unprofitably expended in foreign loans and in joint-stock companies, and the undue facilities afforded by banks to large and mercantile firms. 10. The recurrence of that decennial cycle of bad trade which Professor Jevons stated had gone on for 150 years. As remedies for the gradual removal of the present depression he ventured to submit the following:—1. Greater economy in national and local expenditure; greater economy in the use of luxuries and in the general cost of living; and a great reduction in the enormous expenditure—estimated at 155 millions sterling per annum—in intoxicating liquors. 2. By reduction generally in the cost of production, by the use of improved machinery and appliances, by further economies in the cost of labour and materials, and by the stopping of the unwise proclivity for erecting new works, and for continually increasing the productive power of old works. 3. By the removal of all restrictions to the freedom of trade and commerce in India and with our own colonies, and as far as possible, by commercial treaties or otherwise, with all foreign countries. 4. The security of peace, as far as practicable, with all the world; the speedy removal of the commercial excitement and fear caused by the still unsettled state of the countries affected by the recent war between Russia and Turkey; and a speedy peaceful and permanent settlement, if possible, of the differences existing between India and Afghanistan. 5. The natural and gradual action of time, as in all previous cycles of bad trade, and by cheapness and quality securing our due share in providing the implements and clothing for the annual estimated increase of 1 per cent., or ten millions in the population of the world. 6. The stoppage of insolvency of old, weak, inefficient, or badly managed concerns, and the operation of Darwin's rigid but apparently inevitable law, "the survival of the fittest." 7. The amendment of the law of joint-stock companies by placing greater restrictions and providing for full publicity on their establishment, and preventing their beginning business unless the full amount, or at least three-fourths, of the total authorised capital was subscribed, and by the compulsory appointment of a Government or other professional auditor for all joint-stock banks and other companies corporations, and building societies, and trustees receiving or having the control of money subscribed by the public.

FALLACIES OF THE COUNTRY.

That you can have a waggonette whenever you like.

That you are sure of getting plenty of fresh vegetables and fruit.

That some beautiful village or lovely view is about two miles off—whereas it turns out to be nearer four.

That in the country you will accomplish what you have long contemplated—the study of the Spanish or Saskatchewan languages.

That there will be abundance of cream and new laid eggs.

That you will have ample time for reading, and that you will get through a great many books which you have long intended to study.

That you will take up botany, or ichthyology, or some other scientific pursuit.

That you are sure to find rare wild flowers, ferns, insects, lepidoptera, &c., in abundance.

That you will rise at a much earlier hour than is your custom at home.

That you will have an enormous appetite.

That you will be able to clear off your arrears of letter-writing.

That you will not require your dress clothes.

That you will return home from the country the picture of health and strength.—*Punch*.

THE ENGLISH FARMER UNDER FREE TRADE.

The Toronto *Mail* attacks the *Mark Lane Express* in a vigorous but good-natured strain for its advocacy of Free Trade, as follows:—

"The 'Man of Mark Lane,' in his generally humorous 'sample' column in the *Mark Lane Express*, delivers himself as follows:—

"The Free Trade versus Protection controversy is in full swing just now in Canada. The *Globe*, of Toronto, fairly sketches its contemporary, the *Mail*, tripping in a paragraph showing how New Zealand and New South Wales have grown and prospered recently, while Canada has only a much less satisfactory result to show. In reply to this comparison the *Globe* says:—'Yes. These are the results of Free Trade. New Zealand and New South Wales are both Free Trade colonies, distinctly adverse to Protection. And mark, the only Australian colony that is now suffering is Victoria, which is protective, although the tariff is not high according to American ideas.'"

Our genial Mark Lane friend, like the *Globe*, jumps to conclusions in helter-skelter fashion. In the first place it doesn't seem to occur to him that New Zealand and New South Wales may be prospering not *by*, but *in spite of*, Free Trade. A man with a tight boot may have *vim* enough to walk along the highway at a good speed, but one would hardly endorse the opinion of anybody who should thereupon cry out, "See! how capital a thing a tight boot is for pedestrianism!" In the next place, the "Man of Mark Lane" ignores the fact that the position of Canada and that of New South Wales are entirely different. The Australian colonies haven't a great, energetic, pushing people on their borders, who, under a jugg-handled "Free Trade" policy, are enabled to swamp their neighbours' markets with their own productions, while they raise a Chinese wall round their own territories by heavy protective duties. These things are so obvious that when the *Globe* put forth its flimsy rejoinder to the plain truths contained in our own article, we did not think them worth notice, any child being able to detect their fallacy, and we are surprised that our generally able contemporary the *Express* should set its seal to such an apology for argument.

But now let us glance at the condition of the "jolly" English farmer as sketched by the *Express* itself, under the very Free Trade *regime* which it considers Canadians heterodox for discarding. Hear our contemporary's lugubrious statements! "Nothing more disheartening to farmers than the present state of the wheat trade could well be imagined. There is absolutely no life in the markets. Nobody seems to want wheat, and sellers take their samples from stand to stand before they get a bid, and then the offer is so small that they are agast when the price is named." Again: "Farmers in Somersetshire complain of the high rents and increased taxes and many farms are changing hands." From Lancashire: "Had it not been for the extraordinary deficiency of the French crop, which is now stated to require an importation of nearly seven million quarters, it is manifest that British prices would now have been at a considerable lower range than that at which they already have arrived." From Essex: "We have had altogether a very gloomy market, such a one as a large merchant who has attended it for many years told me he had never witnessed. The gentleman to whom I refer said, 'There was a look of despondency and weight on the faces of the farmers such as I never saw during all the years I have kept the market.' The situation is a most perplexing one for a great many, as it is well known that farmers must raise a sum of money to meet certain engagements which fall due about this season of the year, and in addition to which beasts for winter grazing have to be purchased; and when it is known that it requires a very good acre of wheat to purchase a very indifferent store bullock, it does not require much more to be said to prove it at the position of the farmer to-day is both difficult and critical."

The above are only samples of the general position. And while thus situated the farmers see immense supplies of wheat pouring in daily from the States, so that 40s. to 45s. a quarter is the ruling quotation. Moreover, as is frankly admitted, it is only the fact that a bad yield has shut out French competition which has prevented matters being worse. In old times if the English farmer had a bad yield there was the compou-

sation of increased price. But that consolation is now taken from him. The reason of the English farmer's depressed condition is obvious enough, and was thus referred to by Col. Brise at the meeting of the Braxley Agricultural Society on the 26th ult.:—"He regretted that the hopes of the agricultural community has been so completely dashed to the ground by the low prices of corn which had prevailed since the ingathering of an indifferent harvest. Prices at Mark Lane for the last two Mondays had been simply ruinous in consequence of our great importations of wheat." The chairman, Mr. C. P. Wood, also observed:—"He hoped he might be wrong; but he was satisfied that farmers had come to this state that they required a bumper to recompense them for their past losses, and this bumper they would not, in his opinion, attain." Meantime, while the farmer is being knocked clean out of wind by excessive foreign importations, the bulk of consumers do not get the benefit; for the *Mark Lane Express* observes:—"Will it be believed by country readers that, in spite of the extremely low price of wheat, the bakers in the suburbs of London are charging 7d. and in some cases even 8d. per quarter for bread? With good white wheat selling at 15s. per qr., and red at 40s., such prices are very exorbitant."

And now let us glance at the magnitude of the interests involved in the unequal contest between the English and American grower. Captain Cruise in a paper prepared for the Paris Congress calculates that 2,500,000 individuals are engaged in the ownership, occupancy and tillage of the soil in the United Kingdom, apportioned thus—landowners of one acre and upwards, 302,000; tenant-farmers, large and small, 1,000,000; and farm labourers, 1,500,000. Of the occupiers of land, 530,000, or more than one-half, are in Ireland. The landlords' capital at 30 years' purchase is nearly two billions of pounds sterling. The farmers' capital at an average of 2s per acre is about £400,000,000. The labourers' capital is their labour, which is computed to represent a yearly income of £58,000,000. This signifies about 14s. per week to each labourer, or about 21s. for the manual work of each arable acre. This is certainly not over the actual outlay for labour. Inquiries made in various quarters 2 years ago showed that the average in Scotland was about 21s. per imperial acre. Of course as the *Express* is the farmer's friend and philosopher and eke a free trader, it must, we assume, regard unrestricted competition as a good thing, though perhaps its rural *don'tell* doesn't see it. However, if the genuine agricultural interest is nearly sledge-hammered to death by Free Trade, doubtless the manufacturing interests are flourishing! But here too there seems no crumb of consolation. "The depression in the 'Black Country,' we are told, 'has reached a dreadful point,' and a similar wail comes from all other manufacturing districts. Meantime Jonathan keeps on paying off his national debt, and from east, west, north, and south come in his consular reports, indicating fresh "openings" for American "protected" notions, and stirring him up to "cultivate" this and other promising markets. The *Mark Lane Express* doesn't look with favour on the "National Policy" in Canada—but it seems probable, were its effects as bad as the Free Trade prophets say it will be, it can't well mitigate a worse condition of things than the poor British agriculturists bewail under unrestricted competition. However, Free Trade for ever—especially jugg-handled Free Trade—for those who live it—and "love your neighbour better than yourself."

[Our contemporary forgets his own objection in citing the depression in England as caused by Free Trade. Considering how many years of prosperity followed the introduction of Free Trade, we have at least as good a right to assert that the existing depression is *in spite of* Free Trade as the *Mail* has to assume that the prosperity of Free Trade Colonies is *in spite of* Free Trade. We think, a little bitter right].—Ed. M. L. E.

THE CULTIVATION OF RABBITS AND HARES—Sergeant Armstrong in a game case some time ago, used a parody of a well-known passage from Goldsmith's "Deserted Village"

Ill fares the land, to hastening ills a prey,
Where hares accumulate and crops decay;
Nimrods and game may flourish and may fade—
On wastes and deserts let them make their trade,
But when on labour's fruits they browse and tetter,
And can't be shot—let hungry jurors at 'em.

F F

NATIONAL INSURANCE v. POOR-RATES.

The *Mark Lane Express* says:—

The Rev. William Lewery Blackley has published in the current number of the *Nineteenth Century*, a paper entitled "National Insurance: a cheap, practical, and popular means of abolishing poor-rates." He proposes that a National Insurance or Provident Society should be formed, to which every male above a certain age should be compelled to contribute, in order to render him secure against destitution in sickness and old age. Mr. Blackley's arguments in support of his proposal are clearly and forcibly given. Against the objection to compulsion, he urges that it is a much less interference with the liberty of the subject to compel a man to support himself than to compel him to support other people, in the form of a compulsory poor-rate. We quite agree with him so far, and, indeed, in discussing the policy of compulsion in connection with a National Provident Society on previous occasions, we have admitted that there is no objection to it on principle, the only question being as to its advisability or its feasibility, or both. Apart from the proposed compulsion and one or two other details, there is nothing new to our readers in Mr. Blackley's plan, although that gentleman writes as if he were astonishing the world with some hitherto unheard-of and dreadfully startling scheme. We do not know whether Mr. Blackley has read the writings of earlier contributors to the subject or not. If he has, he has ignored them as completely as if they were utterly unworthy of attention or acknowledgment. If he has not, he must be very new to his subject, and may well be invited to read and digest what others have written before him. If we may judge from the internal evidence of Mr. Blackley's paper, we should say that he has read at least some of these writings, but preferred to appropriate their suggestions and use them as far as they suited him without acknowledgment, rather than adopt the more graceful course of admitting his indebtedness at the cost of his originality. We may, however, give him the benefit of the doubt, and proceed to inform him who has written on the subject of National Insurance before he attempted to deal with the subject. Many years ago the Rev. J. Y. Stratton, now of Ditton, Maidstone, contributed a paper on a National Friendly Society to *Household Words*, and followed it up with others in *All the Year Round*, the Royal Agricultural Society's *Journal*, and other periodicals. Mr. Stratton also read a paper on the subject at the meeting of the Social Science Congress in 1873. Another writer on the subject is the Hon. E. Stanhope, who, besides other papers published in various periodicals, read one on "Sickness pay through the Post Office" at the Conference of the Friendly Societies Association in 1871, and contributed another to the *Quarterly Review* for January 1875. The Rev. C. D. Francis read a paper before the Banbury Chamber of Agriculture in 1873, in which he advocated a scheme like that of Mr. Blackley's in all

but one particular, recommending compulsory payments and their deductions from wages by employers—precisely as Mr. Blackley recommends. But the most complete and elaborate scheme of the kind was made public by the late Mr. Charles Lamport, in the *Westminster Review* for January 1875. A paper on "Providence versus Pauperism" read at the Farmers' Club in March, 1877, gave an epitome of some of these previous writings on the subject.

The only new feature in Mr. Blackley's plan is the proposal that the compulsory insurance against destitution in sickness and old age should be paid for in a lump sum, either at once, or spread over one, two, or at most, three years. The reason given for this proposal is that a young man at seventeen or eighteen years of age is well able to save the £14 or £15 which is all that is necessary to secure to him 8s. per week in sickness up to the age of 70, after which he would have a pension of 4s. per week. As a man gets older, and is burdened with a family, he is less able to pay the necessary premiums, and as a matter of fact often discontinues to pay them after paying them for many years. Mr. Blackley tells us that nearly 50 per cent. of the members of Friendly Societies thus fall off in their payments. If, then, we agree to compulsory payment at all, it is well to make it compulsory in early manhood, and every able-bodied young man could well afford to pay £14 or £15 in three years. The premium, too, would probably become much less if we had a National Society, as a large proportion of the contributors would never need the aid of the Society and great economy would be secured by the largeness of its scope. The proposal that employers should deduct the money from wages due to their workmen, however, is in our opinion very objectionable.

Mr. Blackley's plan is much less complete than that of Mr. Lamport, a synopsis of which appeared in the *Mark Lane Express* of March 12th, 1877. It makes no provision for cripples and others incapable of supporting themselves, and altogether is a much less ably worked-out scheme than the other. In fact, Mr. Blackley's paper reads more like an initial rough draft of an entirely new plan than what the public has a right to expect from any one who contributes to so well-worn a topic. Apart from details, however, Mr. Blackley's paper is admirably calculated to produce an impression, as his arguments are so forcibly and plainly put, and he writes with great earnestness and eloquence. We therefore gladly welcome so able an ally into the ranks of those who have long been endeavouring to convince our legislators of the need for a National Provident Society with a State guarantee. As for the proposal of compulsory contribution, we have no objection to it on principle, as we stated in discussing the subject more than a year ago; but the people generally might object to it, and a National Provident Society could be made a great success without it. If every one understood that out-door relief would be abolished after a

certain period, and that if he did not belong to the National Society he would only have the House to go to when sick or destitute, the effect would be pretty well equivalent to compulsion. If, however, the certainty of compulsion should recommend it to those who take an interest in the important question of providence *versus* pauperism, we shall be quite ready to go with them in so far as modifying the proposals hitherto made. In the meantime we hope that Mr. Blackley's paper will be widely read, and will have a good effect. It is not a bit "dry," but so earnestly, vigorously, and pleasantly written that the most determined opponent of a National Provident Society can hardly read it, we think, without becoming a convert, at least as far as the main principle of the paper is concerned.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR.—While cordially thanking you, on the behalf of the subject, for the article in your last issue on my essay in the "Nineteenth Century," I feel sure I may claim, in all good humour, a few lines of space in your next number, to refute the charge of plagiarism, which your leader-writer makes against me.

The leader refers to Mr. Stratton, Mr. Stanhope, Mr. Lampport, and the writer of a paper on "Providence *versus* Pauperism," read at the Farmers Club, in 1877, as the authorities from whom I have borrowed without acknowledgement.

Now, my paper was written two years ago at least. When preparing it I wrote to Mr. Stratton, asking where to obtain a copy of "Hints for Legislation," which, I was told, touched the subject. He replied to me, regretting that the paper was out of print, and I have never seen any of his writings. As to the Hon. E. Stanhope, I was so familiar with his views on the subject of a (voluntary, not compulsory) National Club, that I submitted my manuscript to him, and he did me the great favour of reading it, and recommending its publication. It is hardly likely that a conscious plagiarist would submit his essay to the very man whose ideas he was appropriating. As to the other plans mentioned, I had never read them in my life; but having a copy of the *Mark Lane Express* Supplement, of March 12, 1877, put in my hands on last

Monday week, Nov. 11th (twelve days after the publication of my article), I became, for the first time, aware of their existence. On that very day I wrote to Mr. Francis, asking a copy of his paper; having read which, and seeing that he had anticipated many points, I again wrote, volunteering the promise of mentioning the priority of his paper when I republish my own.

My manuscript was in editorial hands months before the date of the "Providence *v.* Pauperism" paper, in the *Mark Lane Express*, referring to the previous literature of the subject. Except in that paper, I have never seen anything of Mr. Lampport's essay.

The only originality I claim in my article is for the special point of compulsory and complete payment in advance, and in early manhood of a universal contribution to a national Club. But those are just the very points which made the scheme of a National Club possible at all. Nearly half my article is taken up with the rejection, by the Friendly Society's Commissioner, of the great memorial in favour of a National Post Office Club. Surely no one would gather from this that I claimed the merit of first thinking of such a thing.

I am, Sir, &c.

WILLIAM BLACKLEY.

[No direct charge of plagiarism was made against Mr.

Blackley in our article, which did not profess to decide whether our correspondent had seen the previous writings on his subject. We are glad, however, he has by the above letter completely explained what seemed to be strange omissions.—Ed.]

THE STRIKE IN KENT AND SUSSEX.

The farm labourers of Kent and Sussex had their masquerade in Exeter Hall, and a very effective one it was—none the less so because it was a hollow sham. The men posed as distressed, nay, "starved" labourers, and the workmen and roughs, who chiefly composed the vast audience, believed them. Miss Helen Taylor believed them, and so did Mr. George Shipton, Secretary of the London Trades Council. We are not quite sure whether the Hon. Auberon Herbert believed them; for, although he presided at the meeting, his object was apparently to recommend reforms of the Land Laws, which we should be the last to make light of. A large number of hand-bills, containing the most exaggerated statements, and signed by the Secretary of the Kent and Sussex Union, were distributed in the streets, and thrown in bundles about the Hall, and money boxes in great abundance were pressed towards the members of the audience as they came out, besides being handed round outside during the evening. It is very likely, therefore, that the speculation of coming to London on a calling expedition has been a good one for the Union. We fear, however, that it is likely to be a very disastrous one for the men, as it will encourage them in maintaining their foolish strike.

We have no fault to find with the speech of Mr. Auberon Herbert, which was admirably calm, and not at all calculated to cause bad feeling. All that he said about the needed reform of our land system has been urged over and over again in these columns. We are not so sanguine as Mr. Herbert is as to the success of a peasant-proprietorship in this country. On the contrary, we believe that if carried out extensively here the labourers would earn less than they earn now, though they might save more. Still we believe that there is a great want of land in small parcels for market-gardens and corn plots, and we would give peasant-proprietorship, like other systems, a fair field and no favour—not quite all that some at the meeting required. All hindrances to the free sale of land should be swept away, and when that has been done all that the legislature can do with respect to Mr. Herbert's demand to "get the people on the land," without an unfair interference with the rights of property, will have been accomplished.

By far the most immoderate and mischievous speech of the evening was that delivered by Miss Helen Taylor. We do not allude to her nauseating reiteration of an appeal to the "pity and mercy" of the rich on behalf of these "poor labourers," and especially on behalf of the women and children; nor do we just now refer to her appeal for funds to enable the "distressed" labourers "to stand against these despots who would trample upon them." Such semi-hysterical sentiments are not unatural in a lady who really

believes that the men are distressed and their families half-starved. We refer to her assertion that the great question is "how most quickly and peaceably the land and property of the country can be divided," so that the mass of the people may have a share in the land; also to her exclamation, "shame to the country" that any working man should have to bring up a family on 18s., 20s., or even 25s. a week. The reference to the "division of land and property" is just such a proposal as too many of the labourers are ready to catch at, and some of them would not be too scrupulous as to how it was done. As to the foolish remark about wages, if Miss Taylor thinks that it is a "shame" that a farm labourer does not get more than 25s. a week, well then it does not much matter what Miss Taylor thinks on the subject. It is certain that not one farm labourer in a hundred earns 25s. a week for his employer, and it is very doubtful if the majority of the small proprietors of France and Belgium get as much from the tillage of their own land. A grower of fruit and hops may be able to pay some such wages—as our recently published returns show actually are paid in some parts of Kent—but they are out of the question in ordinary farming districts. Even in the North of England and Scotland the wages of farm labourers are seldom as high as 25s. a week. Miss Taylor, therefore, did harm in exciting hopes amongst the men that are not likely under the existing conditions of agriculture to be realised.

Mr. Simmons, referring to the Benefit Society in connection with the Union and the habits of providence thereby inculcated, boasted: "What the squires and the clergy have been talking about we have done"—as if Benefit Societies had not been established before the Kent and Sussex Union started theirs. But what Mr. Simmons boasts of is really a disgrace, and—to borrow a term from Miss Taylor—a "burning shame." It is, indeed, a burning shame that the leaders of Unions should be allowed to inveigle men into paying their sixpence a week, or whatever their premium may be, to a fund ostensibly intended to pay for sickness and burial, but liable at any time to be exhausted in a strike like the present. It is like obtaining money under false pretences to induce men to become members of a Benefit Society so utterly insecure as such an one must be. It is illegal, though it appears to be no one's special business to prosecute. If the present strike should continue through the winter, where will the sick benefit fund be? As to whether the present dispute is a strike or a lock-out, Mr. Simmons declared that his clients were "not strike men," and added that there was not a man in the room who had struck, but that everyone had received notice to leave unless he accepted reduced wages. Now, the masters gave notice of a reduction, and very probably said that all who did not accept it would have to leave; but that does not constitute a lock-out, as anyone was free to go to work at the wages offered. The farm gates were not locked against the men in the mass, but were open for all who chose to come to work on the employers' terms. The men in large numbers refused to work on the terms offered, and such a refusal constitutes a strike. With respect to wages, Mr. Simmons said that they had been reduced in

many cases to 2s. a-day. Will he tell us where?

Mr. George Neame, described as an agricultural labourer, maintained that the wages his class had been receiving were "barely sufficient to provide the barest necessities of life," and declared that the reduction meant, not giving up luxuries—"it meant starvation." He referred to the returns of the men's earnings published in this journal, and said that instead of a guinea a week, the wages would not come to 12s. after the reduction. We are not surprised that Mr. Simmons and other speakers should have carefully refrained from calling attention to our returns, as it is not desirable from their point of view that the truth should be known to the public. Mr. Neame was less discreet, and even he appeared to regret having mentioned the name of the agricultural paper in which the returns appeared, as he professed to be uncertain whether it was the one he had mentioned.

The only complaint against the conduct of the Kent farmers that was at all well sustained was that in reference to the notice issued by some of them to the effect that they would not employ any men who subscribed to the Kent and Sussex Union. We regret that this notice has been issued, and hope that the great body of the employers will avoid the mistake into which a few of their number have fallen. In other respects the statements and arguments of the representatives of the Union and their London allies were based on the most flagrant misrepresentations.

It is greatly to be desired that such disingenuous tactics should be speedily and widely exposed, in order that the public may be fully warned against contributing support on a false issue. We have therefore forwarded the names of some of the contributors to our returns—of course with their consent—to the Special Correspondent of the *Daily News*, who is now in Kent, in order that he may satisfy himself of the correctness of their figures by examining their books. This gentleman appears to be impartially disposed, and if he will undertake the work of verification our correspondent may trust him to do justice to them and their labourers alike. In the meantime we notice that the Special Correspondent of the *Standard* has confirmed our returns by the reports which he has published, after having seen the labour books of several Kent farmers.

A body of agricultural labourers, between two and three hundred, arrived at Woolwich by special train on Nov. 19 on their road to London, for the purpose of eliciting sympathy and support in behalf of the movement now on foot to resist any reduction in the rate of agricultural wages. After three hours had been devoted to rest, and refreshments, the men paraded the town in procession, being joined by several of the workmen from the Arsenal. At seven o'clock they halted at the Skating Rink, in which a public meeting was held an hour afterwards. The chair was taken by Mr. John Cooper, of Ashford, who said the object of the present demonstration was to show that agricultural labourers could no longer be treated as serfs, and that the time had come when their wages should be on an equality with those of the best of artisans in the land.—Mr. Alfred Simmons said there were now nearly fifteen thousand labourers connected with the Kent and Sussex Union who had bound themselves together for the purpose of self-defence. A resolution in favour of the objects of the Union, and suggesting emigration as a panacea for the present condition of affairs, was moved by Mr. Pell, of Maidstone, who

argued that if the landlords reduced their rents, and if the clergy would only give up their tithes, every agricultural labourer in the country would be paid 20s. a week. He advised the men to stand firmly by their right, but at the same time to be "wise as serpents and harmless as doves." Mr. G. Neame, of Canterbury, seconded the resolution, which was carried with applause. Mr. Whale, solicitor, of Woolwich, moved the third resolution in favour of the reform of the land laws, and the abolition of tithes, which was also carried; and after a few remarks from other sympathisers with the objects of the meeting, the assembly dispersed, most of the men going by special train to London, where the London Trades Council met them at the Cannon Street Station.

MEETING AT EXETER HALL.

The agricultural labourers of Kent and Sussex, who came to London under the auspices of the Kent and Sussex Labourers' Union, for the purpose of arousing public attention in favour of the men, held a public meeting at Exeter Hall on November the 20th, after having perambulated the principal streets of Central London, with banners and a brass band, during the day. Some 500 labourers were represented as having come to the metropolis to stir up public feeling. The hall was filled within a short time of the opening of the doors, and long before the proceedings were announced to begin. The audience was as motley in character as could be desired, and only here and there, instead of, as was expected, in a sedate compact body, was to be seen the blue sash or favour which was the distinguishing mark of the sons of toil. Soon, though, there was a good array of them mustered in the background of the platform. The brass band made its appearance on the platform—the hall at that time being crowded—and struck up "Auld Lang Syne," "Cheer, Boys, Cheer," and other music. Three broad white banners were displayed at the back of the platform, the inscriptions in blue letters being, "Kent and Sussex Peasants Evicted and Destitute," "We grow the Corn, but must not eat it," and "Locked-out Agricultural Labourers from Kent and Sussex." Another banner, not shown inside the Hall, was inscribed, "We grow the hops, but must not drink the beer." Shortly after eight o'clock the promoters of the meeting came upon the inner reserved circle of the platform, amid cheers. The chair was taken by the Hon. Auberon Herbert, who was supported by Mr. O'Donell, M.P., Sir John Bennett, Mr. George Sturton (Secretary London Trades' Council), Miss Taylor (London School Board), Mrs. Surr (London School Board), Mr. Alfred Simmons (Secretary of the Kent and Sussex Labourers' Union), Mr. J. Cooper (Ashford), Mr. H. R. King (Secretary London Consolidated Bookbinders, &c).

The CHAIRMAN, in opening the proceedings said: Under ordinary circumstances all labour disputes were best left to those whom they concerned. He did not believe that generally they who stood on the outside did much good by interfering, but in this particular case, he ventured to think a great national question underlay the dispute between the agricultural population and their employers, while the way in which this dispute should be settled would very largely affect the future of England. He was not going to say one harsh word about the farmers. Let them look for one moment at the position of the farmer. His two great difficulties had been that during the last few years an enormous quantity of cheap corn and now a large quantity of cheap meat, was coming into the country. These two things, as they knew, were the greatest blessings and help to the people. Let them remind the farmer when he spoke of the difficulties which free trade imposed on him, what free trade, and the communications that now existed between this country and other countries, had brought the farmer. He found his markets in the populations of the great cities, which could not have existed until we became an active manufacturing country, and the communications with other countries brought cheap feeding stuffs and fertilizing agencies that doubled his power upon the land. Therefore he (the chairman) submitted that the farmers did not stand in a worse position than they did in past years, and if we could once more shut this little island off from the rest of the world, and leave it to its own industry, the farmer would find himself in a worse position. He thought there were certain hardships affecting the farmer at the present moment. In the history of free trade, he thought the malt tax was not fair play for the farmer.

The farmer, too, was tied down by ancient covenants as to the way in which he should cultivate his land, not being allowed to make the most of everything. He was confident, however, that the farmer would not make his business a prosperous one and succeed in overcoming his difficulties unless, first and foremost, he reconciled himself with the labour he employed. Unless the farmer pursued the right way of doing that, he did not think there could be a good future for him. The labourers were asking for a rate of wages which the farmer said he could not afford to pay. He (the chairman) believed that there was one way open by which the farmer could help to satisfy the labourers, and he would not enter into the special question of what rate of wages the farmer could or could not pay, which was a question that in every locality farmer and labourer must settle between them. But, unless in some way or another the farmer could succeed in paying a higher rate of wages to the whom he employed, he would not be able to keep the labourers in their English homes much longer. A few years ago a certain clinging to the soil on which men were born, and a dread of an unknown land kept them at home, but that time had passed away. How could they keep them at home? His answer was, "Get them on to the land." It was not in favour of any violent legislation, although he felt that it was a shame, a weakness, and a disgrace to them as a nation that a large part of the people should be a homeless people. He pointed out the benefits that accrued from having labourers in possession of small bits of land, and at all events they should have the chance of owning on leasehold their own homes and little properties. He referred to the good effect of the peasant proprietors of France and the Channel Islands. The law of settlement ought to be undone. It was the clasp of the fingers of a dead man upon the land of England, and the land was withering under the fatal grasp. A man dying should be able to take no further than one person to whom his land should go.

Mr. A. SIMMONS then made a statement. He said the organization now numbered 15,000 members. The legislators, clergy, and others had advised these men to be more provident in their habits. This was the principle of the society, as he showed by detailing the work of it, with its sick and benefit fund. Was a society that enabled men to raise themselves above pauper's graves to be allowed to be stamped out? The following notice had been served on men by farmers:—"I have decided that after the 22nd of November next not to employ any labourer who subscribes to the Kent and Sussex Labourers' Union." After referring to the steps for the reduction of the labourers' wages, he pointed out that the Kentish farmer did not depend on the wheat crop, which was small compared with those of hops and fruit. Therefore, the plea of the price of wheat was a paltry one. The reduction of the wages of the labourers meant the want of necessities of life, and it might it not be supposed that farmers out of a charitable feeling would give up a few luxuries rather than deny the labourers some bread, of which they had not sufficient. It was not a question affecting only the tenant farmers, because the opponents of the Union were also the landlords. Lord Darnley had a rent-roll of £13,000 per annum, and he had reduced the wages of about a dozen poor serfs by 2s. per week. He had advised his tenant-farmers to do the same, but he (Mr. Simmons) was proud to say that many of them had declined. Sir William Hart Dyke had a rent-roll of £10,000 per annum besides £2,000 from the taxation of the country. He, too, had reduced his labourers' wages, and told the farmers that, in his opinion, the time had not yet come when the landlords should be called on to reduce their rents. But he reduced his labourers' wages 15 per cent. Lord Somers, with a rent roll of £26,000 per year, also advised a reduction of the labourers' wages. A halo of romance had been thrown around the labourers' cottages by writers, and no doubt they kept them clean, but they were mostly white as sepulchres. None of the men were on strike, but had received notice to leave unless they agreed to a reduction of wages, which meant about 2s. a day. This asked for justice,—not charity—as the *Evening* put it. He quoted the concluding sentence of an article in that paper of the 16th inst., which recommended the landlord to send the Kent labourer home with a flea in his ear; and asked—"Are you prepared to do it?"

Mr. GEORGE SHIPTON proposed the first resolution as follows: "That this meeting expresses its earnest sympathy with the agricultural labourers of Kent and Sussex, who are under notice of reduction of wages to such a serious extent,

by some of the farmers of those counties, as to be calculated to drive the men and their families to the verge of starvation, and consider such a step unequalled for unjust, and arbitrary in the extreme, and hope that the pending dispute may yet be settled by humane and conciliatory means which shall be honourable and just to both parties, before any ill-feeling is engendered on either side by the struggle." He hoped that the significance of that meeting would echo into Kent and Sussex, and that the farmers would think better and shake hands with the men.

He read several extracts from the article in the *Examiner* above referred to, and contested the statement of wages quoted by the *Examiner* from the *Mark Lane Express*, offering to supply any number of men to the farmers of Kent and Sussex at 18s. 6d. per week the year round.

Miss HELEN TAYLOR, who was received with great cheering, seconded the motion. She asked what became of the boasted philanthropy of this country which left the women and children of the agricultural labourers to starve because the men had refused to be the humble serfs of their masters by taking whatever wage those masters offered. She averred, and loud cheers, that it was a burning shame to the country that while thousands were luxuriating on many thousand pounds a year, the labourer should be reduced to less than 10s. a week, on which to keep the worker and his family. Even if he received 18s., a guinea, or 25s., it was a shame to the country that any working man should have to bring up a family on the largest of these sums. The problem was how most quickly and peaceably to divide the land and property of the country, so that the mass of the people might have a share in the land. She concluded by exclaiming, that if there is a heart in the upper classes—naturally we ought to call them the lower classes—they will not see their poor labourers suffer, but will come to their assistance to enable them to stand against the despots who would trample upon them.

Mr. GEORGE NEAME, an agricultural labourer, in supporting the resolution, said the wages of an agricultural labourer were reckoned at the rate of 15s. a week; but the fact was the man was paid per day, and what the labourer received did not amount to 12s. a week. If the labourers received their earnings all the year round—as the nobles received their salaries out of the taxation of the country—they would be better off; but in order to live, even on the money they had received before the proposed reduction, the wives and children of the labourers had to go into the fields to supplement their earnings. He had seen some statements in an agricultural paper—he thought it was the *Mark Lane Express*, but was not sure about the name—which made out that enormous wages were received by the farm labourers of Kent. This paper said the average was about a guinea a week, but the labourers were not paid by the week, but by the day, and were not paid in wet weather. Wages after the reduction would not come to 12s. a week. He saw a letter in the *Standard* (Mr. Stunt's), which stated that labourers were receiving something like 35s. a week; but he appealed to those behind him to say if they ever got such wages. The names of the men said to earn these large wages were never given. The earnings of the wives and children must have been added to make the amounts so large. Reduction meant—not giving up luxuries—it meant starvation.

Mr. J. CODNER, Ashford, moved the following resolution:—"That, in the opinion of this meeting, the farmers of the United Kingdom should use every effort to relieve themselves of any difficulties or unjust burdens under which they labour in the cultivation of their farms, not by lowering the wages of their poor and deserving labourers, but by the abolition of Church tithes, and a sensible reduction of the large rent rolls, which, notwithstanding all the depression in our industries, have continued to rise; and a law should be speedily passed by which the entire system of land tenure in this country shall be radically changed, and the land brought into the possession of the people to be cultivated in the true interests of the entire community."

Mr. KING seconded the resolution, which was supported by Mr. O'Donnell, M.P., and adopted; after which the proceedings closed with a vote of thanks to the Chairman.

Mr. Walter C. Stunt, of Loreuden, Faversham, thus summarises the returns of wages in his district which were published in *Mark Lane Express*.—

Can you find space in your columns for the notice of a few facts relative to the earnings of the agricultural labourers in this district, to meet the very gross misstatement that have appeared in the public prints on this subject? I have communicated with ten of my fellow-farmers, with the object of ascertaining what is the highest, and also the lowest, amount that has been paid to the able-bodied men and their wives during the past twelve months. Upon averaging the results of this communication, and adding my own experience, I have found that the highest amount for the year is £82 13s. 9d., or 31s. 9d. per week; and the lowest £59 0s. 6d., or 23s. 8d. per week. On one farm the average earnings per week for the whole of the men, thirteen in number, amount to £1 3s. 8d., or with their wives and families, £1 8s.

The above amounts are generally without the assistance of children's labour, other than during harvest and hop picking, but in some few instances the earnings of one, and in two instances of two young children are included in the receipts. I write from a district where a strike against the reduction of 1s. 6d. per week has taken place, and upon farms from which these statistics have been taken. The cottages have good gardens, the rents of which are generally 2s. per week; in some 2s. 6d., and in one instance 2s. 9d. The perquisites vary; beer is generally allowed in haying, harvest, and hop-picking, straw for the pigstye, or manure for the garden, haulage of coal, payments of rates, &c. I will not int. ure at greater length upon your space. I consider I have made it clear that there is not much cause for a public appeal to support a warfare such as the Kent and Sussex Labourers' Union are now endeavouring to maintain.

The *Globe* of November 21 says, the meeting of the farm labourers of Kent and Sussex now on strike against a proposed reduction of wages at Exeter Hall last night was a densely packed, very enthusiastic, and somewhat uproarious one. Neither Miss Taylor nor any other speaker at the meeting took any account of the many advantages which farm labourers possess by way of additions to their money wages, such as low rents for cottages, and large gardens—even when these are not rent free—beer or cider when at extra work, and in some cases firing also. The representatives of the labourers who spoke made the usual exaggerated remarks about "starvation wages," denying the poor labourers the means of a bare subsistence. Referring to the returns published in the *Mark Lane Express*, the *Globe* continues:—"They show that the wages fluctuate considerably, not only in the various districts, but also on different farms in the same districts, the men on farms where fruits and hops are extensively grown earning higher wages than those on farms where these commodities are grown in small proportions or not at all. The lowest amount of weekly wages is a return from Sussex, and in the district from which it came no reduction is proposed; the highest is 21s., and this, too, comes from a parish in which there has been no notice of reduction given. But in these, and all other cases, the average weekly earnings of the men the year round are stated to be considerably higher than their ordinary weekly wages, owing to the extra money paid for piece-work and in harvest. Thus by far the greater number of the returns put the average earnings of the men alone at about a guinea a week, one or two rising as high as 25s. 6d., and a solitary instance being as low as 16s. Besides these money payments the carters, and some of the stockmen get their cottages and gardens rent free, with fuel also in some cases. The earning of the men's wives are in some instances given, and these vary from about £5 to £11. Children also add to the receipts, quite young ones assisting in the hop-picking. Cottage rents are from 1s. to 3s. 6d. per week, about 2s. being the most common amount. The proposed reduction in wages is from 1s. to 2s. in all but one instance, which mentions a drop of from 15s. to 13s. for day labourers. In reply to the question whether the men usually lose time in wet weather, the returns almost unanimously say "No" or "Not usually." The assurance, however, is hardly needed, as the excess of average earnings over ordinary wages shows clearly enough that the men cannot lose much time.

So, said a lady to a would-be wag, "your jokes always put me in mind of a ball." "Of a ball, madam? Why so, pray?" "Because they never have any point."

WEIGHTS AND MEASURES ACT.

At a meeting of grain merchants, held in the Corn Exchange, Dublin, on Nov. 19, to consider the provisions of the Weights and Measures Act, a motion was submitted approving the uniform standard of 112lb., which the Act makes universal in Ireland from the beginning of next year. An amendment was made to adopt the cental and to memorialise the Board of Trade to sanction and to legalise it. The amendment was rejected and the original motion carried. The Chamber of Commerce of Belfast has passed a resolution in favour of the adoption of the cental. The Cork grain merchants on Saturday discussed the question, but came to no conclusion. A meeting of farmers, corn merchants, and millers was held at the Town-hall, Northampton, on Saturday week, to consider the steps necessary to comply with the Act. Lord Spencer presided, supported by Mr. P. Phipps, M. P., Mr. T. J. Atkins, of the Chamber of Agriculture, Mr. S. Westley, Millers' Association, and Mr. M. P. Manfield, Chamber of Commerce. It was resolved, "That this meeting is of opinion that grain of all kinds and the dry products thereof should be sold by weight only; that the cental of 100 imperial standard lb. is the most convenient selling standard; and that this meeting would be glad to see it become the legal denomination for general use." In the course of his speech Lord Spencer pointed out the difficulties that the buyers and sellers of corn at the present time laboured under, and expressed his opinion that it would be beneficial to all parties if an acknowledged standard of weight for the sale of grain and all products thereof were generally adopted. Remarking upon the second resolution, with which he said he thoroughly agreed, he stated that he regarded it as a very desirable thing to introduce the decimal system in this country. He was strongly in favour of the introduction of this system, but at the same time thought it advisable to adopt some decimal measure of weight already in existence and used upon the Continent, and not the cental as suggested in the second resolution. Mr. Phipps was opposed to the first proposition. He doubted much the wisdom of confining the sales effected to weight only, and advocated accepting the Act as it now stood, in which it was optional whether sales were effected by weight or measure. Still he thought it would be for the convenience of trade to make the cental the legal denomination in a weight where weight was used.

The Association of the Liverpool Corn Trade met in the Corn Exchange on November 19th to take steps in connexion with the new Weights and Measures Act, for the legalization and the use of the cental of 100lb. There was a large attendance. Mr. John Patterson, who presided, remarked that for the last 20 years the cental had been universally used in Liverpool for wheat, but unfortunately it was disused for Indian corn, beans, flour, &c., things which were supposed then to be of secondary importance. Recently meetings had been held in various parts of the country in favour of uniformity in the mode of selling grain and its products, and the millers were among the most enthusiastic supporters of the change. The meetings showed the most gratifying unanimity in support of the cental that was originally devised in Liverpool. Some opposition was offered, mainly in Ireland, but Belfast had approved the change, and recommended the use of the cental for all solids. Mr. Patterson concluded by moving—"That this meeting is of opinion that all grain and the products thereof should be sold by weight of the standard of 100lb." Sir Thomas Frost, of Chester, seconded the resolution, which was supported by Mr. Charles Bishell, as a deputation from the Liverpool Chamber of Commerce, and by Mr. J. A. Cowan, on behalf of the Bakers' Association. Mr. Wilson, president of the Midland Corn Trade Association, remarked that flour was sold by cental throughout the kingdom, the millers, consumers, and dealers know the relative value of the commodity in various parts of the country, weight for weight. Not one farmer in 20 objected to it. Mr. Lamb supported the resolution on behalf of the Liverpool Millers' Association, and it was carried unanimously. On the motion of Mr. Edmund Taylor, seconded by Mr. Stephen Williamson, it was resolved:—"That this meeting is of opinion that the term cental should be recognized by law, and that application be made to the Board of Trade for the necessary authorisation under the 5th clause of the Weights and Measures Act, 1878, so that there may be no obstacle to the universal use of the cental from the 1st of January next."

At Plymouth a number of corn merchants and millers met on Nov. 19 and discussed the provisions of the new Weights and Measures Act. They expressed the unanimous opinion that all grain and dry products thereof should be sold by one uniform weight, and that the cental would be the most convenient standard to adopt. They pledged themselves to the adoption of the cental in all business transactions, as soon as it becomes legal to do so, and appointed a committee to bring their resolutions under the notice of all persons engaged in the trade throughout the Western county, and to call a united meeting if deemed desirable.

The following resolution was passed by the National Association of Millers at their meeting on the 24th November 1878: "The Council of the National Association of British and Irish Millers, viewing with satisfaction the results of the recent meetings in London, Liverpool, Birmingham, Belfast, Plymouth, Northampton, York, and other places, convened by this Association, and by Chambers of Agriculture and Chambers of Commerce, where resolutions have been passed in favour of selling grain and the dry products thereof, and all solid agricultural products by weight, and recommending that 100 imperial standard pounds should be the unit of weight adopted, and that action should be taken by a united deputation to the Board of Trade to ask under clause 8 of the Weights and Measures Act, 1878, for a new denomination of standard for 100 multiples of an imperial pound, under the name or denomination of cental; Recommends that in the event of the Board of Trade, complying with the desire of the Association, the agriculturists and the trades interested, and the same being approved by Her Majesty in Council, the use of the cental be commenced from the 1st day of January next, or so soon thereafter as the same may be legally permitted, and urges all members of the Association, as well as other millers throughout the United Kingdom, to promote the success of the movement in favour of uniformity thus inaugurated by the National Association, by making all their purchases and sales by the cental only."

A meeting was held at Bedford to consider the Act on November 16, the Mayor of Bedford, Mr. Elger, in the chair. Mr. C. Howard introduced the subject, and moved the following resolution:—

"As the Weights and Measures Act, 1878, prohibits terms of measures being used to describe weight, this meeting of the corn trade and others of the Bedford District is of opinion that the time has come for the use of measures to be discontinued for all grain and all the dry produce of grain."

This was carried. Mr. E. Ransom then moved.

"That this meeting is anxious to join in any steps towards uniformity of standards as tending to promote trade and to lessen misunderstandings. An expression of opinion in favour of the Liverpool cental of 100 pounds being strong in this country, this meeting votes in that movement in so far as to recommend at once the standards of 500 pounds for wheat, 400 pounds for barley, and 300 pounds for oats."

Mr. Hopwell moved as an amendment:—

"That the meeting is of opinion that the stone of 14 pounds is the most suitable weight for corn and meal."

The amendment was carried.

We understand that the Right Hon. Lord Viscount Sandon, President of the Board of Trade, has consented to receive a deputation on Monday, 5th December, from the National Association of British and Irish Millers, the Central Chamber of Commerce, and other public bodies interested in the working of the Weights and Measures Act, 1878, for the purpose of expressing their views in favour of the legislation of a new denomination of weight to consist of 100 lb.

STRIKE IN SUFFOLK.—The *East Anglian Daily Times* says that at Wortham, in Suffolk, where the labourers' wages have been reduced one shilling a week resulting in a general strike, some of the labourers have resorted to extreme measures. Shots were fired into the houses of two farmers happily without causing any personal injury. Corn drills have also been dismantled, and other disorderly acts committed. We see nothing about this, however, in the Suffolk weekly papers.

MESSRS. WEBB'S ROOT SHOW.

The annual exhibition of roots, vegetables, &c., made by Messrs. Webb and Sons, of Wordsley, was held in Curzon Hall, Birmingham, on the 20th and 21st ult., and a very excellent show they had. It was the first time this enterprising firm of seedsmen have held their exhibition at Birmingham, having formerly used their own premises at Wordsley for the purpose. Finding, however, that their show became more bulky year by year, and that it necessarily interfered with their business arrangements at home, they very wisely determined to meet their customers and friends at Birmingham, and the numerous attendance showed that they had not made a mistake in so doing. The total number of entries was 1,612, as against 1,308 last year, and the exhibits were from all parts of the United Kingdom. The quality throughout was very excellent for the season, which has not been a very good one. The cold wet month of May prevented the sowing of swedes very generally, and the unseasonable weather which obtained during the first half of the month of June checked the growth of mangel, so that the root crops are neither as bulky nor as slightly as they would have been under more favourable auspices. Common turnips, coming later, had a better seed-bed and more favourable weather for their early growth than either mangels or swedes, and had no check in their growth; consequently we may expect to find the turnips of better quality and more true to shape than other roots this year. Taking all these circumstances into consideration, Messrs. Webb and Sons have reason to be proud of the success which has attended the growth of their seeds in the summer and autumn of 1878.

In making an inspection of the exhibits, the first class which came under notice was that of Webb's Imperial Swede, in which the five prizes awarded were for the best quality, a separate class for size being instituted for the purpose of enabling the judges to simplify their labours, and to give more general satisfaction. This is a very excellent arrangement, as it is most difficult to draw a line between the rival claims of size and quality to satisfy exhibitors. But Messrs. Webb very rightly give their premier award for quality—for the twelve *best* roots—and this was fairly won by Mr. J. Beach, of the Hattons, with an entry of particularly nice quality, small in the neck, and with very little root. These swedes were of good character, and as uniform as one could expect from the season; not large, but solid and useful, with very little waste to them. Mr. Holder's second prize lot were larger, and it must have been difficult to make this award. Messrs. Perry secured third prize with better and larger swedes, but the entry was uneven. Mr. G. Chapman's fourth prize roots were smaller than either, and of excellent quality, but they were rather fangy; and Sir Francis Sutton's fifth prize lot were just such useful roots that one would be glad to have a large crop of. Mr. T. Chapman's entry, which obtained a high commendation, must have pushed the latter very hard indeed; but the awards on the whole in this class were no doubt right, and must have taken some very careful consideration. There were eight entries which obtained honourable mention, and the class itself was a very good one. Although there was not that symmetry and uniformity in the entries which a better season would have secured, there was abundant evidence that Messrs. Webb's Imperial Swede is deserving all the praise which has been bestowed on it. The second division of this class was for twelve *heaviest* roots, and in it there was strong competition, some of the exhibits being of great weight. Mr. T. Campion's third prize roots had quality as well as size, and were very creditable. The weight of twelve of the heaviest swedes was 269 lb., and the number of entries in the two divisions of the class for Imperial Swedes was 511.

The mangel classes were well filled, and the mangels, on the whole, better than the swedes; but this, as already explained, was not the fault of the seed, but of the season. There was a capital show of the Improved Colonel North Mangel, for which the firm are deservedly noted. Mr. T. H. Farrer's first prize entry was well matched, of large size, and capital quality. Mr. Beale's second prize lot contained some large specimens, but they were not so well matched nor so clean. Sir F. Fitzwilliam's third prize mangels were of similar character, but the fourth prize lot, grown by Sir F. Sutton, were particularly clean and true, and of first-rate quality, but they were too small to compete successfully with such as have already been mentioned. Size is an important element in all show roots, although medium-sized roots thick on the ground will turn out the heaviest crop, as well as produce sounder food than larger roots; still, for an entry to get into the best places in a show it must have fairly good size as well as quality. Seven entries secured commendations, and, with a little more uniformity, there would have been nothing left to desire. The class throughout was a good one, and highly creditable to Messrs. Webb. The second division of this class was for twelve heaviest roots, in which Mr. W. L. Beale obtained the prize. The Mammoth Long Reds were another good class, Mr. Lythall's first prize entry being very clean and free from fang, as well as being of good size, and the other prizes and commendations were well deserved. Mr. T. Moxon took the prize for the twelve heaviest roots, which were of mixed size though much forked. Webb's New Kinver Yellow Globe is a favourite root in the Midlands, and the entries in this class were amongst the best in the show. Sir R. P. Sutton's first prize was large, good, and true; Mr. Beale's second prize not so true, but larger; M. T. H. Farrer's third prize entry was better, but smaller; and the rest all of more or less merit. The Yellow-fleshed Tankard Mangels were not, as a class, quite as good as the previously-mentioned mangel classes; and the same may be said of their Yellow Intermediate Mangel, although some good entries are to be found in both of them. Mr. Beale's kohl rabi are first-rate, and Mr. O. Robinson's cabbages are very large and good. The twelve heaviest Long Red Mangels weighed 479 lb., and the twelve heaviest Globe Mangels 363½ lb. A Long Red Mangel, weighing 62 lb., was also shown as part of a collection of roots exhibited by Mr. T. Penn, and so excellent were some of the specimens in this collection that the judges awarded it a special prize of a cup value £5 5s. There were also exhibited four extraordinary Globe Mangels grown by Mr. G. Sotham, one of which weighed 39 lb., and these roots were as good as they were large and heavy.

The Turnip classes were very good indeed, and some very capital entries were to be found amongst them. The selected Green Globes were not, perhaps, as good as some of the rest; but Mr. Pudley's first-prize entry was a really good one. The Purple-top Mammoths were a capital class, as were also the Imperial Beef Heart Turnips. In the latter class the Duke of Portland's entry was almost perfection, and several others were of great merit. The selected White Globes were also a good class, and amongst the Yellow Tankard Turnips Mr. R. Lees takes first prize with a very large purple-topped variety.

The competition for the prizes offered for Roots grown on Sewage Farms was fairly good, and the manager of the Birmingham Corporation Sewage Farm took the first prizes in two classes out of three. There was a large show of potatoes and vegetables, and a well-filled class for cereals. This first show in Birmingham has been a decided success, and must have been highly satisfactory to the Messrs. Webb and to their customers. The prize list

was on the usual liberal scale. Messrs. Webb offered at this and other shows of the season prizes to the value of £500.

The number of visitors on Wednesday was 4,600; Thursday, 7,300.

The judges were:—Mr. James Brebner, her Majesty's Norfolk Farm, Windsor; Mr. Briginshaw, her Majesty's Bagshot Park farm, Surrey; Mr. T. Stirton, Benham Park Farm, Newbury, Berks; Mr. J. Chalmers Morton, Mr. James Buckman, Professor of Agriculture; and Mr. J. Laue, Broom Court, Leicester, of roots and cereals; Mr. George Steedman, Shaftmoor, Hall Green, Birmingham, of root crops; and G. H. Green, head gardener to the Right Hon. the Earl of Stanford and Warrington, Euville Hall, of vegetables and potatoes.

PRIZE LIST.

SPECIMEN ROOTS,

GROWN WITHOUT SEWAGE CULTIVATION.

Webbs' Imperial Swede (12 best roots).—1, J. Besch, The Hutons; 2, S. J. Holder, Cradoc; 3, G. and J. Perry, Acton Pigott; 4, G. Chapman, Radley; 5, Sir R. F. Sutton, Benham Park. Ditto (12 heaviest roots).—1, R. Lloyd, Kidderminster; 2, G. and J. Perry; 3, T. Campion, Coton.

Colonel North mangels (12 best roots).—1, T. H. Farrer, Abinger Hall; 2, W. L. Beale, Waltham St. Lawrence; 3, Major-Gen. Sir F. Fitzwygram, Leigh Park; 4, Sir R. F. Sutton. Ditto (12 heaviest roots).—1, W. L. Beale.

Mammoth Long Red ditto (12 best roots).—1, F. Jythall, Offchurch; 2, R. N. Phillips, Snitterfield; 3, W. Williams, Ely; 4, J. Skurray, Shrivvenham. Ditto (12 heaviest roots).—1, T. Moxon, Eusehall.

New Kinver Yellow ditto.—1, Sir R. F. Sutton; 2, W. L. Beale; 3, T. H. Farrer; 4, J. Clarke, Aston Bampton.

Yellow-fleshed Tankard ditto.—1, Mrs. Cumberley, Moor Hall; 2, J. Fall, Burbage; 3, J. Hutt, Thrupp; 4, G. and J. Perry.

Yellow Intermediate ditto.—1, W. L. Beale; 2, J. Fall; 3, Major-Gen. Sir F. Fitzwygram; 4, W. Williams.

Imperial Green kohlrabi.—1, W. L. Beale; 2, G. and J. Perry; 3, T. Moxon.

Selected Green Globe turnip.—1, J. Pulley, Lower Eaton; 2, W. O. Foster, Apley Home Farm; 3, Duke of Portland, Clipstone Park; 4, E. Parsons, Wheatbill.

Purple Top Mammoth ditto.—1, J. Vaughan, Kington; 2, H. Franklin, Barford; 3, R. Simpson, Swinbrook; 4, Duke of Portland.

Beef Heart ditto.—1, Duke of Portland; 2, S. Viggers, Horley; 3, G. Timms, Kitesbridge; 4, E. Parsons.

Improved Grey Stone ditto.—1, Duke of Portland; 2, E. Parsons; 3, Earl of Dartmouth; 4, J. Pulley.

White Globe ditto.—1, Duke of Portland; 2, J. Watts, Railway Fields; 3, Lord Northbrook, Micheldever.

Yellow-fleshed round ditto.—1, R. Lees, Carngillan; 2, Earl of Redesdale; 3, S. Brown, Fawley.

Yellow Tankard ditto.—1, R. Lees; 2, S. Parry, Moccas; 3, F. Paddock, Caynton House.

White carrot.—1, W. Williams; 2, J. Crump.

Drumhead cattle cabbage.—1, S. Robinson, Melbourne; 2, J. Fall.

Collection of roots (special prize)—T. P. nu, Worminghall.

GROWN WITH SEWAGE CULTIVATION.

Webbs' Mammoth Long Red mangel.—1, Birmingham Corporation Sewage Farm; 2, C. Tough, Eton Wick.

New Kinver Yellow Globe ditto, or Improved Colonel North ditto.—1, J. Graham, Cranford; 2, C. Tough.

Yellow-fleshed Tankard ditto, or Yellow Intermediate ditto.—1, Birmingham Corporation Sewage Farm; 2, Earl of Warwick.

VEGETABLES AND POTATOES.

Collection of eight distinct varieties of vegetables.—1, J. Pulley; 2, P. Southby, Bampton; 3, T. Wheeler, Ox'ord.

Improved Banbury onion.—1, P. Southby; 2, G. and J. Perry; 3, T. Brinson, Banbury.

Parsnip.—1, W. Edwards; 2, Major Cholmondeley, Condover Hall.

Red carrot (long).—1, A. C. H. Percy, Hodnet; 2, Major Cholmondeley.

Red carrot (short).—1, O. Beannon, Brockton; 2, E. Perry, Penn.

Collection of six varieties of potatoes.—1, G. and J. Perry; 2, P. Southby; 3, J. Baker.

Improved Magnum Bonum potato.—1, G. and J. Perry; 2, T. J. Lawden, Handsworth; 3, R. Lees.

Snowflake ditto.—1, G. and J. Perry; 2, J. Baker; 3, W. Edwards.

CEREALS.

Webbs' "Challenge" white wheat.—1, J. Tuckey, Goring; 2, R. Simpson.

Webbs' Kinver Chevalier barley.—1, - Tetstill, Blackstone; 2, J. Tuckey.

Webbs' Profite Black Tartarian oat.—1, J. Nicholls, Tuck Hill; 2, J. Tuckey.

Webbs' "Challenge" white oat.—1, J. Proud, Lymington; 2, J. Tuckey.

MESSRS. SUTTON'S ROOT SHOW.

On Saturday last, the 23rd ult., Messrs. Sutton held their 29th Annual Root Show in their seed warehouses at Reading. The weather being favourable a large number of agriculturists and others—not a few ladies being present—crowded these spacious premises to an extent which made locomotion difficult and great admiration was expressed on all hands at the show itself. From the appearance of the growing crops in various parts of the country it is not reasonable to expect even show roots to be as symmetrical and true to type as the leading varieties sold by our great firms of seedsmen have now become in ordinary seasons; and we were not prepared to see as good a show as Messrs. Sutton have once more succeeded in preparing for the public. It would indeed be strange if there were no weak places in such an immense collection of roots grown in a season like that of the present year; but such weak places were very few, and could only be discovered by carefully looking for them. In saying this we are giving the Messrs. Sutton very honest praise indeed, and it was as honestly deserved. With the exception of all kinds of roots being more or less deficient in symmetry this season, from the fact of their growth having been checked by unfavourable weather, we have never seen a better show at Messrs. Sutton's; certainly not one more creditable to seedsmen and useful to growers.

We cannot speak too highly of the mangels; they were not, as a whole, as perfect in shape as we have seen them on the floors of Messrs. Sutton's warehouses, but they had size, weight, and quality which has not within our knowledge been surpassed in former years. To practical men these mangel classes would commend themselves as being exceedingly useful, representing, as they must do, some very bulky crops, the full value of which will be realised in the spring of next year. The weights of some of the entries were very great; and although there was a lack of uniformity which was due entirely to the effects of the season, the mangel classes were more free from fungy growths, spots, and deformities than we expected to find them. We do not hesitate to declare the mangels a very excellent lot of roots. The first class consisted of a competition for a prize of £20, for three varieties of mangel, which was won by Sir Paul Hunter, of Mortimer Hill. This collection consisted of twelve long Reds weighing 406 lb., twelve Golden Tankards weighing 377 lb., and twelve Yellow Globes, weighing 315 lb., together 1,098 lb.; a very fine lot of roots indeed. The second prize in this class fell to Mr. R. Burn-Blyth for a collection consisting of twelve each of Long Reds, Golden Tankards, and Yellow Intermediates, the gross weight being 700 lb., being 328 lb. less than that of the first prizelot; but the quality or rather the symmetry and uniformity of this collection was superior to that of the first, though the decision of the judges was without doubt correct, for the first prize roots were sound and

good if not quite so shapely. The Long Reds in the second prize collection were very perfect. There were other collections of great merit, but in a competition of this kind weight must tell. Mr. J. Skurray's collection contained some very good and shapely Golden Tankards, and some excelled in one variety whilst others excelled in another. The class, altogether, was a very creditable one.

Class 2 was for six roots of Mammoth Long Reds, containing 50 entries, and the quality of this mangel was very noticeable; in fact, considering the difficulty there always is in growing Long Reds free from fangs and divisions, this class was particularly true and symmetrical throughout—unusually so for the description of root. The first-prize lot, exhibited by Sir F. Smythe, Bart., weighed 205 lb., and were as perfect as Long Reds could be in a more favourable season; for type and quality perhaps this entry was the most perfect in the show. Sir Paul Hunter's second prize lot were larger, weighing 235 lb., but were not so true. The fifth prize fell to Mr. S. Bishop, of Banghurst, for a gross weight of 195 lb., and, but for one very imperfect root, would doubtless have been placed higher, for the quality of the rest was excellent. Mr. A. S. Whiting, of Newbury took a high commendation for an entry which was as clean and good as the 4th prize, and cleaner than the 3rd prize, but the weight being only 177 lb., the entry was fairly beaten. Mr. F. Lythall and Mr. John Wright had entries of great merit. Next in order came Class 3, for six roots of the Berkshire Prize Yellow Globe, and numbering 150 entries, which were nearly all large and good. For practical usefulness this class would probably bear the palm; not so true as the Long Reds, but of better size, comparatively, throughout. Mr. R. Webb's first prize roots weighed 181lb., and were very shapely; the second prize lot weighed 160lb. and were exhibited by Messrs. J. and W. H. Clarke; the third and fourth prizes were taken by Sir Paul Hunter and Sir F. Smythe, and weighed 163lb., and 145lb. respectively. Amongst the other entries of note were Sir Richard F. Sutton's and Mr. J. Fall's; the latter might have been placed higher without injustice, and Mr. Ravenhill appeared to us to deserve a commendation. Class 4 was for six roots of the Yellow Intermediate, which contained 50 entries; these mangels were smaller, but the great majority of the exhibits were of very nice quality. The first and second prizes, taken by Sir Paul Hunter and R. Webb respectively, were of very equal merit, all the roots being good, but not quite uniform; it must have been a difficult matter to decide between them. Class 6 was for Golden Tankards, of which there were 76 entries; and this beautiful root proved, as usual, the most attractive class in all the show. In a favourable season these mangels are as true as if cast in mould, their rich colour adding greatly to their beauty. This year they have not been so uniform in size, but their type and character has been admirably preserved. Sir Paul Hunter was again first, and had a second entry of great merit, Sir F. Smythe second, with larger roots not so well matched. This was a most excellent class throughout.

The collection of mangels grown with sewage were interesting from containing some particularly good specimens from the Reading Urban Sanitary Authority. The classes were for Long Reds, Berkshire Prize Yellow Globe, Golden Tankards, and Yellow Intermediates; and in each of these four classes, Mr. W. W. Champion, the manager of the Reading Urban Sanitary Authority's Sewage Farm, took the first prizes, and Mr. C. Tough, the manager of Eton Sewage Farm, the second prizes. Mr. C. Champion's Yellow Globes are particularly large, true, and good; taken by themselves they are probably the *best* entry in the Show, which is saying a great deal for it. He also showed a collection of mangels grown on the Reading

Sewage Farm, which was quite a root show in itself, and the crops from which they are taken are stated by him to have weighed, respectively, as follows:—Long Reds 110 tons per acre, Golden Tankards 88 tons per acre, Berkshire Prize Yellow Globes and Yellow Intermediates each 77 tons per acre. As a grower of mangels Mr. Champion must be a champion hard to beat.

Green Kohl Rabi formed a large and particularly good class; probably the largest and best which Messrs. Sutton have ever had to show—the number of entries we omitted to note. In this class the prizes appeared to have gone altogether for quality, ignoring size if accompanied by sportive growths, and the quality of these Rabis was excellent. We are very pleased to see the advance which this useful plant is making; its progress hitherto has been slow but sure, and we may now look for it to force itself more rapidly on the notice of agriculturists.

Swedes are not as good as usual, but they were a great deal better than we expected to see them, and as good as the season would permit. The bulk of the entries were not of large size, and the prizes were awarded to fairly good show roots of undeniable quality. Turnips were better than the swedes, the Imperial Green Globes forming a very large and very excellent class. The first prize entry of White Globes was beautifully perfect. Mr. Robert Lees exhibited some exceedingly large turnips in several of the classes. There was a good class of Cabbages, and also of White Carrots. The collections of roots of various kinds in competition for the prizes offered by Manure Manufacturers were very interesting, and amongst them was a very beautiful entry of Golden Tankard Mangels grown by Sir F. Smythe with Messrs. Morris and Griffin's Manures. Potatoes and Vegetables formed a very attractive show, and the Parsnips were a large and exceedingly good class.

The total number of entries in the Show was 1,574; and the prize list was a very liberal one.

The following is a list of the awards:—

JUDGES.—Mr. J. Brebner, her Majesty's Norfolk Farm, Windsor; Mr. Wm. Briginshaw, her Majesty's Bugshot Park Farm; Mr. J. Backman, Professor of Agriculture; Mr. J. C. Morton, Editor *Agricultural Gazette*; Mr. H. Simmons, Bearwood Home Farm, Berks; Mr. H. Tait, her Majesty's Shaw Farm, Windsor. POTATOES AND VEGETABLES.—Mr. Combes, gardener to Richard Bonyon, Esq., Englefield House; Mr. C. Fenny, gardener to H.R.H. the Prince of Wales, Sandringham; Mr. J. Tegg, gardener to John Walter, Esq., Bearwood.

GROWN WITHOUT SEWAGE.

Mangel Wuzel in 3 of Messrs. Sutton's varieties.—1, Sir Paul Hunter, Bart., Mortimer Hall; 2, R. Burn-Blyth, Woolhampton.

Mammoth Long Red mangels.—1, Sir C. Saythe, Bart., Acton Burnell; 2, Sir Paul Hunter, Bart.; 3, R. Webb, Beenham; 4, J. and W. H. Clarke, Aston Bampton; 5, G. Bishop, Banghurst.

Berkshire Yellow Globe or Oxheart mangels.—1, R. Webb; 2, J. and W. E. Clarke; 3, Sir Paul Hunter, Bart.; 4, Sir F. Smythe, Bart.; 5, T. H. Farrer, Abinger Hall.

Yellow Intermediate mangels.—1, Sir Paul Hunter, Bart.; 2, R. Webb; 3, J. and W. H. Clarke; 4, Sir R. F. Sutton, Bart.; 5, Hon. Mrs. Hay, Chiffa Hall.

Golden Tankard mangels.—1, Sir Paul Hunter, Bart.; 2, Sir F. Smythe, Bart.; 3, J. and W. H. Clarke; 4, R. Webb; 5, Sir R. F. Sutton, Bart.

Champion Swedes.—1, J. E. Barrall, Frialey; 2, H. Middleton, Dunse, N.B.; 3, E. Edwards, Sand; 4, G. and J. Perry, Acton Pigott; 5, Mr. Ruffell, Elvetham.

Imperial Green Globe turnips.—1, J. S. Calvert, Winney; 2, Col. Loyd-Lindsay, N.C. M.P., Lockinge Park; 3, J. S. Anley, Leamington; 4, Rt. Hon. Lord C. Lichorpe, Elvetham Park; 5, W. Hay, South Reston.

White Globe turnips.—1, W. Willis, Lamborne; 2, Chas.

Keep. G. m. z. Heath; 3, Col. Loyd-Lindsay; 4, The Duke of Portland, Clifton Park; 5, E. Strickland, Alverton.

Purple-top Mammoth turnips.—1, W. Hobbs, Witney; 2, Col. Loyd-Lindsay; 3, D. May, Thatcham; 4, Sir G. A. C. East, Bart., Hall Place; 5, The Duke of Portland.

Grey Stone turnips.—J. Bromstone Stone, Sherfield; 2, J. H. G. Love, Bradfield; 3, Sir G. A. C. East, Bart.; 4, W. Wyeth, Bramshill; 5, J. W. Simmons, Arbour Hill.

Red Paragon turnips.—1, H. Palmer, Sulham; 2, Col. Loyd-Lindsay; 3, C. Key, Goring Heath; 4, W. Wyeth, Bramshill; 5, J. H. G. Love.

Yellow-fleshed turnips, any round variety.—1, Sir C. M. Laughton, Bart., Rowant; 2, R. Lees, Tarblton, N.B.; 3, J. H. G. Love; 4, R. Webb, Beenham.

Turnip turnips, any variety.—1, R. Lees; 2, W. Townshen, Aston Banpton; 3, J. Sampson, Minestead; 4, Right Hon. the Earl of Redesdale, Batsford Park.

Improved Green kohl rabi.—1, W. L. Beale, Waltham St. Lawrence; 2, T. Atken, jun., Spalding; 3, W. Everett, Great Doddington; 4, R. Stanford, Richmond; 5, Reading Union.

Drumhead cabbages (heaviest).—1, S. Robinson, Mebourne; 2, Sir P. Hunter, Bart.; 3, S. Bide, Farnham; 4, Major Baskerville, Crowsley Park; 5, Hon. Mrs. Hay.

White carrots.—1, Sir P. Hunter, Bart.; 2, Hon. Mrs. Hay; 3, F. Lythall, Offchurch.

GROWN WITH SEWAGE.

Mammoth Long Red mangels.—1, Reading Urban Sanitary Authority; 2, Eton Sewage Farm, Berkshire; Earl of Warwick, Sewage Farm.

Yellow Globe, or Oxheart mangels.—1, Reading Urban Sanitary Authority; 2, Eton Sewage Farm.

Golden Tankard mangels.—1, Reading Urban Sanitary Authority; 2, Eton Sewage Farm.

Yellow Intermediate mangels.—1, Reading Urban Sanitary Authority; 2, Eton Sewage Farm.

Improved Green kohl rabi.—1, Reading Urban Sanitary Authority; 2, Bedford Sewage Farm.

POTATOES AND VEGETABLES.

Collection of potatoes not less than 12 nor more than 20 varieties, 9 tubers.—1, C. Eyre, Wellford Park; 2, Hon. Viscount Eversley, Heckfield Place; 3, The Marquis of Dougal Hamphred Marshall; 4, Major Thoyte, Salthampstead.

Magnum Bonum potato, 18 tubers.—1, The Marquis of Donegal; 2, J. Clarke, Christchurch; 3, P. Southby, Bampton; 4, F. Day, Oatlands Park.

Collection of vegetables (omitting potatoes), 12 distinct varieties, 3 specimens or dishes of each.—1, Right Hon. Viscount Eversley; 2, P. Southby, Bampton; 3, J. Baker, Bampton; 4, J. W. Workman, Reading.

Improved Reading onions.—1, P. Southby; 2, W. Bowles, Banbury; 3, J. H. Blagrove, Calcot Park; 4, J. Baker.

Twelve long red carrots.—1, Withheld by the Judges; 2, W. Vales, Needon; 3, Rev. G. Marshall, Milton Rectory; 4, W. Ryman, Faringdon; 5, Major Thoyte.

Twelve parsnips.—1, Col. Gray, Farley Hill; Mrs. Court, Teyford; 3, Professor J. Buckman, Bradford Abbas.

SPECIAL PRIZES OFFERED BY MANURE MANUFACTURERS.

Messrs. Morris and Girdle's prize.—Sir F. Snythe.

Messrs. O'Leary and Co.'s prize.—R. Birt-Blythe.

Messrs. James Gibbs and Co.'s prize.—F. H. Farrer.

Odon's Chemical Manure Co.'s prize.—Sir R. F. Sutton, Bart.

Mr. J. B. Owen's prize for roots grown with Messrs. Fretter's manures.—H. Maskeleyne, Bucklebury.

Messrs. Weedon's prize.—Sir F. R. Sutton, Bart.

MESSRS. CARTER'S ROOT SHOW.

It was fortunate that the three great root shows of last month were held in different localities, especially as those of Messrs. Carter and Messrs. Sutton took place on the same day. In the Agricultural Hall on the 23rd Messrs. Carter had their usual large collection of roots and vegetables grown from their famous stocks of seeds, and

fairly filling the spacious galleries of the Hall. A liberal prize list, comprising awards amounting in value to £215 7s. 6d., and the honour of winning in a great competition brought together roots and other vegetables from all parts of the country, as well as some from Canada; and Messrs. Carter may be congratulated upon an exhibition which, if not the largest, was one of the best they have held.

A hasty walk round, before commencing the work of careful inspection, was sufficient to impress upon us the fact that of all the varieties of roots the swedes suffered most from the vicissitudes of the past summer. It is true that mangels received a check, and did not come up to the first promise; but there was nothing to lead one to suppose that they had suffered materially in the specimens shown in the Agricultural Hall on Saturday. We were somewhat surprised to find them better for their part than the common turnips, though the latter were greatly superior to the swedes, as they grew well after a plant was secured, which in many districts was not till late in the season.

Coming first to a large collection of Carter's Imperial Hardy Prize Winner Swedes, with 12 specimens in each lot, we were pleased to see that the judges in making their awards had been guided by considerations of quality and symmetry rather than of mere size. Most of the large roots—and there were many lots of large ones—were coarse and misshapen, showing the effects of forcing in an unsuitable season. The first prize in this large class went to Mr. E. Pilcher, for twelve models of quality and shape, though by no means of great size. The roots in the second-prize lot, shown by Messrs. Borthwick, were not so well formed. Mr. W. Beckett was third, and Mr. J. R. Keen fourth, with roots of fine quality.

The show of mangels was the finest we have seen for several years, especially the Globe and Intermediate varieties. There was a fine collection of Carters' Warden Yellow Globes. Mr. T. Smithers was first with some large and well-shaped roots, Mr. Furer (Mr. Stevenson, Steward) second, Mrs. Morten (Mr. J. Cave, Steward) and Mr. Clarke equal thirds, and Mr. Circuit (Mr. H. Swann Steward) fourth. Mr. Clarke's roots were particularly well-grown, and, in our opinion, were far superior to Mrs. Morten's, if not to those placed before them. Indeed, we thought there were several lots which got no prize, superior in quality and symmetry to Mrs. Morten's. In the Mammoth Long Red class the judges certainly did not go for quality, as they gave two of the prizes to very coarse and lanky lots. One of the best lots, Messrs. Emery's, only got a high commendation, though they were greatly superior in form and quality to the second prize lot, and to one of the equal first prize lots. Here Mrs. Morten deservedly had an extra (equal first) prize awarded to her for roots strangely passed over by the judges. The best collection of mangels in the Show was that of the Intermediates. They were almost uniformly sizeable, and shapely, and this fact speaks well for the stock. Mrs. Morten's first prize lot are models. The show of Carters' Yellow Tankard Mangels was a fair one, but the roots were neither so well grown nor so true to type as the Warden and Intermediate. Mr. Clarke was deservedly first with some mangels of nice quality.

The White Globe Turnips were not as good as we have seen them; but there were some of excellent quality and symmetry, particularly those grown by Mr. F. Alderton, Steward of the Middlesex County Asylum, and a highly commended lot grown by Mr. W. Wright, which we preferred to the rut-crowned third-prize lot. Grey Stone Turnips were not well represented. The Red Lincolnshire or Paragon Turnips made a pretty show, and there were some very nice roots in the Imperial Green Globe class. The Purple Top Mammoth and Yellow Faced Turnips were small classes.

Carters' Imperial Green Kohl Rabi were in great force, and the remarkable uniformity of excellence speaks well for the stock. A few of the exhibitors had trimmed their roots; but we were glad to see that the objectionable practice was discouraged by the judges. The first prize specimens were grown by Mr. J. Ancombe, on the Birmingham Corporation Sewage Farm, and are very fine and true to form.

There was a fair show of Carrots, and in the Drumhead Cabbage class there were the usual monster specimens.

Class 16 was for single specimens of Mammoth Mangels, the prizes going to the heaviest roots. Mr. T. Moxon was first with a mangel weighing 48 lb., and Mrs. Morten second with one of 45 lb. The next class was for the heaviest specimen of the Warden variety, and here there were some fine and good roots, showing that this variety can be forced without growing coarse, which cannot be said of the Mammoth Long Reds. Mr. Clarke was placed first for a specimen of 31 lb. weight, and Mrs. Morten again second for one of 28 lb. Mr. Clarke's mangel is one of excellent quality and symmetry, worthy of being the parent of a new generation of the stock. The heaviest Intermediates were 29 lb. and 28 lb., grown by Mrs. Morten and Mr. Clarke. Prizes were also given for "the handsomest or best-shaped" roots, and these were better worth looking at than the heaviest specimens. Mr. Lythall was placed first in the Mammoth class, though to our eyes Mrs. Morten's second-prize specimen was of a better type than the less broad-shouldered first-prize root. The corresponding class for Warden mangels was a remarkably good one, and the next, for Intermediates, was quite as good, the first-prize root, grown by Mrs. Morten, being quite a model of what this very nice variety of mangel should be. The handsomest Tankards were not so true, but contained some useful entries. The entry for the handsomest swedes was a small one, showing how rare it was to find perfect swedes in the field this season.

The exhibition of garden vegetables was very interesting. The competition for the best twelve dishes of vegetables was close; there was a capital show of potatoes, many of which were very fine indeed, and the onions were generally large and of excellent quality.

There was a separate competition for mangels grown with sewage. In the Globe class Lord Warwick was first and the South Metropolitan District Schools (Mr. Osman, Steward) second. Mr. C. Tough won the first prize for the Eton Local Board in the Mammoth class. Mr. D. Tough taking the second prize for Lord Warwick. The latter gentleman was first in the Tankard or Intermediate class, the Birmingham Drainage Board (Mr. Ancombe, Steward) being second. Messrs. James Gibbs and Co., of Mark Lane, offered a five guinea cup for the best collection of roots grown from Carter's seeds with Gibbs's manures, and this was won by the South Metropolitan District Schools. A prize of the same value, on like conditions, was offered by Messrs. Ohlendorff and Co., and fell to E. and R. Emery.

The roots grown in Canada attracted attention on account of their great size and grotesque forms. The heaviest Mammoth weighed 63 lb. when pulled, but had wasted to 58½ lb. Others weighed 55 lb., 51 lb., 49 lb., 48 lb., and 43 lb. respectively. Eight of the roots turned the scale, when pulled, at the great weight of 430 lb. They are giants of ugliness, and must have been grown on rich soil and under forcing climatic conditions. The Globes, Tankards, and Intermediates were less mis-shapen, and some of these were of great weight. On the whole Messrs. Carter are to be congratulated upon a very interesting and successful exhibition.

The judges were:—Mr. J. A. Clarke, Secretary of the Central Chamber of Agriculture; Mr. J. Stirton,

Seward to Sir R. Sut on, Bart., Benham Park; Mr. A. F. Barron, Royal Horticultural Society, Chiswick; Mr. A. Blake, agent to Mr. A. Brassey, M.P.; Mr. Charles Penny, gardener to H.R.H. the Prince of Wales; Mr. J. C. Mouton, Editor of the *Agricultural Gazette*; Mr. Shirley Hibberd, Editor of the *Gardener's Magazine*; Mr. J. Hart, Steward to Major Thoytts, Sulhamstead.

PRIZE LIST.

SPECIMEN ROOTS.

- Carters' Imperial Hardy Prize Winner swede.—1, E. Pilcher; 2, T. C. and A. H. Borthwick; 3, W. Beckett; 4, J. R. Keen.
- Warden Yellow Globe mangel.—1, T. Southern; 2, T. H. Farrer; 3, J. Clarke, Mrs. Morten; 4, J. C. Circuit.
- Mammoth Long Red ditto.—1, J. Clarke, Mrs. Morten; 2, Major Alfrey; 3, Admiral Sir G. B. Middleton; 4, F. Lythall.
- Intermediate ditto.—1, Mrs. Morten; 2, J. Clark; 3, Lord Clinton; 4, Birmingham, Tame, and Rea District Drainage Board.
- Yellow Tankard-shaped ditto.—1, J. Clark; 2, J. Skurray; 3, Mrs. Morten; 4, J. Fall.
- White Globe turnips.—1, Mrs. Morten; 2, Sir W. Farquhar; 3, J. J. Ensor; 4, Lord Redesdale.
- Grey Stone ditto.—Middlesex County Asylum; 2, J. Redcalf; 3, H. Denman; 4, J. Redwood.
- Red Lincolnshire or Red Paragon ditto.—1, A. Stevenson; 2, Mrs. Morten; 3, W. Kenwick; 4, R. Rogers.
- Imperial Green Globe ditto.—T. Moxon; 2, Mrs. Morten; 3, W. B. Boxall; 4, W. Kewick.
- Improved Purple Top Mammoth ditto.—1, Mrs. Morten; 2, R. Wingfield-Baker; 3, H. Denman.
- Yellow-fleshed or Hybrid ditto.—1, H. Denman; 2, Sir C. Lampion.
- Imperial Green kohl rabi.—1, Birmingham, Tame, and Rea District Drainage Board; 2, W. L. Beale; 3, South Metropolitan District Schools; 4, Mrs. Morten.
- White or Yellow Belgian carrots.—1, Lord Warwick; 2, Pigou, Wiiks and Laurence; 3, F. Lythall.
- Red carrots.—1, Captain Carmichael-Ferrall; 2, T. Potts; 3, T. Nicholson.
- Drumhead cabbage (heaviest).—1, J. Grestorex; 2, Earl of Harrington; 3, Central London District Schools.
- Heaviest Mammoth Long Red mangel.—1, T. Moxon; 2, Mrs. Morten; 3, J. Clarke.
- Heaviest Warden ditto.—1, J. Clarke; 2, Mrs. Morten; 3, T. Moxon.
- Heavies Champion Intermediate ditto.—1, Mrs. Morten; 2, J. Clarke; 3, J. C. Circuit and Lord Warwick.
- Heaviest Imperial Hardy Prize-winner swede.—1, T. Moxon; 2, J. Lovell Fry; 3, H. Denman.
- Handsomest or best-shaped Improved Mammoth mangel.—1, F. Lythall; 2, Mrs. Morten; 3, E. and R. Emery.
- Handsomest or best-shaped Warden Globe ditto.—1, T. H. Farrer; 2, J. Clarke; 3, J. C. Circuit.
- Handsomest or best shaped Intermediate ditto.—1, Mrs. Morten; 2, J. Clarke; 3, J. C. Circuit.
- Handsomest or best-shaped New Yellow Tankard ditto (of not less than 15 lb. weight).—1, J. Clark; 2, Mrs. Morten; 3, J. Skurray.
- Handsomest or best-shaped Imperial swede.—1, Middlesex County Asylum; 2, E. Pilcher; 3, Mrs. Morten.
- Best twelve dishes of vegetables.—1, G. D. W. Digby; 2, R. Wingfield-Baker; 3, P. Southby; 4, J. Baker.
- Best eight dishes of potatoes.—1, Lord Sondes; 2, C. W. Howard; 3, C. Eyre, T. Creed.
- Onions, spring-sown.—1, G. D. W. Digby; 2, Mrs. Morten

ROOTS.

Warden Prize mangel (or any other Globe variety).—1, Lord Warwick; 2, South Metropolitan District Schools.

Six Roots Improved Mammoth ditto.—1, Eton Local Board; 2, Lord Warwick.

Six Roots Carters' New Yellow Tankard-shaped, or Intermediate ditto.—1, Lord Warwick; 2, Birmingham, Tame, and Rea District Drainage Board.

Messrs. James Gibbs and Co.'s Five Guinea Cup.—South Metropolitan District Schools (Mr. C. Osman, Bailiff).

Messrs. Ohlendorff and Co.'s Five Guinea Cup.—Messrs. E. and R. Emery.

EXTRA PRIZES.

Mrs. Morten; J. C. Circuit; Mrs. Morten.

THE NORWICH FAT CATTLE SHOW.

(From the Norfolk Chronicle.)

The Show of the Norfolk and Norwich Christmas Cattle, held on Nov. 21 was a great improvement upon the first exhibition of last year. There were some who thought the commencement of the Society so good that its excellence could not be maintained, but this year the quality and quantity of stock exhibited greatly surpassed it, and we feel confident that many classes will not be so well represented at the National Fat Show in London next month.

This was certainly the case with the Norfolk and Suffolk red polled cattle. It is seldom, if ever, that such a good collection of these greatly improved animals has been seen. Mr. Pestle's first prize taker was a pretty little polled steer, but the chief honour among the polled beasts fell to Mr. Alfred Taylor's matchless three year and nine months old ox, that was shown in a younger class last year. Next was Mr. Peter Hudson's big bullock, with wonderful rump and loins, but slack behind his shoulder. In the next class Mr. J. J. Colman's two-year-old heifer, bred by Mr. Hudson, of Castle Acre was the best of all the homebreds, and was certainly long level animal of marvellous touch and quality. Mr. Middleton, of Holtkam, won a good second prize. Among the cows Mr. Hammond's Beauty well deserved her name and the first prize, and the next winner was Mr. Loft, from Suffolk, and Mr. Clare Read's well-bred, but patchy Sbyl was the reserved number. Mr. Wortley's Hereford's stood first and second in Class 1, and in the next division his Shorthorn was the chief winner. But it was among the old Shorthorns that the champion beast of the yard was to be found. The blue ribbon of the exhibition fell to Mr. Thomas Bond, of Lincolnshire, for a magnificent roan Shorthorn, that was shown at Norwich last year in a younger class. So again, the Royal Patron's Plate goes out of the county; so also does the Mayor's £15 cup, as that is won by Mr. Mayhew's two-year-old heifer, whose home is at Carlton Colville. This was a level, deep and thick heifer, but looked small when competing with the gigantic Lincoln ox for the Prince's Plate. But the ox was nearly twice the age of the cross-bred heifer, and so ought to be ever so much bigger. In the class for cows and heifers bred and fed in Norfolk, Mr. H. C. B. Gilbert stood first with the heifer that won at the Blisfield Show last month, and Mr. Frank Taylor carried off the second award with a large well-fed white heifer of capital quality. The Irish class was well filled, but it was difficult to say that the prize-takers were not Shorthorns, for there is no doubt as pure Shorthorn blood in Ireland as in England. Mr. Lubbock and Mr. Hayles-Tooke showed two splendid polled cross-bred oxen, both being by a Shorthorn bull and Norfolk cow. Among the Shorthorn heifers Mr. Edward Hubbard, of Loud, maintained the high position his white heifer secured at North Walsham, and Mr. J. Wortley had a singularly nice cow in the older class, which stood first on the prize list, Mr. Edwards, of Keswick, taking a second place with a well-bred old Shorthorn cow.

Perhaps the show of sheep was a greater advance upon that of last year than the cattle. There were no less than 21 entries for the three prizes offered for long-wooled and cross-bred rams, and it reflects the highest honour upon Mr. Utting that he secured all the three prizes. It is many years since the Stanninghall flock first carried off the honours of our local shows for the

best half-bred lambs. These three pens of noble young sheep are a good advertisement for Mr. Allen's rams, and the senior judge said that the worst pen of the 21 were quite worthy of a prize. Mr. J. J. Colman won the champion cup with his Southdowns, and the other chief honours of these classes fell to the Easton flock, the Prince of Wales having to be content with a second place. The half-bred wethers of Mr. John Overman were decidedly the best of their class, and made a good fight for the plate presented by the Chairman of the Great Eastern Railway. In the short-wooled sheep, other than Southdown, the Shropshire, Hampshire, and Suffolk downs stood in the awards in the order here recorded. Mr. Crawshaw had some famous half-breds and a pen of really prime Southdowns.

The pigs were not a large entry, but the specimens were all of the highest class; Mr. Sanders Spencer stood first, with the Rev. T. L. Fellowes and Mr. H. Wortley capital seconds.

CATTLE.

CHAMPION PRIZES.

H. R. II. The Prince of Wales, K.G., piece of plate for the best beast in the yard.—Prize, T. Bond.

H. Birkbeck, piece of plate for the best ox or steer in the yard.—Prize, T. Bond.

The Mayor of Norwich (J. D. Smith) for 1877-78, piece of plate for the best cow or heifer in the yard.—Prize, J. Mayhew.

Piece of plate for the best beast in the yard, bred and fed in Norfolk, not being the winner of the Patron's plate or of the Members' plate.—Prize, H. C. B. Gilbert.

Members for the County of Norfolk and City of Norwich, piece of plate for the best Norfolk and Suffolk Red Polled beast in the yard.—Prize, J. J. Colman, M.P.

Steer of any breed.—First prize, R. Wortley, Saffield; second, R. Wortley.

Steer of the Shorthorn breed.—First prize, R. Wortley; second, H. Brinkley, Wickham Market.

Ox or steer of the Shorthorn breed.—First prize, T. Bond, Lincoln; second, J. J. Colman, Norwich.

Heifer of the Shorthorn breed.—First prize, E. Hubbard, Lowestoft; second, T. Bond, Lincoln.

Cow of the Shorthorn breed.—First prize, J. Wortley, Norwich; second, T. H. Edwards, Norwich.

Steer of any pure breed.—First prize, J. Wortley, Hereford; second, H. R. H. The Prince of Wales.

Ox or steer of any pure breed.—First prize, J. J. Colman, M.P., Norwich; second, C. R. Marsham, Stratton Strawless Hall.

Cow or heifer of any pure breed.—Prize, H. Harvey, Timworth.

Cross or mixed-bred steer.—First prize, H. E. Wortley, Frettenham; second, P. M. Kett, Beeston St. Andrew.

Cross or mixed-bred ox or steer.—First prize, R. Wortley; second, A. Taylor, Staston Place.

Cross or mixed-bred cow or heifer.—First prize, J. Mayhew, Carlton Colville; second, A. Hamond, Westacre.

Steer of the Norfolk and Suffolk Red Polled breed.—First prize, J. S. Postle, Snaillburgh; second, J. J. Colman, Norwich.

Ox or steer of the Norfolk and Suffolk Red Polled breed.—First prize, A. Taylor, Starston Place; second, P. Hudson, Wighton.

Heifer of the Norfolk and Suffolk Red Polled breed.—First prize, J. J. Colman; second, C. Middleton, Holtkam.

Cow of the Norfolk and Suffolk Red Polled breed.—First prize, J. Hammond, Bale; second, R. E. Lift, Troston Hall.

Steer of any breed.—First prize, J. J. Colman; second, Sir E. H. K. Lacon, Bart., Ormesby. Reserved and highly commended, H. R. H. The Prince of Wales.

Ox or steer of any breed, bred and fed in Norfolk.—First prize, J. J. L. Lubbock, Catfield Hall; second, B. Hales-Tooke, Salthouse.

Cow or heifer of any breed, bred and fed in Norfolk.—First prize, H. C. B. Gilbert; second, F. O. Taylor, Thuxton.

Irish-bred ox or steer.—First prize, R. Wortley, Saffield; second, S. Goulder, Woodbastwick.

SHEEP.

Pen of three Southdown wethers, under twenty-three months old.—First prize, J. J. C. Inan, Norwich; second, the Prince of Wales.

Pen of three short-woolled wethers, other than Southdown, under twenty-three months old.—First prize, G. Cooke, Linton; second, H. Lambert, Cambridge.

Pen of long-woolled or cross-bred wethers, under twenty-three months old.—First prize, J. Overman, Barnham Sutton; second, C. Crawshaw, Hinglham.

Pen of three short-woolled ewes, not under three years old.—First prize, J. J. Colman; second, the Prince of Wales.

Pen of three long-woolled or cross-bred ewes, not under three years old.—First prize, R. C. Catling, Wisbech; second, R. C. Catling.

Pen of three Southdown lambs, born in the year 1878.—Prize J. J. Colman.

Pen of three short-woolled lambs.—Prize, H. Lambert, Great Abington.

Pen of three long-woolled or cross-bred lambs.—First prize, T. W. Utting, Stanninghall; second, T. W. Utting, Stanninghall; third, T. W. Utting, Stanninghall.

Duke of Norfolk's Prize for the best pen of lambs.—T. W. Utting, Stanninghall.

Best pen of sheep.—Prize, J. J. Coleman. Reserved, J. Overman.

SWINE.

Pig, large breed.—First prize, S. Spencer, Holywell; second, J. Brown, Long Sutton.

Pig, small breed.—First prize, S. Spencer, Holywell; second, T. L. Fellowes, East Tuddenham Vicarage.

Pen of three of any breed.—First prize, S. Spencer, Holywell; second, H. E. Wortley.

Messrs. Clowes, Tewson, and Nash, piece of plate for the best pig in the yard.—Prize, S. Spencer.

THE PROSPECTS OF AGRICULTURE.

Mr. C. S. Read, M.P. writes to the *Times* :—

In the discussion in the *Times* upon the present condition of British agriculture there are one or two facts that are altogether ignored or very imperfectly understood.

The first is the natural, but very false, impression that a larger supply of meat will be raised by our arable land being turned into grass.

In the opinion of some leading agricultural authorities the new grass will not produce nearly as much meat as the arable land. I am very certain that for a number of years it cannot possibly make more. So there is the loss of all the corn without any increase of meat. Yet ordinary arable land has been and will be even more extensively turned into pasture, although the gross value of the produce of the arable land may be three times that of the pasture. The reason is not far to seek. Grass pays best; the cost of production beats the arable farmer in spite of the enhanced price of meat. Let us consider for a moment what it costs the farmer to grow his roots. The best way to produce sound swedes and mangels is to apply a dressing of both natural and artificial manure. The farmyard manure has probably to be filled, carted on a heap, packed over, refilled, carted to the land, set out, spread, and knocked. The land has to be cleaned and tilled, requiring the passage of the plough, scarifier, roll, and harrows many times over it. The land is now ridged up, the farmyard manure is applied, the artificial is sown, the ridges are split, the seed is drilled and rolled down. The plants will need three horse-hoings and at least two hand-hoings, besides singling. Most of the roots intended for the cattle will be pulled, loaded, carted near the homestead, haled, thatched, and covered with earth, and then, when wanted, trimmed, loaded, carted to the turnip-house, and there sliced, shredded, or pulped before the stock eat them. Contrast all this with the expenses of the pasture: There the grass grows, and the stock eat it. The rent, tithes, rates, and taxes are the same, but there is no seed or tillage, and hardly any expenditure for horse or manual labour.

But it may be argued, "Granted all this, still, at the present price of meat, winter grazing ought to pay." I find my own experience is confirmed by a great many other farmers in East Anglia, and it is this: that a winter-grazed bullock

on an average of years, after paying for his artificial food and attendance, does not leave more than half-crown a week for the roots, hay, and straw he consumes. At this rate roots certainly cannot pay, but they must be grown, as they are the means of cleaning the land and enriching it with manure. Formerly the profit was looked for in the succeeding corn crops of the rotation, but with poor yields and low prices they have not lately paid their own expenses. But it must not be supposed that grass farming has no drawbacks. It is exposed to more vicissitudes and is more speculative and uncertain than the cultivation of arable land. It has been computed that ten times more grass grew this year than in 1865. But supposing this year to be double an ordinary crop, and that of 1868 to have been somewhat less than half the usual growth, we have here a variety of yield that is rarely met with in corn crops. The result was that in 1868 the stock were starved or killed half fat. This year the plethora of grass so raised the price of the stock that at the end of the summer cattle were not worth more than they cost in the spring, leaving nothing wherewith to pay the rent and other outgoings, without mentioning profits of the grazier.

The next point I wish to notice is that, independently of the scanty grain crops of the past four years, the arable farmer's expenses have considerably and permanently increased. We pay our labourers nearly 50 per cent. more than we did 25 years ago. We receive in return shorter hours, less work, and what is harder still, much worse work. It is also impossible nowadays to procure female or juvenile labour to weed our corn or single the turnips. Also, there is the cost of labour-saving machinery and the augmented tradesmen's bills. I therefore content that, in one way or another, in this item of labour alone the tiller of the soil is 10s. an acre worse off than he was even a few years ago; and I need hardly add that the whole of this additional burden has at present fallen upon the tenant farmers.

I will not ask if, with the malt tax, Free Trade is "one-sided," or speculate upon rents falling. The love of farming (though its pleasures are small indeed now) and the delights of rural life will, in this rich country, always command a number of tenants who will hire land more for amusement than profit. The law of distress, though not without its advantages to struggling, needy tenants, no doubt tends to keep up rents and creates a false competition for land. But I greatly fear that if the tillage farmers of England have to pass through many years like the last four, a startling percentage of them, instead of demanding a reduction of rent, will be candidates for the bounty of the Royal Agricultural Benevolent Association.

Mr. Charles Beasley, of Harston, Grantham, objects to certain statements made by Mr. Caird in his paper recently published in the Royal Agricultural Society's *Journal*. He writes :—

Mr. Caird states, I have no doubt correctly, that the carriage of American fat cattle costs £4 per head. He goes on, however, to say that this £4 is equivalent to a natural protection of £2 per acre on the rental of land in the United Kingdom. Here I think he must be mistaken. I farm upwards of 600 acres of average mixed pasture and arable land, on which I grow a large proportion of green crops, and consume nearly £1,000 worth of artificial foods during the year. I breed almost all my own stock and sell it off fat, and I find that the average quantity of meat sold, including sheep and pigs, does not exceed the value of 50 fat American bullocks, weighing 65 imperial stones each. Fifty bullocks at £4 per head would be a natural protection of £200 on the 600 acres, or 6s. 8d. per acre, not £2. If my land were all permanent pasture, I do not consider that it could produce so large a quantity of meat as it does now with the artificial food used.

Mr. Caird also states that the cost of carriage on corn is equivalent to £2 per acre, and implies that this is equal to a natural protection of £2 per acre on the rent of a farm. This does not appear so to me. Land in England of the value of £2 per acre costs at least £7 more before an acre of good wheat can be garnered. This cost is in a great measure incurred to replenish the land with the fertilisers which the wheat has exhausted. Now this is done in America by allowing the land to rest, and little rent is securing during that period, so that to produce an acre of wheat as grown in Ame-

seven several acres of fertile land are required. If this method were practised in England, the rent of the additional land would be more costly than the artificial fertilisers. It, therefore, appears that it is not the absence of rent on the land that is growing the current crops of wheat which gives the American the advantage over the English farmer, but the almost inexhaustible quantity of fertile land that only requires ploughing and sowing to produce good crops for several years, and then become again fertile at little cost to the farmer by being allowed to lie dormant, and I do not suppose that land worth less than 50s. per acre in England would be used for growing wheat at all in America. It is very difficult to say how far the cost of carriage protects the value of land in this country, but I should think that 10s. per acre would be much nearer the mark than £2.

Mr. Caird remarks of reaping machines that "one can do the work of ten men; this has multiplied the effect of human labour tenfold." I think most practical farmers will agree with me that it works four horses and two men very hard to cut as much corn with a reaping machine as eight men could do in the same time without one. The great advantage, therefore, of this machine, which is expensive to keep in repair, is not so much the saving of cost, but that it enables the farmer to do the work quickly at a critical time.

FOREIGN AND COLONIAL AGRICULTURE.

The *Wiener Landwirthschäftliche Zeitung* of the 16th ult. states that the results of the vintage in Hungary have surpassed all expectations, and that such an abundant produce has not been known since 1834. Between the Danube and the Theiss, operations will still continue their course for some time to come.

The Austrian empire abounds to superfluity of the unfermented liquor and wine. The inhabitants were not prepared for such a plentiful harvest, and not one man out of ten was provided with casks equal to the emergency, therefore causing the receptacles to be double the worth of the wine.

The rinderpest has broken out also in Skola and Podwoleczyska in Galicia, between the 4th and 11th instant. During the same time the epidemic has eased in Vodhorcez-Wierczany in the Stryer district of Galicia.

According to reports given by the Minister of Agriculture, the culture in the northern zone and in the Alps was finished by the end of October; but on the coasts and in Dalmatia, as also in many parts of Lower Austria, Kairns, and a great part of Hungary, viz., in Croatia and the former military boundary, the autumn seeds were not sown, owing to the heavy falls of snow, and it is questionable whether tilling can be proceeded with. The young corn generally presents a good appearance, only in some parts where operations were later it has suffered in consequence of too much rain, causing the tips to turn yellow or red.

Field-mice are still much complained of in Silesia, Galicia, and Salzburg.

The success of spring culture in the northern zone was great; but in the Alps, and particularly in Hungary, it was less favourable. Information concerning potatoes shows the produce, at least in many parts of Mähren, Silesia, and East Galicia, to be moderately good.

The crops of sugar-beet and cattle turnips upon an average, are good; with respect to quality, statements vary considerably.

Vintage, with the exception of Bohemia, Steiermark, and a few small vineyards in Lower Austria, may be regarded as finished. The quantity produced in Mähren, Lower Austria, and Dalmatia is good, in Kairns medium, in the Tyrol, Garz, and Tesria bad, in Bohemia and Steiermark it is estimated as moderately good. In Hungary

Sichenburg and Croatia, the crop as regards quantity, in spite of loss through putridity, are very good. A good quality is reported from the Tyrol and the South of Hungary, but the reports of the quality in many countries are unfavourable.

The *Philadelphia Ledger* says the export of apples this year promises to be the largest ever known. The apple crop is enormous, the quality is excellent, and prices are ruling low enough to give excellent promise of profit in foreign markets. The Boston correspondent of the *New York Bulletin* says that already some vessels have taken as many as 3,000 barrels, but the *Canopus*, of the Warren line, which sailed October 16, took 5,000 barrels, which is the largest cargo yet, and, as near as he can find out, no such shipment was ever before made.

The *New York Tribune* says that six hundred thousand pounds of California grapes were sold this season in Philadelphia—sent from San Francisco in ten weekly refrigerator car-loads at a cost for freight of £1,125 each, or about 6 cents per pound of grapes.

In view of the prevalence of hog-cholera at the West the *Chicago Tribune* advises everybody to become Jews indeed, to the extent of eschewing the flesh of swine, as the only sure way of escape from possible unpleasant results.

An Iowa correspondent of the *Western Rural* asserts that the "agricultural" exhibitions in many parts of the West are now mainly sustained by "the lower classes," "moral and intelligent people" having withdrawn their support in consequence of horse-racing and other gambling practices. He advises parents "who wish their children to grow up without contracting injurious habits," to keep a close watch on them when they go to the fair for a day's "recreation."

THE LAW OF DISTRESS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I think the "Man of Mark Lane" does Mr. Knatchbull-Hugessen an injustice. The present Law of Distress only gives the landlord a "preferential claim" for one year's rent. No doubt if he puts in his distress "before" any other creditor, he can hold all he can get until his claim is paid in full, but if a trade creditor puts in a distress first, the landlord can only claim "preferentially" one year's rent, and for all rent due to him beyond that he must rank like any other creditor. Now, Mr. Knatchbull-Hugessen said, "If you will suffer no distraint upon live stock placed upon a farm by the tenant, but which is not his property, how will you prevent a man in the last year of his tenancy keeping no stock upon his farm save that of other people, and snapping his fingers at his landlord?" It seems to me this is a very sensible question, and the "Man of Mark Lane" would do well to answer it, for Mr. Knatchbull-Hugessen goes on to say "the landlord will be driven to protect himself by stringent provisions in his agreement." The real fact is, all this outcry about "Hypothec" and "Distress" is made solely in the interest of a few rich farmers, who think it would limit the number of men who could take farms, and so enable them to get them cheaper. If the Law of Distress were done away with every landlord would require security from every new tenant, or else "one year's rent paid in advance." How would this place tenants already short of capital?

I am, Sir, &c.,

G. A. H.

[This very stale objection has been answered over and over again in these columns.—Ed.]

MR. W. E. BAXTER ON AGRICULTURE.

Mr. W. E. Baxter, M.P. for the Montrose Burghs, addressed a crowded meeting of his constituents at Brechin on Nov. 18. He said he had recently pointed out the enormous advantages which this country had derived from free trade, and he desired again to impress the fact that had it not been for the great change in our commercial policy, for which we were mainly indebted to Mr. Cobden, Mr. Bright, and Sir Robert Peel, the long mercantile crisis which we were now enduring would have been far more severely felt by the masses of the people. Since 1857 the value of foreign cereals and animal food imported into Great Britain had risen from thirty-five millions to one hundred and ten millions sterling. The greatest increase had been in the importation of animal food, living animals, fresh and salted meat, fish, poultry, eggs, butter, and cheese, which in twenty years had risen from an annual value of seven to thirty-six millions sterling. Even since 1868 the importation of meat had more than doubled, butter and cheese had risen one-third, wheat more than a third, and other grain had doubled. We were now getting our bread in equal proportions from our own fields and those of the foreigner. Ten years ago one-tenth of our meat and other animal products came from abroad—the proportion was now one-fourth, and it was to foreign countries we must look for nearly the whole of the additional supply required for the future increase of our population. During the last thirty years the average consumption of animal food per head had more than doubled, and whereas it cost the labourer four days' work in the week at the former period to pay for a bushel of wheat, it costs him only two and a-half days now. In addition to the whole of our home produce, we imported in 1877 foreign food and corn to the value of one hundred millions sterling. So much for the improved condition of the masses of the people; but how about the farmers and landowners, whom the repeal of the Corn Laws was to ruin? The most sagacious and prophetic statesman of our time (Mr. Cobden) was laughed at, even by some of his own friends, for saying that in the long run the agricultural interest would benefit more than any other by the triumph of the Anti-Corn Law League. During the last twenty-five years the capital value of the live stock of the United Kingdom had risen from one hundred and forty-six to two hundred and sixty millions sterling, and the land rent of the country, capitalised at thirty years' purchase, showed an increased value of three hundred and thirty-one millions sterling. "When we add to this," said Mr. Caird, "the increase of farm capital, through the rise in the value of live stock, one hundred and fourteen millions, there is the amazing sum of four hundred and forty-five millions sterling as the gain to the agriculturist—the landowners and farmers—and, in higher wages, to the agricultural labourers of the United Kingdom, from the improvement of land and the general prosperity of the country." Whilst on the subject of land, he wished to remark that although opposed to the laws of entail, primogeniture, hypothec, and all such relics of feudalism and artificial protection to the proprietors, he was equally opposed to any of those wild proposals emanating from Ireland, which, call them by whatever name they chose, were projects of robbery and confiscation, and the design of their authors, however they might mask it by specious phrases, was to transfer the soil of their country from the present owners to the present tenants, leaving all who aspired to be tenants in the future out in the cold.

BRITISH DAIRY FARMERS' ASSOCIATION.

A committee meeting, adjourned from the 11th ult., took place on the 18th, Mr. E. C. Tisdall of Kennington presiding.

The following were elected members:—Mr. Ralph C. Gregg, of Stouffield, Reigate; Mr. George J. Adams, of South Mall, Cork.

It was announced that the subscriptions of all new members joining from that time would date until the end of 1879.

Letters were read from Colonel Kingseote, C.B., M.P., stating his inability, on account of numerous other engagements, to undertake the office of President of the Society for the forthcoming year, also from Mr. W. E. Bear, tendering

his resignation as a member of the Committee, for the same cause, after the present season. A communication from Mr. Adams, of Cork, was also read, expressing an intention, on the part of himself and others in the province of Munster, to organise a Dairy Association there, in direct affinity to the parent institution in London, hoping by that means to enable the dairy interest of Ireland to be better represented at the metropolitan shows than has hitherto been the case.

The Chairman of the Finance Committee (Mr. W. Freeman) reported that a statement of accounts of the late Dairy Show had been submitted by the Hon. Sec., and he was pleased to be able to inform the members present that after paying all expenses there was a very fair balance of profit to the Association. It was stated on the part of the Committee of Inquiry that a balance-sheet of the accounts of the late hon. sec. would be shortly forthcoming; that the sum of £10 had been paid in, and the remainder promised at an early date. After discussing other items in connection with the late show, and arranging an agenda for the general meeting on December 11th, the members separated, the next committee meeting being fixed for Monday, December 2.

CANNIBALISM IN AUSTRALIA.—Although the recent report of cannibalism among natives of New Zealand has been proved to be unfounded, the Australian continent still possesses savages who practise cannibalism. The "Blacks" of Queensland have long been regarded as among the most determined opponents of the white men, and the recent wreck of a vessel named the Reiser near Townsville gave them an opportunity of displaying their hostility. After murdering the crew of the vessel, they cooked and ate some of them, and the bodies of two of the men were afterwards found in an oven on the mainland opposite the King's Reef, on which the Reiser struck. The features of the men were unrecognizable, the skulls being smashed in and parts of the flesh being removed; but traces of paper, clothing, &c., in the neighbourhood of the camp left no doubt as to their identity. The natives of the interior of Queensland are of a type far inferior to the Maoris of New Zealand, and the fact that they have been brought little or not at all under the influences of civilization prevents any comparison between them and the Maoris, whose renunciation of their heathen rites and customs dates back many years. The murders, and subsequent acts of cannibalism which were recently attributed to New Zealand natives, really occurred in New Britain or the New Hebrides—accounts are still conflicting and uncertain, and the exact locality of the crime is not easily fixed in face of inaccurate telegraphic reports which have travelled from Melbourne to Sydney, and to Auckland, and by two different routes—via San Francisco and via Port Darwin—to Europe. It is certain, however, that New Zealand was not the scene of the outrage. It is supposed that the sufferers were native teachers from Fiji, and not Wesleyan missionaries from Europe.—*Times*.

AGRICULTURAL EDUCATION.—A meeting has been held at Eynsford for the purpose of promoting an evening class for instruction in the principles of agriculture, a subject which has recently been added to the list of sciences aided by the Science and Art Department. Mr. Euckmaster attended from South Kensington, and explained the nature and conditions upon which pecuniary and other assistance was given in aid of such instruction. He saw no reason why such classes should not become general in agricultural parishes during the winter. A knowledge of the nature and properties of the soil was as necessary in the education of a farmer as a knowledge of drawing was to the mechanic. The teachers of these classes must pass an examination before they can earn payments. A number of elementary teachers in Scotland and England have already passed the examination. The teaching is conducted according to systems prepared by the Department, and the class now numbers 30 pupils. It was objected that only the theory could be taught in these classes, but Mr. Euckmaster pointed out there was no antagonism between theory and practice. The practical man when he found one system fail tried another and became a theorist, and so-called practical men were often unconsciously the most theoretical. Science with practice was the only way of placing the cultivation of the soil on an intelligent basis. A local committee has been formed, of which Sir William Hart Dyke, M.P., is chairman, and the class promises to be a success.

Agricultural Societies.

MANCHESTER AND LIVERPOOL.

At the annual meeting of this Society, Mr. Nield, Worsley, in seconding the adoption of the report and financial statement, complained of the charges made by railway companies for the carriage of stock. He thought that farmers required a central organisation to enable them to confer on such over-charges as well as on excessive rating assessments and other questions. It was decided that the next show of the Society should be held at Manchester, during the first full week in September.

NORFOLK.

The annual meeting of the members of the above Association for the election of officers, determining the place of meeting for 1879, and the transaction of other business, was held on Nov. 19, at Norwich, Colonel Fitzroy in the chair.

THE PLACE OF EXHIBITION FOR 1879.

Mr. C. S. READ, M.P., proposed, and Mr. LARKE seconded, that the exhibition for 1879 be held at East Dereham.

The CHAIRMAN said that the application from Dereham had only been recently received; but as everything was satisfactory, the Committee unanimously resolved to accede to the application.

The motion was unanimously adopted.

Mr. R. T. GURDON was elected President of the Association for the ensuing year.

It was agreed "That a show be held henceforth in the spring for thoroughbred and hackney stallions and cart-horses."

It was reported that the Suffolk show would next year be held in the third week in June, the week in which this Society is accustomed to hold its meeting. After some discussion it was resolved to hold the Norfolk show on the 11th and 12th of June.

Chambers of Agriculture.

CHESHIRE.

The annual meeting of the Cheshire Chamber of Agriculture was held on Nov. 21 at Crewe, the Hon. Wilbraham Egerton, M.P., presiding.

The SECRETARY (Mr. T. Rigby) read the report of the Council for the six months ending November in the present year.

Mr. J. EDWARDS moved a resolution to the effect that the Chamber should represent to the Board of Trade the desirability of adopting the cental of 100 lb. as the best weight for grain and flour, and of retaining the hundredweight of 112 lb. for hay, straw, cheese, &c. He said that as a corn dealer he had found the greatest difficulty in making calculations in the various markets he attended, owing to the difference of the weights in use. For instance, in the Crewe market the bushel of wheat weighed 75 lb.; in Staffordshire it was 73½ lb.; in Birmingham 72 lb.; in Nottinghamshire and Lincolnshire 62 and 63 lb.; and so on in other places. This, as he had said, caused him great difficulty, because he had to calculate his own business on the basis of 75 lb. to the bushel. At a meeting he attended a few days previously in Liverpool, the prevailing opinion was that all dry goods should be sold by the 100 lb.; but he himself felt in favour of the 112 lb., because the farmers and dealers already had those weights in their possession, and it would put them to great expense to make the change.

Mr. W. FAIR seconded the resolution.

Mr. G. WILLIS moved as an amendment that all agricultural produce should be sold by the standard of 100 lb. He thought that if any alteration at all was to be made, it might as well be a thorough one, and he could not see the necessity for two standards. It was surely as easy to sell cheese by the 100 lb. as to sell corn.

Mr. J. HORNBY seconded the amendment.

The amendment was then put, with the result that five voted for and five against it.

The CHAIRMAN said he should give his casting vote in favour of the original resolution, which was accordingly carried.

DEVON AND CORNWALL.

The Devon and Cornwall Chamber of Agriculture, at a meeting at Plymouth on November 14, discussed the corn returns, the Highways Act, and the Weights and Measures Act. Upon the corn returns are based the tithes commutation charges, and the complaint is that the returns are incomplete, and represent only the prices realised for the best corn sold to the merchants, who are responsible for the returns, the lower quality corn not being taken into account. So the agriculturists are taxed upon the highest prices realised, and not upon the prices actually received by them as growers. The following resolution was accordingly passed:—

"That whereas it is expedient to establish a fair basis whereon to strike a just percentage for the tithe charges, this Chamber is of opinion that all purchasers of corn direct from the grower only should be required to make returns, and it pledges itself to use its best endeavours to obtain the sanction of the Legislature to such a measure."

Regarding the Highways Act, the value of the provision of this measure was generally recognised, but strong objections were raised to the board of guardians having the working of the Act thrust upon them, and the following resolution was agreed to with unanimity:—

"That, while it is highly desirable that the rating area should be coincident with the highway districts, it is inexpedient that the management of the highways should be imposed upon rural sanitary authorities, and it is absolutely necessary for the due administration of the poor and highway laws that separate and distinct boards for each purpose should be maintained."

With respect to the Weights and Measures Act, the desirability of a uniform weight was recognised, and the Chambers resolved:—

"That it is desirable that use of the cental be legalised for the sale of solids, but that a scale of averages for adapting the present mode of payment of tithes to this alteration is indispensable."

ESSEX.

The members of this Chamber met on Nov. 22 at Chelmsford to discuss the Weights and Measures Act, Sir F. F. Buxton, Bart., in the chair. Mr. F. S. Gardiner, introduced the subject and moved the following resolution, which was carried:—

"That this Chamber is of opinion that all corn and dry goods should be sold by weight only; that the cental of 100 imperial pounds be the standard; and that it be made compulsory."

WEST SUFFOLK.

The annual meeting of this Chamber was held at Bury St. Edmund's, on Nov. 20th. Mr. T. Thornhill, M.P., occupied the chair. Mr. T. Thornhill, M.P., was re-elected President and Mr. W. Manfield, Vice-chairman.

YORK.

On November 16 a public meeting called by the York Chamber of Agriculture was held in the Corn Exchange at York to consider the Weights and Measures Act. The Lord Mayor occupied the chair. Mr. Dunn, of Kelfield (President of the York Chamber of Agriculture), proposed that the meeting was of opinion that grain of all kinds and dried products thereof should be sold by weight only. The proposition was seconded by Mr. Edward Smith, of Malton, and carried almost unanimously. Mr. J. Coleman, of Riccall Hall, then proposed that the 100 lb. cental should be the new standard of weight adopted in that district. This was seconded by Mr. F. D. Smith, of York. Mr. Joseph Smith, of Huggate, moved as an amendment that the meeting was of opinion that the present lb., stone, cwt., and ton should be continued as the standard of the district, and Mr. Ware, of Skirpebeck, seconded it. On being put to the vote there was a large majority in favour of the original proposition, which was carried. It was then resolved to send the result of the meeting to the President of the Board of Trade, that effect might be given to it.

THE AGRICULTURE OF LOMBARDY.

No I.

The appearance that Italy first presents to the traveller is one of extraordinary and unsurpassed beauty. In contrast with the bleak heights of the St. Gothard, as he descends the narrow winding roads and crosses the roaring Alpine torrents, his eye dwells with inexpressible delight upon the expanses of verdure that surround and confront him in every direction. The magnificent chestnuts that stand like unmolested giants upon the steep slopes of the mountains, with their heavy branches of fruit, the tall stalks of the Indian maize—most stately of all grain productions—the vine climbing along the trellises, like a green carpet spread several feet above the ground, and the black bunches of grapes ripe for the vintage, the ornamentation of the wayside inns decked out with the flowering oleander, the distinctive and sunburnt features of the peasantry—all these mingled together form a moving panorama.

At Biasca the diligence is left behind, and the train carries the traveller on to Locarno, seated on the banks of the Lago Maggiore, the most noble and extensive of Italian waters. From this spot the steamer conveys him a long fifty miles of lake scenery to Arona, where he again resumes the railway-carriage, until he arrives at the City of Milan.

The old Lombard capital is very striking with its wide streets, lofty houses, and unequalled cathedral, from the spire of which may be seen the rich plain of Lombardy, with the snowy range of the Alps to the north of the landscape, and the faint outline of the Appenines closing the view on the south. The central position for commerce has made this the richest city in Italy, whilst the inhabitants are supplied with an abundance of agricultural products, the growth of the surrounding district. The visitor cannot fail to be struck with the excellence of the bread, meat, cheese, butter, eggs, mushrooms, &c., and the vegetable market is an object of interest.

The causes of this extreme abundance must be sought in the combination of climate, water, soil, and the skill which has been practised for many centuries in turning these important elements to useful purposes. The lakes at the foot of the Alps serve as natural reservoirs to receive the melting snows, and discharge from thence their fertilising waters, guided over the plains by the skill of the engineer. Under a heat almost tropical, the ground is constantly saturated with moisture, and hence the abundant crops of rice, Indian corn, and the rich pasturage for the cattle. These latter again keep up a supply of manure for the soil, which would otherwise soon become exhausted, the result of its own luxuriance. The City of Milan is encompassed by the waters of canals, which on the one side connect it with the Adda, and on the other with the Ticino and the Po. The Naviglio Grande terminates under its walls. The Naviglio Intorno, occupying the former ditch of the ancient town, furnishes an inner line of navigation by which heavy supplies of all kinds are transported, and links the Naviglio Grande with the Naviglio della Martesana, the important line connecting Milan with the river Adla. From the southern side of the city the magnificent canal of Pavia pursues its course towards Pavia; while numerous smaller channels combine to irrigate the adjoining meadows, where no less than eight crops are produced annually, of which five are grass and three are hay.

The Naviglio Grande, or Great Canal of the Ticino, the parent of the irrigation canals of Europe, is an artificial river constructed so early as the twelfth century, which has for more than six hundred years borne forward a volume of water equal to nearly 1,500 cubic feet per

second. This great mass of water has been spread over the surface of the country through a thousand channels, stimulating the productiveness of the soil to such an extent as to make the country through which it passes one of the richest and most densely populated which the world has ever seen. For the cultivation of the *marcite*, or winter meadows, the land is disposed in a series of small ridges and valleys over which a flow of water is effected that never freezes; and from the meadows, as a general rule, five crops of grass are obtained during the year. Another source of supply are the springs or *fontanili*, as they are locally termed. Being derived from a considerable depth beneath the surface of the soil, the temperature of the water of the *fontanili* is always higher in winter than that of the canals, and hence it is greatly preferred for the irrigation of the *marcite* meadows.

In the financial administration of the great canals, which may be regarded as the main arteries of the irrigation system of Lombardy, it has been the invariable practice of the Government to sell the water in absolute property to the possessors of the soil. So soon as the water passes beyond the banks of the Government canal the purchasers have unrestricted liberty to dispose of it as they choose. The *diritto di acquedotto*, or right of passage, reserves to every proprietor of water the power of carrying his channel, under certain specified conditions, across all lands intervening between the main canal and his own property; and when the supply exceeds the immediate wants of the purchaser he has the right to dispose of the surplus to such of his neighbours as are desirous of having it. In the Milanese a certain measure of water is assigned to every subsidiary canal, and the legal capacity of the dispensing canals is limited to the quantity of water they can always command, even in the dry season. The unit of measure used in irrigation is the Milanese "oncia," consisting of that quantity of water which, by its own pressure, passes through an aperture 0.198 centimetres high, 0.149 centimetres wide, 70,099 centimetres below the surface of the water. The "oncia" is calculated at 2.50 cubic metres per minute, or 4.16 litres per second. The mouths of the canals, when constructed according to fixed rules, are said to be modelled. But this practice is generally confined to the mouths of the more important canals which come directly from the great feeders. For the distribution of the water in the derivatory canals in due proportion among the different proprietors it suffices to make ordinary transverse canals, each with an oblique angle projecting into the main current, which thus is divided into sections roughly determining the quantity of water belonging to each user. These subsidiary canals are constructed according to rule: the mouths are either open or furnished with sluices, as the distribution of the water is temporary or continual. When the subdivision of the waters has attained a certain limit it is stopped, and any deficiency in the supply is made good by its successive use among the different proprietors, the whole body of the water being turned into one or other of the subsidiary canals by the help of the sluices, according to the nature of the agricultural rotation, the quantity of water at command, and the character of the soil. The "rota," as it is called, is terminated at a certain number of days, and is repeated in the same order. This takes place during the summer irrigation, that is, the period between the 25th of March and the 25th of September. In winter the irrigation is continuous for the persons who may be entitled to it and who may require it. In the Unions, for the purposes of irrigation, the expenses are divided among the members in proportion to the use of the water. A part of the charges is also borne by the factories, which may be worked by water-power. The meadows and the rice

lands may be said almost to divide between them that vast volume of water which is every year poured over the face of the country, the irrigation of Indian corn or flax consuming but a small portion of the supply.

It may be interesting to remember that Leonardo da Vinci, whose celebrated fresco painting of the "Last Supper," at the Convent of Santa Maria delle Grazie, is diligently sought by all travellers to Milan, can claim to have been one of the earliest of the great hydraulic engineers of Lombardy—an example of versatility of talent by no means rare amongst the gifted Latin races.

WEIGHTS AND MEASURES ACT OF 1878.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—This Act comes into force on the 1st of January of the coming year. To gauge fairly of its provisions, considerable difficulty and confusion must necessarily arise; but these, I believe may, to a considerable extent, be prevented, and a far more uniform and advantage system adopted, if as to the sale of corn and all commodities of bulk, the buyer and seller would practically and earnestly give their attention thereto. It cannot but be unsatisfactory as to quotations and comparison of prices, that in different districts of the kingdom, we should be selling corn by the load (of two kinds), by the quarter, the comb, or the bushel, and other different measures of capacity. Why not have an agreed weight as to a starting point, and universally adopt it, and adhere to it? After having given the matter considerable attention, and earnestly perused the reports of what has been written and spoken upon the coming change I can see no better quantity than that recommended at many recent meetings—the cental of 100 pounds. As to bulk and weight it is most convenient, and in calculation as to price would be far easier than the present method. I am aware there is an existing prejudice against the adoption of the cental, and one of the reasons given is that it will lead us into a decimal system. I respectfully submit this is its chief recommendation. To change our coinage into a decimal system would be doubtless attended with both difficulties and confusion. I believe these, however, exist more in imagination than in fact. But I think I am entitled to ask what sound reasons can be urged against 10 dwts. being 1 oz., 10 ozs. 1lb., 25lb. 1 qr., and 100lb. 1 cwt.? The facilities as to calculation resulting from this system would be of immense benefit.

Corn that is brought into the market now is sold only nominally by bulk—mentally, but perhaps unconsciously, the seller and the buyer both are estimating the weights, although they know the bulk. How can it be otherwise, when in the bulk of a bushel, wheat will vary from 58lb. to 66lb., barley from 44lb. to 53lb., and oats from 34lb. to 44lb. Further, the cental is well adapted for the size of the present bags or sacks. These, if filled or nearly so, would be either two or two-and-half centals. For the future a two-cental bag is of a more convenient size and weight than the present sack of wheat weighing from 240lb. to 260lb., and far more suitable to the strength of the average man for loading, unloading, or shifting.

As in all changes, so in this; some little inconvenience would, doubtless, arise in the transition, but none but what in a week any ordinary capacity would overcome. Besides the relationship of price and bulk in the two systems are more analogous than at first appears. For example, a quarter of wheat weighing 60lb. per bushel at 40s. per qr. is 1d. per lb. The cental is 8s. 4d. A quarter of first-class barley weighing 52lb. per bush. at 16s. per qr. is about 1½d. per lb. The cental is at 10s. 6d. A quarter of oats weighing 36lb., if at 24s. per qr., would be

1d. per lb. also, 8s. 4d. the cental. If the weights, therefore, remain as they now are no difficulty that I can see presents itself, and it cannot be doubted that the uniformity of which I have spoken must be immensely advantageous to all concerned.

Consider our present system of the sale of meat. We have the stone of 8lb., the imperial stone of 14lb., and the score of 20lb. There can be no doubt but that the latter—the score—should be adopted in every instance.

The proposed change should not be looked upon jealously as an innovation, but as an acceptable one for removing existing abuses, adjusting any incongruous customs which may have been formed, and by wise counsel introducing such a system as shall be at once reasonable and easy of application; and which shall become of universal application throughout the United Kingdom.

10, Staple Inn, Holborn,

1 am, &c.,

W.C., Nov. 18.

THOMAS PAGE.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—A leader upon the new Weights and Measures Act has appeared in the *Times*, the purport of which is that the new Act, being a re-enactment of an old law ought not in any way to alarm the commercial community. It is evident that a most important point in the question escapes the writer's notice, namely, that the re-enactment of an old law is virtually the enactment of a new one, and not only abrogates the former statute, but also the pleas and precedents attached thereto.

A judge dealing with a question arising under the old law would recognise custom and precedent and decide accordingly, but in dealing with the same question under the new law he will have the Act alone before him and will be called upon to interpret it in its integrity without reference to either custom or precedent. There are many terms of sale in use in various trades, such as the boll and comb in the corn trade, that, although not illegal, are not legally recognised—indeed, they have been for a long time virtually abolished. If a contract based upon customary terms as these were to be called into question under the old law, "custom of the trade" would be effectually pleaded; but under the new Act such a plea would be invalid. If such a plea were valid, then the agitation pervading the country would be, as the article in the *Times* implies, uncalled for; but since the contrary is the case, and the question remains open for a legal tribunal to decide, our traders have not been premature in taking precautions to meet the requirements of the new Act.

The boll and comb may be weights or measures based upon the standard pound or imperial bushel, but until a legal tribunal has determined that such denominations as "boll" and "comb" are legal terms of sale under the new Act contracts based upon such terms are subject at any time to be declared in a court of law null and void.

It must also be borne in mind that, although the Bill originated with the Board of Trade, and its framers evidently had no intention of affecting our commercial system, its interpretation rests with the officers of the Crown, and the Board of Trade have no control over their rulings.

I am, Sir, &c.,

FRANK F. SUFFERIFF.

31, Threadneedle Street, E.C., Nov. 21.

MEDICINAL QUALITIES OF APPLES.—The acid of apples is among the most healthful of substances taken into the human stomach. It rouses the action of the liver when torpid, and thus enables it to eliminate and throw off the germs of bilious disorders and those of other diseases arising from slow blood-poison. They must also be classed among the most important and valuable of the vegetable growths especially for that class who work with the brain.—*Practical Farmer*.

LAND DRAINING.

The following is a report of Mr. Manfield's paper on "Land Draining," read at a meeting of the Ixworth Farmers' Club:—

In meeting together again I am sorry I cannot congratulate you upon a return of more prosperous times, although I am thankful to say we have been more favoured through having finer weather than our neighbours a few miles distant, so that most of our barley will command a good price; were it not so, this year would rank with its immediate predecessors as being amongst the worst for many years past. You are aware the Committee has circulated a schedule of prizes to be competed for and awarded at our autumn show of roots, &c., which will be held later than usual, partly in consequence of the backwardness of the root crop, and partly that we might have a moonlight night to go home. You will have noticed there is one prize not offered this year, viz., for farmers' sons' ploughing. Our President would have much pleasure in giving it if there could be found a fair amount of competition: he is making a stay in Cornwall, or he would have been with us to-night. He never misses an opportunity of helping the Ixworth Farmers' Club; it is mainly through his influence and example that it has risen to its present position, and with the assistance of our Vice-President and neighbouring landowners, and many of you gentlemen who are the rank and file, a most important part of our army, it must still continue to increase in influence and usefulness. It will soon be incumbent upon us to revise our rules. We have outgrown the scope of most of them, but there is one we have not acted up to, which provides that prizes shall be given annually for land draining, for which the Club has never given one; but last year Mr. Castledine gave a prize, and I think I am right in saying that a friend has offered to give £1 for a prize for land draining this year. It is through a disappointment that I have undertaken to introduce a subject to-night. Our friend, Mr. Castledine, had promised to read a paper upon the "Storage of Water," but through the pressure of business at this season he is compelled to defer it until December. Rather than let the month pass without a meeting I am here to bring to your notice the very common-place subject of "Land Drainage." Many will think there is nothing they can learn upon that, and they are right; but I find it better sometimes to overhaul our knowledge of very familiar subjects, and not to allow it to remain inactive. I have noticed that during the last few years very little land draining has been done. I look upon it as the foundation of the successful and profitable cultivation of all land that requires it. Upon wet land weeds will grow well; corn will rot. Manuring is but of little use. I shall not occupy your time by dwelling upon how land was drained many years ago, but speak briefly upon the different methods as practised now in our locality, viz., steam mole ploughing, and draining by manual labour. Where there is a good fall for the water I have found the steam mole plough do its work very well. Thirteen years ago I had a field steam mole ploughed every three years. In doing it all the surface soil between the drains was moved. It was a very stony field, and I believe the drains work well now. My usual practice has been to have these steam drains a rod apart, and thirty inches deep. Great care should be taken to keep the plough in an upright position; otherwise the bottom of the drain is uneven, and the cost probably wasted. Some I mole ploughed ten years ago. I drained with the spade two years ago, when I could as easily find where the blade of the plough had cut as if it had been done only one month. The cost of steam mangle ploughing is about 30s. per acre, exclusive of cost of horses to draw the ploughs about. It is not suitable upon moderately flat land, or land with many sand galls in it. It is more or less an inefficient substitute for good pipe draining. The proper time for steam mole ploughing is when the land is dry, as there is a difficulty in keeping the man-drains done close up to the plough. If they are not, in a wet time they are rendered useless at once. I look upon draining by spade as the best and most economical method. All things considered, I prefer to drain upon an unbroken wheat stubble. It is cleaner to walk upon, and it ploughs much better after than before being drained. The first thing is to find the best fall for the water. It is almost impossible to do this in many fields without a level, but with a little practice I have found

the common bricklayer's level answers every purpose. There are levels made expressly for the purpose, but these are more or less expensive. Having ascertained the best fall, I proceed to draw the drains, ploughing six furrows, or, as it is called here, five furrows and a brow, by which means the drain is drawn ten inches deep. The distance from drain to drain must vary according to the soil and the depths of drains, but where wood, furze, or straw is used for filling up, the drains should not be more than six yards apart, or less than thirty inches deep. If pipes are used, the drains should not be more than nine yards apart, or less than forty inches deep, but upon this great difference of opinion prevails. We are indebted to some gentlemen for what I may call experimental and theoretical farming; where they are unsuccessful—and they frequently are—we need not follow their example. I have profited by the experience of some who have departed from the old-fashioned and beaten course of land draining. I have seen draining done not more than twenty inches from the surface, and filled up with straw. I thought the money was not well spent. I have also seen it done (upon a very stiff blue clay) four feet deep, under the direction of a Land Improvement Company. I thought it would have been more effectual twelve inches nearer the surface; had it been mine it should have been so—but I am bound to add that the tenant of the land, some years afterwards, told me he was quite content to pay the increased rent which covered the cost of drainage. I have seen deep pipe draining exceedingly well done at Thornham, where they did not go upon such a hard and fast line as the Land Improvement Company did; and I also remember seeing some very excellent draining at Drinkstone, where I think the drains were generally nine yards apart, and forty inches deep. In the last three instances pipes were used. Having drawn the drain ten inches deep with the plough, a very good drain may be made thirty-two inches deep by taking out two spits of earth. The cost, exclusive of material for filling up and drawing drains, is about 35s. per acre. Such draining, if properly done, will stand well for about twelve years. I prefer wood or furze for filling up drains to straw, as either of the former are more durable and cheaper than the latter. The methods of which I have spoken are but makeshifts in comparison with good pipe drainage. My own practice is to have the drains drawn nine yards apart, ten inches deep; I then go thirty inches, three spits with the spade. At first I have a difficulty to get the proper depth; I always have a long spline in the field, which I lay across the drain, the ends of the spline resting on the unploughed land. I require forty inches from the underside of that spline. I always have a man whose business it is to lay in the pipes and see the work is properly done. He is not allowed to pass any that is not the proper depth, or improperly done. I find a cart of water in the field very useful for the levelling when the draining is going on. When the drain passes out of the hands of the man who digs at the pipe-layer puts in his pipes and covers them with a little of the surface soil, other men follow and spread all the soil that has been taken out of the drain. The drain is afterwards ploughed in, long whippetrees being used. The cost of draining in this way for manual labour is from 40s. to 50s. per acre, the pipes about two guineas. Such draining is very durable, and will last for many years. The clay-spreading costs an additional five shillings an acre, making the cost of thorough draining and claying £4 12s. an acre, exclusive of drawing drains and carting pipes. I prefer having very few eyes and using large pipes for the main drains, the size of the pipe to be according to the extent of land drained by it. The question arises, Is a tenant justified in making such an outlay? I should say certainly not, unless he is protected by something beyond the custom of the country. Such draining as I have described should be deemed an unexhausted improvement for 20 years, and the tenant should be entitled to compensation in respect of it during that time, as provided in the Agricultural Holdings Act. And again I should say certainly not, as it is a work that should be paid for by the landlord, done under proper supervision, and the tenant should pay a reasonable amount of interest upon the outlay; or the landlord should find pipes, charging the tenant interest upon the outlay, and the tenant find labour, the unexhausted value thereof being spread over a much longer period than usually allowed by the custom of the country. A landlord might not feel justified in making such an outlay; such an one could go to a Land Improvement Company, who would see the

work was properly executed, and the cost would be paid off within a certain number of years, as also provided in the Agricultural Holdings Act; or a landlord on paying to the tenant the amount of compensation due to him under this Act may obtain from the County Court a charge on the holding in respect thereof (Section 42). I can see no reason why draining such as I have last described, and well done, should not be as efficacious at the end of 50 years as at the beginning. It is more economical, as it requires to be done but once, while draining filled up with wood would require to be done four times during the same period, and there is not much difference in the cost for manual labour whatever material is used for filling up. One reason why more draining is not done is, that farmers are frightened at the cost, and they have not sufficient security for the unexhausted improvement, although the cost of shallow draining is not greater than the cost of manuring with farmyard manure. In the latter case the return is immediate and almost complete, but in the former the return is more gradual, and remains unexhausted for a longer time. To my mind, draining thirty inches deep, and well done, filled to with wood, should be deemed an unexhausted improvement for not less than six years, and that a outgoing tenant might fairly be recompensed upon that scale, deducting one-sixth of the cost for each year the work has been completed. Another reason is, in some places it has been difficult to get a sufficient supply of good drainers, although I have never had any trouble in getting any number I wanted, and very good land drainers too, from this and the adjoining parishes. I find labourers are most plentiful between the times of wheat sowing and wheat hoeing. Two years ago I had between forty and fifty acres of pipe draining done, and I gave no more for it than I did seven years ago. Last year I saw more labourers standing about the streets of Exworth than I have seen for many years, and I think most likely there will be more still this year. In conclusion, I by particular stress, whatever methods are pursued, on doing land draining thoroughly. I have seen fields where part has been laid dry, the water has been taken from one part of the field to another, and not carried off altogether, leaving part of the field wetter than it was before anything was done. Where draining is requisite nothing is so wasteful or unprofitable as to neglect it; but where it is requisite and done well there is no farming operation so profitable.

An interesting discussion followed, in which there was a general expression of opinion that a depth of thirty inches was sufficient on heavy land.

SARAWAK AS A FIELD FOR EMIGRATION.

A British resident of Sarawak, R. J. H. Brooke's territory, which is one-sixth wider in area than Ceylon, has favoured *The Ceylon Observer* with a very interesting letter, which we recommend to the attention of planters who cannot afford the high prices at which land is now selling in the States. The letter is as follows:—

INFORMATION FOR PLANTERS RESPECTING SARAWAK.

KUCHING, July, 1873.

SIR,—Having just returned from England in company with some Ceylon planters, I have been induced by their inquiries to send you the following information respecting the territory of Sarawak.

I was surprised to learn that so much interest has been excited by a new and untried scheme for civilizing the north of Borneo, and that some of your planters had so far entered in to the project as to promise the investment of considerable capital. Before this can be done with any degree of safety, a Government must be established, and that is not the work of a day.

Meanwhile, all the inducements offered in the north of Borneo are to be found in Sarawak, with the additional advantages of a Government of nearly forty years' standing able to maintain order.

All that is asked is that planters will come and test the accuracy of the following statements. I can, on the part of the Government, offer them every facility for examining the country. The Sarawak territory extends from Cape Datu to Cape Kidorong, having a coast line of about 250 miles. It is very

mountainous; in fact, within 30 miles of the capital (Kuching) there are numerous mountains, some attaining the height of over 5,500 feet. The country is so intersected by rivers that most of these can be easily approached by water, and the Government is willing to make roads to facilitate transit where necessary. The soil is of the most varied nature, embracing granite, porphyry, felspathic clay, limestone, sandstone, and many igneous rocks.

CLIMATE.—The following is a true copy of registration of rainfall and temperature at Kuching:—

1877.	RAINFALL.	TEMPERATURE
January	38.85	79°
February	21.66	79°
March	17.23	80.5
April	11.13	80°
May	33.15	82°
June	9.63	81.5
July	7.41	81.5
August	7.66	82°
September	7.57	81°
October	4.83	79.5
November	12.32	80.5
December	13.70	80.5

The monsoons are pretty regular, and we have few violent storms; the country being out of hurricane and typhoon latitudes.

Steamers run to Singapore, a distance of only forty-eight hours' steaming every ten days. The agents, Messrs. The Borneo Company, Singapore, will give visitors particulars of time of sailing, &c.

Kuching is a free port with but few exceptions.

Land in considerable quantities can be obtained from the Government either on lease (or 990 years at 50 cents* per acre— with an annual quit rent of 10 cents, or in fee simple, per 1 dol. an acre. The cost of felling virgin forest is from 4 dols. to 5 dols. an acre. Labour can be obtained from China and in the country at about 5 dols. per month. Numerous Kling-j from the Malabar Coast have settled here. Chinese are excellent artisans. Rice is grown in the country and imported from Singapore at reasonable rates. Cattle—easily procurable—10 dols. to 30 dols. per head. Australian horses and native ponies thrive well. A few plants of Liberian coffee planted in H. H. the Resident's garden are doing exceedingly well, and ordinary coffee is grown by the natives at elevations but little above the sea level.

I am, sir, yours truly,

WILLIAM W. CROCKER,

Resident of Sarawak.

F. S.—Since writing the above I have received your book on the cultivation of Liberian coffee in Ceylon. I find there is a striking similarity in the seasons of Liberia and Sarawak, and I have no doubt the plant would thrive well here. I send you a small map of the Sarawak territory.

* Cents of Spanish Dollars.

† Tamils.

As we have indicated, Sarawak exceeds Ceylon considerably in size, its area being equal to 30,000 square miles. Population is the great want, the census giving only 260,000. Chinese labour at 5 dols. per month is only a little over £10, and we should think that Tamil labour could be got for even less. The sum for felling forest which Mr. Crocker mentions, if, as we suppose, it includes burning and clearing up, is actually much lower than our Ceylon contract rate of £20 per acre. As we understand the Resident's letter, land can be selected and will be granted in fee simple for one payment down of a Spanish dollar (about 4s 2d.) per acre. This is considerably lower than the old upset price of 5s., at which so many acres were obtained in Ceylon, before an idea of severe competition had prevailed. As land can be got, out and out, for a dollar an acre, we should think that the saving of half the purchase price to begin with will not induce many to take leases on the condition of having to pay 10 cents (a little over 5d.) per acre per annum. There is the grand advantage of cheap land, to be had without competition at auction. Looking at the map, we can see that the land is scored with rivers, and we understand Mr. Crocker to indicate that those rivers are so many of them and to such an extent navigable that they will afford fair means of carriage until roads can be made, which they will be if there is a sufficient influx of planters. The Southern boundary of Sarawak, which, as our readers are aware, is known

tion of the vast island of Borneo, runs along the top of a mountain range, and we see the figures 6,000 feet opposite Mount Poe, which rises not far from the capital. Other peaks, the altitudes of which are given at 4,700 feet, 3,200, and 3,000 feet, rise around the chief station. Close as it is to a mountain range and within a degree of the equator, we are prepared for what we are presented with in the way of rainfall and temperature. The mean of the latter is as nearly as possible $\frac{1}{2}$ degree Fahrenheit above that of Colombo. The figures we deduce for Kuching are 80.58 deg. The rainfall, on the other hand, is a little over twice our average, so that Mr. Crocker is correct in comparing the climate to that of Liberia. Taking it for granted that the rainfall increases with elevation, there can be no doubt that Sarawak has plenty of rain to grow coffee. The question may be whether the wet is not too heavy and too continuous for the ripening of fruit. Probably the zone of altitude for Arabian coffee will be much lower in Sarawak than in Ceylon. There is the fact stated that coffee is grown. But for that fact we should be puzzled to know how fruit could mature and ripen in a climate where there is no absolutely dry month save August. That month is down for 7.66 of an inch, and October shows only 3.88. All the rest of the year (ten months) there is nothing under 7.40, ranging up to 38.55. This for January, one of our driest months. February, which at Colombo is almost rainless, shows 21.66. The north-east monsoon months give the heaviest rainfall, but north-east and south-west monsoons seem to run into each other, the comparative lull being between June and October. That, also (taking in May), is the period of greatest heat, and we think it probable the rainfall is in heavy plumps, with long spells of blazing sun between. The annual rainfall at Kuching is 155.21 inches. We think it probable that Liberian coffee will do exceedingly well in Sarawak, and we should think it would be a very paradise for tea, having rain and hence heat alternating. The mean for May and August being 82 deg., the temperature probably rises on some days in those months to 90 deg. or over. But as regards soil, climate, labour supply, and means of communication, planters are very fairly invited to go and see for themselves. There is, as the Resident points out, the grand advantage of settled government with protection for life and for property as it is created. Baron Overbeck's scheme is dazzling and attractive to minds fond of adventure and romance; but, were we going to settle in Borneo, we should incline to that portion of it where the preliminary fighting was completed a third of a century ago, and where there are courts of justice and a small but efficient army for emergencies. Rajah Brooke and his Rancee, too, are the leaders of a civilised society. Sarawak is fully recognised by the British Government, and would, if endangered, be as readily defended as the neighbouring colony of Labuan, where there is a regular English Governor. Communication with the Straits Colonies, too, is frequent and regular, and we cannot ourselves doubt that a great destiny awaits Sarawak. It may be the nucleus to which all the interests of Borneo, the largest island in the world, may ultimately tend. It will be a feather in the cap of comparatively small Ceylon if planters from its shores help the process with their experience and energy.—*Britannic.*

LANDLORD AND TENANT.

From an admirable letter by "A Land Agent," in the *Land Agents' Record* of the 2nd ult., we extract the following passages:—

The relations of landlord and tenant at the present time are peculiarly interesting. Never within living memory have such a number of notices to quit been given by tenant-farmers. Almost as great a panic exists amongst them to get rid of their holdings as there is amongst bank and gas shareholders to sell their stocks; and I am not sure if farmers have not the graver cause thus to act. There can be no doubt that a very serious crisis for both landlords and tenants is upon us, and on the good feeling and kind consideration of the one and the good sense of the other largely depends much of the future prosperity of both. No land a rent farmer, or indeed any one at all acquainted with land will deny, that in addition to the competition, from without and within, so ably referred to in your articles, a third and

fourth might be added in a succession of four bad seasons running; and in the dearth and inferior quality of the labour of the farm compared with what it was a quarter of a century ago. Add to this again the fact that the last straggle of the farmer—the monopoly of the supply of fresh meat has not only been attacked but is almost wrested from his grasp, and there is shown abundant cause for the extraordinary number of farms about to be given up.

The causes I have named, and some others to which I will refer later on, are and have been operating to the detriment of the British farmer for many years, but with the instincts and feelings of Englishmen, who they say never know when they are beaten, he has been hopeful of better seasons and better prices. In both hopes he has been miserably disappointed, and the culminating point appears to have been reached. It is now absolutely necessary that an entire revision of the terms and conditions under which land is held must take place. The chief reforms required are the following:—A very substantial reduction in rents; the introduction of liberal covenants; freedom from game and rabbits, both of which alter his landlord has had one day's shooting in a year on a farm should belong absolutely to the tenant; the abolition of gamekeepers; proper buildings; a sufficiency of good comfortable labourers' cottages for each occupancy; freedom of cropping; the right to sell hay, straw, turnips, mangels, or other crops (buying as much manure in place of them as is their manurial value). This will give the farmer the difference between manurial value and the selling price, which in localities near large towns will be very great. In short, an entirely new departure must commence, or landowners will have in a large measure to farm their own estates. Are they prepared to do this? Have they the necessary capital to spare? In nine cases out of ten it would be impossible for them to find it. I shall quite expect to be told they cannot afford to reduce rents, and that they cannot find the means for putting up proper and convenient farm buildings and labourers' cottages, for drainage, &c., &c., or any other permanent improvement. But in view of certain Acts of Parliament, and the companies formed expressly to undertake and execute works of that character, by which the charge for both principal and interest can be spread over a number of years, I shall assume that landlords have the means placed within their grasp of making all necessary permanent improvements on their estates. I would respectfully urge all of them who have not already done so, to look round their estates, along with their agent, and see what can be done towards rectifying matters. Farmers have seen their profits reduced to the vanishing point. Would landlords farming their own lands be in any better condition? It would, therefore, be better for a landlord to reduce his rents, give liberal covenants, sacrifice his game, and discharge his keepers, rather than to lose old tenants and enter upon new risks, without any more prospect of success than now appears. I know this advice will be unpalatable, but it must be taken if landlords wish to avoid greater and unknown evils. I am fully aware that many noblemen and gentlemen have very liberally assisted their tenants by returning to them large percentages at the rent audits; all honour to them I say for their kind consideration; but few even of these have gone the further step of abolishing restrictive clauses, or giving up the game and rabbits. The readjustment of rents, however, to meet the altered condition of the times, should be a general movement embracing the whole kingdom, should not rest upon individual goodwill, and should be placed at such a figure as would allow for a run of bad seasons and bad prices. I fully believe that with the benefits arising from the abolition of useless and restrictive clauses, the power to keep down the game, and the other matters to which I have alluded, a reduction of six shilling per acre on the lowest rented land and ten shillings on the highest, would enable the British farmer to fight successfully against all competition, and would draw again to the soil that energy and capital which is now being turned into other channels. Farmers at present are not bringing up their sons to follow them in their holdings. They have been for some years losing heavily, and except for the liberality of those who have assisted, perhaps five per cent of their number, have borne the whole brunt of the battle; it is time that those who have profited so largely by the rise in rents which has taken place within the past forty years should bear a fair share of the losses of the past and present time, and no land agent who has

the real interest of his employer at heart will counsel otherwise. It cannot be to the interests of landlords to lose old tenants, many of whom have been on their estates for generations, and yet is it not the fact that notices involving the severance of such old ties have been largely given this Michaelmas? Timely concessions would have averted some of these notices,—concession that will have to be granted to new tenants in order to obtain them. It adds much to the bitterness of regret every farmer feels at leaving the old homestead to see requests which have been refused to him for years, and which would have enabled him to stay on the farm where he was born, given under pressure of necessity to an entire stranger. As a rule, also, the old tenant would be satisfied with less than is given to the new, and therefore every effort should be made by the agent to avoid changes of tenancy. Many landlords would prefer making larger reductions in rent to giving up the game, but if they are wise they will not retain such a source of annoyance and heartburning in their midst; if the finding of one day's sport in a year for his landlord is left to the tenant, the landlord might rely upon having a good supply for himself and his friends, and the saving effected in the wages of game-keepers would help very much to recoup the reduction of the rents. No one but those who have suffered from game and rabbits know the mischief and loss they inflict, or the angry feeling they daily arouse. To say that thousands have been ruined by over-preservation within living memory is to state a simple fact that cannot be denied. Freedom of cropping and the sale of hay, straw, turnips, or other crops, does not mean impoverishment of the land. Under proper restrictions it will largely add to its fertility and condition; there are thousands of farmers who cannot sell any of the crops I have named.

Every inducement should be offered to the farmer by full compensation for all unexhausted manures, for the consumption of cake, &c., used within the two last years of his tenancy, to maintain his holding in the highest condition up to the time of leaving, and so avoid that pernicious system of taking out of the land everything he has put in.

The value of proper buildings, such as covered stack-yards and fold-yards, is very great; yet how very few holdings possess them. The loss manure sustains by drenching rains is well known, yet probably 75 per cent. of fold-yards are open to every shower. Of other buildings the want is not so urgent, but of really good, comfortable labourers' cottages there is great dearth.

We see on all sides farms going begging. They are advertised for weeks together without success, and agents are at their wit's end to know what to do. Under such circumstances I have ventured to sketch out some suggestions which will meet the views of farmers, and, if granted, will lead to the withdrawal of many of the notices given. I am sure in the long run no landlord or his agent will regret making sacrifices in order to keep on his estate men of the right stamp, who, once lost, can hardly ever be replaced; or if replaced, only by granting to strangers something more than would have satisfied an old tenant.

FARMERS AND FOX-HUNTING.

In the Queen's Bench Division, on the 15th ult., before Lord Coleridge and Mr. Justice Mellor, a case was heard in which a point of law was decided, of special interest to fox-hunters and farmers. It was an appeal from a conviction by the Justices of Somerset, in which the appellants were Paul and others, and the respondent was a farmer's son named Summerhayes. Before the magistrates, the appellants were summoned for trespass and assault. It appeared that the appellants were seen by the respondent riding leisurely along a field adjoining his father's, being out with the Taunton Vale foxhounds, the hounds having previously crossed the field in pursuit of a fox. When the appellant was within about ten yards of the respondent's field he said, "Gentlemen, I forbid you from coming on this land. Paul said to his friend, "Come on, this is the Prince of Wales's land," and tried to get through the gap in the hedge, but the respondent pushed his horse back. The attempt was repeated to enter the field, but without success. Then Paul struck the respondent more than once with his riding whip. The respondent took up a stone, when Paul and his friend got off their horses and entered the field, where a struggle

ensued between the three. The respondent summoned them for an assault and trespass. The Justices convicted the appellants on the ground that there was no evidence to satisfy them that a fox had been seen on the day in question. It was contended for the appellants before the magistrates that the defendants should be allowed to sever their defence so as to be able to give evidence one for the other, but the Justices refused the application. It was contended that the respondent, who was the son of the occupier of the land, had no authority or power to forbid these gentlemen from trespassing. The magistrates however, convicted the appellants, against which they now appealed.—Mr. H. T. Cole, Q.C., now contended that the respondent, who was attending to the business of the farm for his father, who was afflicted at the time, had no authority, expressed or implied, to forbid any person from coming on the land. There was no evidence to show that he was any other than a servant. The father, who was an old sportsman, would, no doubt, willingly have let the appellants come on to that land. Fox-hunting was a recognised sport, and according to the Game Act, a fox-hunter was at liberty to trespass on the land of others when fresh in pursuit of a fox, which was venia and a noxious animal, doing no unnecessary damage. The remedy was by action for any damage done. At common law a man in pursuit of a fox might go anywhere after it, and no one could forbid him lawfully, and here they were stopped before they got on the land.—Lord Coleridge. Admit that; but a gentleman in fresh pursuit of a fox has no right to horse-whip another.—Mr. Charles, Q.C., with whom was Mr. Warry, supported the conviction. A fox-hunter, he contended, had no right to trespass on land against the will of the occupier or owner of land.—Lord Coleridge, in delivering judgment, said the point with reference to the defendants having the right to sever their defence was a matter in the discretion of the Justices, and the court saw no reason to interfere with their decision. He was also of opinion that the respondent had authority to forbid this trespass. The Game Act, the 1st and 2nd William IV., did not apply to the case of fox-hunting. The claim put forward with reference to the Prince of Wales was not *bona fide* so as to oust the jurisdiction of the magistrates. Then with regard to the real question in this case, whether the circumstances justified the respondent in resisting the entry of the appellants after they had been forbidden, he was clearly of opinion that he was, and that fox-hunting could not be exercised adversely to the owner of the land. No such right existed, but it must be carried on like all other sport, subject to the general rights of mankind with reference to the ordinary and established rights of property. There was nothing to justify a field of fox-hunters entering a gentleman's garden, trampling it down, and destroying the flowers and plants. No such right existed at common law.—Mr. Justice Mellor concurred.—The appeal was consequently dismissed, and conviction affirmed.

ABSENT-MINDEDNESS. — Amongst the instances of blunders from absent mind are the following:—A clergyman walking one day in the country, fell into thought. He was so accustomed to ride that when he found himself at a toll, he stopped and shouted to the man, "Here! what's to pay?" "Pay for what?" asked the man. "For my horse," said the clergyman. "What horse?" "There's no horse, sir!" "Bless me," exclaimed the clergyman looking down between his legs "I thought I was on horseback!" Sydney Smith was not in general absent-minded, but he says that once, when calling on a friend in London, and being asked by the servant, "Who shall I say has called?" he could not for the life of him recollect his own name, and stared in blank confusion at the man for some time before it came back to him.—The first Lord Lyttelton was very absent. It is declared of him that when he fell into the river by the upsetting of a boat at Hagley, "he sank twice before he recollected he could swim." A New York paper gives the following story in illustration of the absent-mindedness of the great Jonathan Edwards. When out riding one day, a little boy very respectfully bowed and opened a gate for him. "Whose boy are you, my little man?" he asked. "Noah Clark's boy, sir," was the answer. On the return of Edwards the same boy appeared and opened the gate for him. He thanked the little fellow, and again asked, "Whose boy are you?" "Noah Clark's, sir; the same man's boy I was a quarter of an hour ago, sir."—*A Book of Blunders.*

Miscellaneous.

THE OLD SCISSORS' SOLILOQUY.

I am lying at rest in the sanctum to-night—
The place is deserted and still—
To my right lie exchanges and manuscripts white,
To my left are the ink and the quill—
Yes, the quill, for my master's o'd-fashioned and quaint,
And refuses to write with a pen,
He insists that old Franklia, the editor saint,
Used a quill, and he'll imitate Ben.

I love the old fellow—together for years
We have managed the *Farmer's Gazette*,
And although I am old, I'm his favourite shears,
And can crowd the compositors yet.
But my duties are rather to heavy, I think,
And I oftentimes envy the quill
As it lazily leans with its nib in the ink
While I'm slashing away with a will.

But when I was new—I remember it well,
Tough a score of long years have gone by—
The heaviest share of the editing fell
On the quill, and I think with a sigh
Of the days when I'd scissor an extract or two
From a neighbouring editor's leader,
Then laugh in my sleeve at the quill as it flew
In behalf of the general reader.

I am being paid off for my merriment then,
For my master is wrinkled and grey,
And seldom lays hold on his primitive pen,
Except when he wishes to say:—
"We are needing some money to run this machine,
And subscribers will please to remit;"
Or, "That last load of wood that Jones brought us was
green,
And so knotty it couldn't be split."

He is nervous and deaf, and is getting quite blind
(Though he hates to acknowledge the latter),
And I'm sorry to say it's a puzzle to find
Head or tail to the root of his matter.
The compositors plague him whenever they see
The result of a luckless endeavour,
But the darling old rascal just lays it to me,
And I make no remonstrance whatever.

Yes, I shoulder the blame—very little I care
For the jolly compositor's jest,
For I think of the head with the silvery hair
That will soon, very soon, be at rest.
He has laboured full long for the true and the good
Mid the manifold troubles that irk us—
His only emolument raiment and food,
And—a pass now and then to the circus.

Heigho! from the past comes a memory bright
Of a lass with the freshness of clover,
Who used me to clip from her tresses one night
A memorial lock for her lover.
That dear little lock is still glossy and brown,
But the lass is much older and fatter,
And the youth—he's an editor here in the town—
I'm employed on the staff of the latter.

I am lying at rest in the sanctum to-night—
The place is deserted and still—
The stars are abroad and the moon is in sight
Through the trees on the brow of the hill.
Clouds hurry along in undignified haste
And the wind rushes by with a wail—
Hullo! there's a whoping big rat in the paste—
How I'd like to shut down on his tail!

—*Scribner's Monthly*.

WHERE TO DINE.—An Irish priest was standing at the corner of a square about the hour of dinner, when one of his countrymen, observing the worthy Father in perplexity, thus addressed him.—"Oh! Father O'Leary, how is your rivir-

ence?" "Mightily put out, Pat," was the reply. "Put out! Who'd put out your rivirence?" "Ah! you don't understand! This is just it—I am invited to dine at one of the houses in this square, and I have forgot the name, and I never looked at the number, and now it's seven o'clock." "Oh! is that all?" was the cry! "Just now be aisy, your rivirence, I'll settle that for you." So saying, away flew the good-natured Irishman round the square, glancing at the kitchens, and when he discovered a fire that denoted hospitality he thundered at the door and inquired, "Is Father O'Leary here?" As might be expected, again and again he was repulsed. At length an angry footman exclaimed, "No, bother on Father O'Leary—he is not here; but he has to dine here to-day, and the cook is in a rage, and says the dinner will be spoilt. As is waiting for Father O'Leary." Paddy leaping from the door as if the steps had been on fire, pushed up to the astonished priest, and cried, "All right, your rivirence; you dine at 43—and a mighty good dinner you'll get." "Oh! Pat," said the grateful pastor, "the blessings of a hungry man be upon you!" "Long life and happiness to your rivirence! I have got your malady—I only wish I had your cure," returned Pat.—*Ayr Advertiser*.

THE EIGHTEENTH CENTURY.—The Eighteenth Century, so near to us and yet so far from us, possesses this peculiar charm, that its proximity in point of time enables us to realise to ourselves habits of life, a mode of thought, almost as remote from our own as those of the Elizabethan age. What it requires the powerful imagination of the poet or the novelist to do for us in respect of the sixteenth century, that every man can do for himself in respect of the eighteenth. We can live as familiarly with the men of a hundred years ago as if we had known them ourselves; and yet we are sure that if by any miracle we could be thrown back among them for a day, their talk, their ideas, their very dress, would seem as strange to us as if they belonged to another world. Johnson at the Mitre Tavern, Cowper at the Olney Tea Table, Fox shooting partridges at Holkham, Pitt and Bentham playing chess at Bowood, Dr. Taylor and his sleek black horses might almost be our own contemporaries. Thirty years ago the old tavern life of London still survived. Dinner hours in the country were still sufficiently early to admit of chess and cards being introduced in the evening. A few years earlier Lord Althorpe was still shooting partridges with pointers and setters over the ground trodden by Charles Fox. And numerous Dr. Taylors still survived among the clergy, though they had exchanged their bowwigs and coaches for the less clerical costume of cross-barred stiff ties and one horse gigs. In the picture we have hastily recalled there is nothing strange or unfamiliar. Yet make these figures speak, let them once begin to talk of politics, or literature, or religion, or pleasure, or "society," and we find ourselves in a different world. When personal government by the sovereign was a recognised principle in politics; when the authority of Dr. Johnson was universally accepted in literature; when the Church of England was so supremely popular that the clergy could afford to take their ease and live pretty much like laymen; when the "quality" still frequented Vauxhall and Ranelagh; when ladies of title gave convivial suppers, and were exposed to the same kind of attentions from their inebriated guests as Marlow pays to Miss Hebdastie—it is difficult to believe that in many other respects life was pretty much the same as at the commencement of the present reign. The immense remoteness of such scenes and such ideas from our own experience was combined with the nearness of the two periods to each other in point of time, so much so that opinion and practice as unfamiliar to ourselves as those of a Stafford or a Rochester were a matter of course with men whom we seem to know as well as our grandfather—forms a contrast which is perhaps without a parallel.—*Cornhill Magazine*.

HOW TO KEEP THE PEACE.—"Police-Constable Robinson, underfired by five shots from Peace's revolver, seized the man, and, after a desperate struggle, threw him to the ground. The burglar attempted to draw a sheath-knife from his pocket; but the officer, though severely wounded, did not lose his presence of mind, and after giving his prisoner a few smart taps on the head with his truncheon, succeeded in securing him."—*Newspaper report of the arrest of the great Blackheath Burglar*. Evidently Policeman Robinson is what we read so much of in the Jingo papers—the "Peace at any price" party.—*Punch*.

A ROMANCE IN REAL LIFE.—A lady writing to a con-temporary on registry offices, tells the following story:—Nineteen years ago I found myself an orphan through the sudden death of my father, who had only just gone to London to live from Canada, and after his funeral I was nearly penniless, and sixteen years of age. I could not indulge in sorrow, and had at once to begin my weary tramp after work of some kind, so day after day I walked the streets trying shops, asking them if they wanted a sewer (it was all I knew) without success; they all wanted experienced hands. At last I went into an imposing looking office with "register office for servants" in large letters in the window. I went in and inquired of the man if he knew of a vacancy for me, when he said I must have my name on the books, and the fee was 2s. 6d., without which he could not tell me anything. With a sob I handed him my last half-crown, leaving myself literally penniless, and begged him to be quick to tell me of someone who wanted a nurse girl, or anything, I did not care what, so long as it was work. The villain, with a leer, told me to call again in a few days, and perhaps he could do something for me. I with tears begged for the return of my money, telling him I had not tasted food that day, but he affected not to believe me, and told me he should call in the police unless I left quietly, which had the desired effect, for I went out, but I do not remember how or anything else until some weeks afterwards, when I found myself in bed, with a dear old lady nursing me. It seemed I had wandered unconsciously into my husband's office—husband that is now—and he seeing me took pity on me and took me at once to his mother's where I was ill of brain fever, brought on by anxiety and want of food.

THE EMPRESS OF AUSTRIA.—The Vienna correspondent of an Australian paper thus describes the Empress of Austria:—"Here everyone goes to drive, walk, or ride on horse-back, and I have, thanks to Madame Nilsson, seen all of the celebrities of Vienna, and the Empress on horse-back. As usual, we left the carriage to walk a little, and just then the royal party passed, her Majesty bowing to the fair Swedish prima donna with great affability, and smiling at the same time very sweetly. Being with Nilsson, I was also favoured with a most gracious bow, which gave me a rare opportunity to look well into the face of her Majesty. She is the finest horse-woman I ever saw, and is still perfectly beautiful on horseback. Picture to yourself a slender lithe form, clothed in a perfectly-fitting riding habit, masses of dark, curling hair, and a dainty, aristocratic face lighted up by superb black eyes. When she smiles her teeth gleam out even and fine, like small pearls. Her complexion is pale and clear, and her mouth, though a little large, is quite a royal one, with thin, well-cut lips and corners, just haughtily enough to say "I was born to command." Her neck is slim and well poised, and her bust is beautifully modelled. You must know that the Empress of Austria is now a grandmamma, and yet no one could with justice give her more than 30 or 32 years at the outside. Her waist is still as round and small as when she was a young princess, and now, as now, her Majesty. Sometimes her face wears a most lovely colour, and a ter galloping up and down two or three times the long avenue of the Prater, she looks younger and prettier than ever. She leads a strange life for an Empress, and avoids society as much as possible.

THE FAMILY HAMMER.—No well-regulated family pretends to be without a hammer. And yet there is nothing that goes to make up the equipment of a domestic establishment that causes one-half as much agony and profanity as a hammer. It is always an old hammer, with a handle that is inclined to a liver, and always bound to slip. The face is a way as round as a full moon and as smooth as glass. When it glides off a nail and smashes a finger we unhesitatingly deposit it in the back yard, and observe that we will not use it again. But the blood has hardly dried on the rag before we are in search of the same hammer again, and ready to make another trial. The result rarely varies, but we never profit by it. The awful weapon goes knocking off our nails, and smashing whole joints, and slipping off the handle to the confusion of the mantle ornaments, and breaking the commandments. Yet we put up with it, and put the handle on again, and lay it away where it won't get lost, and do up our smarting and mutilated fingers; and after all if the outrageous thing should disappear, we kick up a terrible hullaballo until it is found again. Talk about the tyrannizing influence of a bad habit. It is not to be compared with the family hammer.

MISS EDITH HELPS THINGS ALONG.

"My sister 'll be done in a minute, and I says you're to wait, if you please, And says I might stay till she came, if I'd promise her never to tease. Nor speak 'till you spoke to me first. But that's nonsense, for how would you know What she told me to say, if I didn't? Don't you really and truly think so?"

And then you'd feel strange here alone! And you wouldn't know just where to sit:

For that chair isn't strong on its legs, and we never use it a bit.

We keep it to match with the sofa. But Jack says it would be like you

To flop yourself right down upon it, and knock out the very last screw.

Suppose you try! I won't tell. Your afraid to! Oh! you're afraid they would think it was mean!

Well, then, there's the album—that's pretty, if you're sure that your fingers are clean.

For sister says sometimes I dab it; but she only says that when she's cross.

There's her picture. You know it? It's like her, but she ain't so good looking, of course!

This 's me. It is the best of 'em all. Now, tell me, you'd never have thought

That once I was little as that? Its the only one that could be bought—

For that was the message to pa from the photograph man where I sat—

That he wouldn't print off any more till he first got his money for that.

What? Maybe your tired of waiting. Why often she's longer than this.

There's all her back hair to do up and all of her front curls to 'size.

But its nice to be sitting here talking like grown people, just you and me.

Do you think you'll be coming here often? Oh, do! But don't come like Tom Lee.

Tom Lee! Her last bean. Why, my goodness! He need to be here day and night,

'Till the folks thought he'd be her husband; and Jack says that gave him a fright.

You won't run away, then, as he did? For you're not a rich man, they say;

Pa says your poor as a Church-mouse. Now are you? and how poor are they?

Ain't you glad you met me? We'l, I am; for I know your hair isn't red.

But what there's left of it's mousey, and not what that naughty Jack said.

But ther! I must go. Sister's coming. But I wish I could wait, just to see

If she ran up to you and she kissed you in the way she used to Kiss Lee."

BRET HARTE.

JUST TO ACCOMMODATE HIM.—"Crustacean" in the *Osgo Witness* writes:—"The Somerville that pass round still are not so bad. On one extremely exciting night a cud for those who had been converted was made. Twenty-nine stood up as having been "touched" by the great Evangelist. "Only twenty-nine in this great thriving city!" said the great man—"Only twenty-nine in this vast crowd assembled? Only twenty-nine!" with a slight touch of the sentiment that animates the auctioneer at the fall of the hammer, "O!—it, I won't see you 'sack for one!" said one criminal, and stood up.

CHURCH BELLS.—I do not profess to understand the mysteries of bell-tuning and bell-hanging, and have no desire to interfere between Mr. Haws and Sr Edward Beckett; but in one thing I thoroughly agree with the author of *Mosses*:

and Morals—namely, that church bells in London are a nuisance. Surely we noise-distracted Londoners have racket enough on week-days to entitle us to claim a little peace and quiet on Sundays. But no; from seven in the morning until eleven the church bells begin, and when one set stops another starts. For the life of me, I cannot see the use of church bells in these days. Before the invention of watches and clocks they of course served to call the faithful to prayer; but now that every one has a timekeeper such reminders are as needless as they are unpleasant.—*World*.

ROUTINE AT FAULT.—An old gentleman who travelled daily on a suburban line had the power of falling asleep without recourse to medicinal aid. He did not, indeed, wake up quite so regularly, but he protected himself from mistake by paying the guard to shout "Gipsy Hill, Mr. Jones!" at the proper station. Last week he was taking rather a longer journey, and unfortunately for him a friend, who knew his peculiarities, was in the train with him. The train stopped on its course, and the friend startled the old gentleman by shouting out "Gipsy Hill, Mr. Jones!" Mr. Jones woke confusedly, and mechanically got out of his carriage. The train went on, and Mr. Jones found himself at Llanfairfechan at 3 a.m. without his luggage.—*Mayfair*.

CUSTOMARY CANDOUR.—*Busch* (Biographer, to prince Bismarck). Your Highness has doubtless read the Guildhall speech of Lord Beaconsfield?

Bismarck. To be sure.

Busch. You noticed his intimated intention to rectify the North-Western boundaries of British India with a view to secure a "scientific frontier"? Does not your Highness think this would be a most unscrupulous proceeding, and a gross violation of international law?

Bismarck (airily, with his characteristic frankness, and a play of face between a wink and a grin). We all do it.—*Punch*.

BELL-PULL MEASURE.

Three pulls (at a bell).....make.....one sound,
Two sounds.....".....somebody hear,
Somebody hearing.....makes.....no difference,
No difference.....".....one angry.—*Punch*.

WHAT RABBITS CAN DO.—Through the courtesy of Mr. G. A. Gebhardt, of Mackeroda, near Kooringa, on whom our special reporter called during his tour through the rabbit-infested country, in the North, we are able to give some farther particulars as to the destruction done in the Mount Bryan district—one of the head-centres of the rodent tribe—and also some information as to the process of extermination by means of bisulphide of carbon. Mount Cone is the name of Mr. Gebhardt's station, which is about eight miles from the Burra in the direction of Mount Bryan and Hallett. A few years ago Mr. Gebhardt was able to keep from 12,000 to 14,000 sheep on this run, but owing to the alarming increase of the voracious little rabbits he can now only maintain about 7,000 sheep, and these have so much of their food eaten up that the percentage of lambs has fallen from about 80 per cent. to 50; and this in spite of the fact that hundreds of pounds have been spent in killing the rabbits and destroying their burrows. On one occasion, three years ago—when the rabbits first came in swarms to the locality and ate up the grass—a thousand of Mr. Gebhardt's sheep died in one paddock. This year, one paddock—2,200 acres in extent—has been wholly given up to the bunnies. It is close to the Mount Bryan head-station. The owner and the people generally in the district have given up killing until Parliament passes an Act making it compulsory on the part of all owners or occupiers to destroy the pest on the land. One 200-acre section sown with wheat this year is now as bare as a road. In another large paddock—1,300 acres in extent—the rabbits have killed all the trees and bushes by their simple method of barking them. At different times the owner of Mackeroda has imported from Germany lucerne, rye, prairie, and other grasses, but he has stopped the cultivation of them rather than feed the rabbits on these luxuries. Indeed so great and so general has been the destruction on the Mount Cone Run that he is afraid he will have to remove his stock if something decisive and general is not done promptly. Mr. Trelligan, a neighbouring farmer, lost one paddock this year, and rather than sacrifice the wheat on another he has fenced it with

wire netting at a cost of about £50 a mile. The District Council of Mount Bryan have levied rabbit rates to the extent of 2s. 3d. in the pound during the last 18 months, but they have now suspended operations until the fate of the second Rabbit Bill is seen. They used to have weekly deliveries of rabbits, and sometimes the number of scalps received in one day was 40,000 or 50,000. Of the 50,000 sent in on one occasion, 14,700 came from the Mount Cone estate, and then the District Council Bank stopped payment. *Adelaide Observer*.

FARM WAGES.—A week of the annual statutes in North East Yorkshire has forcibly shown how the general depression of trade has affected the agricultural interest. At the commencement the farmers determined to stand out against the rates hitherto paid for labour, more especially to the young men, and the result is that engagements are being made at fully £2 to £4 per head per annum less than two years ago. At Malton on Saturday week good foremen got £23 to £26; second men, £17 to £20; youths, from £15 if able to plough, &c.; and lads as low as £16 per annum, with food and lodging. Day labourers, who generally live in cottages near the farms, were also offered 14s. to 15s. per week, with extras in harvest, in place of the 17s. to 18s. they have received in the past four or five years. A great many yet remain unhired, but some accepted the reduction as inevitable.—*Times*.

SEWAGE IRRIGATION WORKS AT BERLIN.—Mr. Aird writes to me under date the 8th inst. from Berlin.—"Herewith I forward you a general plan of the sewage irrigation works for Berlin. The engineer-in-chief tells me the total cost of the same, including purchase of land, farm buildings, also the main and other pipes from the pumping stations, the laying out of lands, roads, &c., is 260 thalers per morgen, or about £60 per acre. The authorities are more than satisfied with the working (actual) results." The plan shows that the whole city is sewaged, the sewage is conveyed in the various directions to areas of land, distant from the city, comprising an area equal to about one-half of the city itself. The ex-mayor of Droitwich informs me that the authorities have purchased 40 acres, at a cost of £240 per acre to receive the sewage.—J. J. MECHI.

THE LABOUR QUESTION.—Mr. Mechi asks us to publish the following letter in answer to a letter by Mr. G. Mitchell.—"Accept my apology for not earlier replying to your letter. I am decidedly of opinion that no hard and fast rule can be applied to the regulation of agricultural labourers' wages—for the conditions are so varying, according to locality, modes of cultivation, and other circumstances. The laws of supply and demand are the only reliable regulators of price—in labour as in other things. In purely pastoral districts which form so large a percentage of our farmed area, labour must be always at a discount unless the rising adult population emigrate or remove to other districts. The acres have no sons—and the conditions are unaltered, or at all events are unaltered. In arable land there is more scope for increased labour. I am very glad to see that since the equalisation of rates by the unions, there is no longer an inducement to pull down cottages, or to prevent the erection of new ones; on the contrary, we see that the wretched and misplaced hovels are rapidly disappearing, and are replaced by residences more conducive to the comforts and morals of our important industrial agricultural workers. I do not consider your proposed plan [fixed payment by the hour] workable. I always pay by piece-work where practicable.—J. J. MECHI.

TRICHINOUS PORK.—The Provincial Council of Saxonia has determined to extend rigorously the official inspection of all fresh or cured pork offered for sale or consumption to every part of the province. Every one killing a pig, or having one killed for him, is bound to have the meat microscopically examined by an official inspector, and may neither use nor sell it, nor permit it to be used or sold, unless furnished with a certificate of its freedom from disease, nor unless each joint of the carcass is branded with an official stamp bearing letters and numbers corresponding with those on the face of the certificate. The fee payable for such microscopic examination is fixed at one shilling for each pig.—*Veterinary Journal*.

REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING NOVEMBER 25.

During the earlier portion of last week the weather was cold and boisterous, and the excessive amount of rainfall caused serious floods in the Midland and Eastern Counties, whereby large tracts of land were submerged and enormous damage done to stock and property. Towards the middle of the week, however, the weather moderated, and the waters subsided to a great extent. A normal temperature has since prevailed, and some little progress has been made with agricultural labour, but a good deal still remains to be done, for which sunshine and drying winds are desirable to relieve the soil of superabundant moisture. In Scotland the weather has been equally unfavourable, and wheat sowing has been much delayed by snow and rain. Supplies of home-grown wheat continue very moderate, both at Mark Lane and the provincial markets: but, taking all things into consideration, the present aspect of the trade appears to be sufficiently sound to justify farmers in withholding their produce as long as possible, and the continuance of light offerings indicate the expectation of better prices later on. Business has been restricted, owing to the impaired condition of most of the samples, it having been quite impossible to thrash with anything like satisfactory results of late; but parcels in a fit state for milling have commanded last week's prices both in London and the country. Animation in the grain trade is seldom experienced at this time, as dullness in weather, and business is the characteristic of the present month, owing to the heavy supplies which are pushed forward from port which are ice-bound during winter, and the disinclination shown by buyers to increase their liabilities at the end of the year. Towards the close of last Monday's market, however, millers discarded their apathetic attitude, and dealt pretty freely in the finer sorts of foreign wheat, particularly red winter American, of which, considering the general depression, some fair sales were made at 44s. per 49lb. exstore. In Russian varieties little has been done, nor is much improvement likely to take place until the closing of Cronstadt. The enormous visible supply in America and low freights, nearly all over the world have doubtless exercised their influence on prices, which have fallen to a level not justified by those causes, which, if not immediately felt, must very shortly be so, viz.: the cessation of supplies from Russia, the closing of the American canals, and consequent diminution of the movement to tidewater, and the increased requirements of this country during the winter months. Our requirements at the moment, it is true, are being fully met by the importation of foreign wheat, which, if not excessive, have been sufficient to keep prices from advancing, last Friday's return showing an arrival of 70,000 qrs. The absence of speculation has been largely felt in the grain trade, and the spirit of commercial enterprise has been broken by the severe financial

vicissitudes through which the general trade of the country is passing, but brighter days for merchant and agriculturist may be looked for with the advent of the year, when there appears to be good ground for anticipating the opening of a fresh campaign at prices more remunerative to both. The sales of English wheat noted last week were 49,580 qrs., at 41s. 2d., against 39,524 qrs., at 51s. 5d. in the previous year. The London averages for the week ending Nov. 23rd were 41s. 6d. on 1,274 qrs. The imports into the United Kingdom for the week ending Nov 16 were 817,099 cwt. Wheat, and 157,889 cwt. Flour. Last Monday's market was largely attended, but a quiet tone prevailed, and, as a rule, buyers were enabled to satisfy their requirements on easier terms. The week's imports of all articles were moderate, and, notwithstanding the reserved attitude maintained by buyers, holders showed little inclination to press sales. The arrivals of home-grown wheat were 3,784 qrs., and the supply fresh up on factors' stands were again very small. Previous prices were obtainable for the few lots in prime condition, but inferior samples were neglected and the turn lower. The imports of foreign amounted to 34,047 qrs., of which quantity 15,472 qrs. were from Russia, and 8,688 from America. Germany furnished about 6,300 qrs., and the remainder of the supply was from the East Indies. Trade was extremely dull during the earlier part of the market, but towards the close a fairly active demand was experienced, especially for winter American and similar classes of fine red wheat at the currencies of the preceding Monday. For the commoner sorts of Russian and American produce there was, however, very little inquiry, and to make sales in any quantity a reduction of 6d. to 1s. per qr. on the week was necessary. The exports were 2,186 qrs., against 2,436 qrs. in the previous week. The supply of barley consisted of 4,552 qrs. of home-grown and 14,451 qrs. of foreign. Malting sorts ruled steady at fully previous rates, but grinding descriptions were neglected, although not quotably lower. The arrivals of maize were very light, only 1,685 qrs.; but sales progressed slowly, and prices were the turn against sellers. There were 45,311 qrs. of Oats reported, and, with further liberal arrivals after the making up of the weekly returns, a limited business was done at a decline of 3d. to 6d. per qr. on the week, for all except new Swedish sorts, which gave way 6d. to 1s. per qr. On Wednesday there were 380 qrs. of English wheat and 49,520 qrs. of foreign, while further imports of Oats, to the extent of nearly 75,000 qrs. were also reported. With a scanty attendance, the trade ruled dull for wheat and feeding corn at nominally Monday's prices. On Friday the return showed 630 qrs. of English wheat and 69,860 qrs. foreign. The market was fairly attended, and there was a rather better demand for wheat at

previous currencies. Feeling corn sold slowly at unaltered rates. The imports of flour into the United Kingdom for the week ending Nov. 16th were 157,889 cwts., against 143,484 cwts. in the previous week. The receipts into London were 91,583 sacks of English and 6,349 sacks of foreign. No new feature of interest has been apparent in the trade which, in sympathy with wheat, has been dull throughout the week, but without any quotable alteration either of sacks or barrels. The week's arrivals of beans were 28,009 cwt., and of peas 35,349 cwt., showing an increase of 2,358 cwts. on the former and 15,345 cwts. on the latter. A fair amount of business has been done in both articles at an advance of 1s. per qr. on the week. The deliveries of malt were 18,380 qrs. and the exports 2,292 qrs. There has been no material change in this branch of the trade during the past week. All fine qualities have maintained late rates, while little attention has been paid to secondary sorts, for which sellers have occasionally submitted to a slight reduction. Increased activity has been observable in some branches of the agricultural seed trade, and a firmer tone has characterised the market generally. New English red clover is marketed pretty freely, and fine lots have moved off steadily at the low prices now current. No change can be noted in the value of American seed, and although transactions have moved within very narrow limits, it seems improbable that prices will recede much further, having regard to the firmness of the markets on the other side. Canary and hemp have been very meagrely dealt with, and the tendency of values have been downwards. Provincial trade has relapsed into a very quiet state, and, with small supplies from the farmers, last week's prices have been barely maintained in the country markets, either for wheat or spring corn. At Liverpool, on Tuesday, the market was fairly attended, and a moderate business was done in wheat at about former quotations. Flour was quiet but not cheaper, while maize met an improved demand at 24s. per 480 lb. for mixed American, and beans and peas were the turn lower. At Newcastle wheat has supported previous values, but sales have been mostly of a retail character. Flour has been quiet but firm, but there has been very little inquiry for oats and maize. At Leeds wheat has given way 6d. to 1s. per qr. and barley and oats have only been saleable at rather less money, while at Hull all articles sold slowly at nominally late rates. At Edinburgh the supplies have been small of wheat but large of other grain. At Wednesday's market wheat and barley realised former prices, but oats receded 6d. to 1s. per qr. At Leith the weather has been fine and frosty, but in the east and south of Scotland all field work has been delayed by heavy rains. With moderate arrivals from abroad, the wheat trade has ruled firm, although the demand has been somewhat limited. Flour has been in moderate request at late rates, while Scotch barley has, in some cases, brought 1s. per qr. more money. Oats and beans have given way 1s. per qr. while peas have advanced slightly. At Glasgow the week's imports have been light of wheat, but fair of other articles. Wednesday's market was moderately attended, but there was

little life in the trade, which ruled dull for wheat, flour, and maize, at barely late rates. Very little business was transacted, and at the close of the market a weaker tendency was observable. At Dublin the weather has been cold and frosty. Tuesday's market was well attended, but little business was done either in wheat or maize. The former sold slowly at previous prices, while the latter ruled dull, and sellers had to accept a reduction of 3d. per qr. At Cork there has been a retail consumptive demand for wheat at fully late rates, while maize has likewise maintained the improvement recently noted.

The following are the reports from Mark Lane during the past month:—

Monday, November 4.

The arrivals during the past week have been: English Wheat, 3,709 qrs.; foreign, 41,965 qrs. Exports, 5,996 qrs. There was a small supply of English Wheat fresh up to market this morning, and the trade ruled steady, but not very active, at an advance of 1s. per qr. on the week. Of foreign the arrivals were fair, and with a large attendance of millers a good consumptive demand was experienced at a similar improvement, the inquiry being chiefly for fine white and American descriptions. Country Flour, 21,684 sacks; foreign, 853 sacks and 4,819 barrels. A somewhat inactive trade, at 6d. per barrel and 1s. per sack more money. English Barley, 3,081 qrs.; Scotch, 3,166 qrs. foreign, 3,405 qrs. Both malting and grinding sorts were more inquired for, and prices improved 3d. to 6d. per qr. on the week. Malt: English, 18,552 qrs.; Scotch, 1,185 qrs. Exports, 728 qrs. The trade was quiet both for new and old at nominally last week's prices. Malt, 13,597 qrs. Firmly held, and fully 6d. per qr. dearer, both off stands and to arrive. English Oats, 787 qrs.; Irish, 1,500 qrs.; foreign, 64,616 qrs. Exports, 18 qrs. Business hung fire rather, but 3d. to 6d. per qr. more money was obtainable for all varieties. English Beans, 1,387 qrs.; foreign, 2,932 qrs. In limited request, and without quotable change in value. Linseed 30 qrs. Exports, 1,639 qrs. Slow at about former rates.

Monday, November 11.

The arrivals during the past week have been: English Wheat, 4,981 qrs.; foreign, 50,676 qrs.; exports, 2,436 qrs. There was a very moderate supply of English Wheat at market this morning, and the trade ruled quiet but firm, at last Monday's prices, of foreign the arrivals were fairly liberal, and with a good attendance of millers a moderate consumptive demand was experienced at about previous currencies. Country Flour 12,674 sacks; foreign, 2,296 sacks. There was only a slow sale for both sacks and barrels at unaltered quotations. English Barley, 3,894 qrs.; Scotch, 4,836 qrs.; foreign, 9,498 qrs. Former prices were maintained for malting and grinding descriptions, but there was not much animation in the trade. English Malt, 16,936 qrs.; Scotch, 1,416 qrs. Exports, 1,493 qrs. In moderate request, and without quotable alteration. Maize: 7,335 qrs. Sales were effected without much difficulty, and prices were the turn in seller's favour. Oats: English, 770 qrs.; Irish, 3,100 qrs.; foreign, 66,726 qrs.; Exports, 431 qrs. There was a moderate inquiry for all varieties, at last Monday's prices, the slight advance which was obtainable on Wednesday having been lost. Beans: English, 14,644 qrs.; foreign, 4,718 qrs. Business ruled quiet, at nominally late rates. Linseed, 10,358 qrs.; Exports, 293 qrs.; without change in value or demand.

CORN IMPORTED AND EXPORTED
FOR THE WEEK ENDING NOV. 16.

	Imported into			Exported.	
	Engl'd.	Scott'd	Irela'd	British.	Foreign
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Wheat.....	621615	95537	99917	31523	5554
Barley.....	181215	1013	...	387	3589
Oats.....	231569	3000	...	497	743
Rye.....	3321	...	...	...	...
Peas.....	29628	5721	...	187	...
Indian Corn.....	15867	12142	...	...	111
Indian Corn.....	267551	23735	75213	...	7418
Buckwheat.....	892	...	...	...	...
Total.....	1354758	141148	175160	35589	17415
Wheat Flour....	81563	73386	...	1357	1224
Oat Meal.....	1972	853	...	674	...
Rye Meal.....	90	...	...	...	...
Bean Meal.....	...	...	...	...	...
Ind. Corn Meal	270	...	...	...	...
Total.....	86835	74239	...	2931	1224
Grand Total..	1411593	215387	175160	37620	18638
Malt.....qrs	...	...	...	1647	...

FOREIGN GRAIN ENTERED FOR HOME CONSUMPTION DURING THE WEEK ENDING NOV. 25.

Wheat.....cwts.	314843	Peas.....cwts.	1057
Barley....."	49578	Maize....."	16480
Oats....."	31855	Flour....."	20862
Beans....."	3500		

Covent Garden Market.

LONDON, THURSDAY, NOV. 21.

The only alteration we have to quote this week is an advance in Grapes, the demand being better with a falling off in the supply. American Apples continue to reach us in large quantities, samples being generally good. Kent Cobs are in moderate supply.

FRUIT.

	s. d.	s. d.		s. d.	s. d.
Apricots, 1/2 dozen.....	0	0	0	0	0
Apples, 1/2 sieve.....	1	6	4	0	0
Pears, per dozen.....	0	0	0	0	0
Filberts & Cobs, 1/2 lb.	0	6	0	0	0
Lemons, 1/2 hundred	6	0	12	0	0
Grapes, 1/2 lb.....	2	0	6	0	0

VEGETABLES.

Artichokes, per bus.	0	0	0	0	0
Eng. Globe, doz.....	2	0	0	0	0
Jarvisden, per bush.	4	0	0	0	0
Asparagus sp., bun.	1	6	0	0	0
Bag, per 100.....	2	0	0	0	0
Beans, Fr., 1/2 100.....	2	0	0	0	0
Runners, 1/2 bus.	4	0	0	0	0
Broad, per bus.....	0	0	0	0	0
Beet, per dozen.....	1	0	2	0	0
Brussels Sprouts, bush.	7	0	0	0	0
Cabbages, per dozen	1	0	2	0	0
Carrots, 1/2 bunch.....	0	4	0	0	0
New Fr., per bun.....	0	0	0	0	0
Chilies, per 100.....	2	0	0	0	0
Cucumbers, each.....	0	4	1	6	0
Custard Mar, doz.....	0	0	0	0	0
Endive, per doz.....	0	0	0	0	0
Batavian, per doz.....	1	6	0	0	0
Garlic, per lb.....	0	6	0	0	0
Herbs, per bunch.....	0	2	0	4	0

The Potato trade is dull, and prices remain the same—Regents, 100s. to 130s.; Early Rose, 110s. to 120s. per ton.

PRICES OF BUTTER, HAMS, CHEESE, &c.
LONDON, MONDAY, NOV. 25.

BUTTER, per cwt.: s.	s.	CHEESE, per cwt.:	s.	s.	
Dorset.....	110	144	Cheshire.....	50	64
Friesland.....	116	120	Double Gloucester	50	64
Jersey.....	98	110	Cheddar.....	60	70
FRESH, per doz.....	16	17	American.....	40	50
BACON, per cwt.:			HAMS: York.....		
Wiltshire.....	60	62	Cumberland.....		
Irish, green, f.o.b.	60	62	Irish.....	94	100

Demand inactive.

Fertilizers.

	per ton	£ s. d.	£ s. d.
Guano, Peruvian, 10 to 13 am....	per ton	13 10 0	13 0 0
Do. High Phosphatic.....	per ton	7 13 3	8 0 0
Bone Ash, River Plate.....	per ton	6 7 6	6 10 0
Linseed Cake, American, thin oblong, prime, in bags.....	per ton	8 12 6	8 17 6
Cottoncake, N.A., decorticated, super.....	per ton	6 7 8	6 15 0
Do. English, undecorticated, in bulk.....	per ton	6 0 0	6 2 6
Phosphate lime, 75 to 90 per cent. pr. vit. 0.....	per ton	0 0 0	0 0 0
Nitrate of Soda, prime.....	per cwt.	0 13 0	0 13 3
Linseed, Bombay.....	per qr.	2 10 0	2 10 6
Niger.....	per ton	1 17 0	1 19 0
Cloverseed, N.A., n.r., f. to g.....	per ton	1 18 0	1 19 0
Tallow, superior North's.....	per ton	0 0 0	0 0 0

SAMUEL DOWNES AND CO., General Brokers,
No. 5, The Albany, Liverpool.

Green Manure, for Wheat, Barley, Oats, &c.....	per ton	£ 8	£ 8
Blue Manure, for Beans, Peas, Tares, &c.....	per ton	8 0	8 0
White Manure, for Autumn Sowing.....	per ton	12 10	12 10
Soluble Guano.....	per ton	8 0	8 0
Manold Manure.....	per ton	8 0	8 0
Potato Manure.....	per ton	6 10	6 10
Lunip Manure.....	per ton	7 10	7 10
Dissolved Bones.....	per ton	6 10	6 10
Superphosphate of Lime, best quality.....	per ton	6 10	6 10

PRENTICE BROS.,

Agricultural Chemical Works, Stowmarket, Suffolk.

Driffield "Special" Linseed Cake.....	per ton	£ 11	£ 11
Corn Cake.....	per ton	8 5 6	8 5 6
Cotton Cake.....	per ton	7 0 0	7 0 0
Manures for all Crops.....	per ton	6 10	6 10

F. C. MATTHEWS, SON & CO.,
Driffield, Yorks.

PERUVIAN GOVERNMENT GUANO, imported by the Peruvian Guano Company.

	£ s. d.	£ s. d.
London: High phosphatic.....	7 4 10	10 7 8
High ammoniacal.....	10 19 7	12 13 0
Liverpool: High phosphatic.....	7 13 3	9 16 11
High ammoniacal.....	10 18 7	12 10 0
Falmouth: High ammoniacal.....	9 6 1	12 7 3
Plymouth: High ammoniacal.....	11 0 4	12 10 0
High phosphatic.....	7 5 5	9 11 3
Exeter: High ammoniacal.....	11 10 6	12 10 0
Gloucester: High ammoniacal.....	11 3 3	12 10 0
High phosphatic.....	13 13 3	12 10 0
Bristol: High ammoniacal.....	0 1 1	12 10 0
High phosphatic.....	7 2 1	8 4 6
Bull: High phosphatic.....	8 5 1	0 0 0
High ammoniacal.....	10 18 0	12 10 0
Newcastle-on-Tyne: High ammoniacal.....	10 3 5	12 10 0
High phosphatic.....	8 6 2	8 18 6

For quantities of thirty tons and above. In retail £ per ton dearer.
W. A. RAU, 55, Old Broad-street, London,
Sole Agent for the company.

	£ s. d.	£ s. d.
Special Concentration Top Dressing for Wheat, Barley, Beans, Peas, Grass, &c.....(per Ton)	12	10
Ammoniacal Fixed Guano.....	11	10
Mangold and Potato Manures.....	10	10
Special Dissolved Bone.....	8	11
Dissolved Bone.....	7	10
Super-phosphate (best quality).....	6	10

LANGDALE'S Chemical Manure Co. (Limited),
122, Dunster House, Mark Lane.

Five Fine Linseed Cakes.....	£ 5	15	0
Do. Cotton-seed Cakes.....	7	0	0
Do. Cotton Cakes.....	7	0	0

WALKER & SMITH, LIMITED, Bath.

Wool Markets.

ENGLISH WOOL MARKET.

	per lb.	s. d.	s. d.
CURRENT PRICES OF ENGLISH WOOL.			
FLEECES—Southdown hogs.....	per lb.	1 1	1 2
Half-bred ditto.....	per lb.	1 1	1 2
Kent fleeces.....	per lb.	1 0 1/2	1 1
Southdown ewes and wethers.....	per lb.	1 1	1 2
Leicester ditto.....	per lb.	1 0 1/2	1 1
Sorts—Clothing.....	per lb.	1 1 1/2	1 4 1/2
Combing.....	per lb.	1 2	1 6

Hide and Skin Markets.

LONDON, SATURDAY, November 23.

	s. d.	s. d.	s. d.	s. d.
MARKET HIDES				
56 to 84lbs.....	0 2 1/2	0 3 1/2		
64 to 72lbs.....	0 3 1/2	0 3 1/2		
72 to 80lbs.....	0 3 1/2	0 3 1/2		
80 to 88lbs.....	0 3 1/2	0 4 1/2		
88 to 96lbs.....	0 4 1/2	0 5		
96 to 104lbs.....	0 5 1/2	0 5 1/2		
104 to 112lbs.....	0 6	0 6		
Horse hides, each.....	6	0	12	0
Calfskins, light.....	2	0	4	0
Full.....	7	0	0	0
Sheep Skins, Uncl's.....	5	8	7	6
Kents and half-breds.....	4	8	5	0
Lambs.....	0	0	0	0
Do. n.....	4	2	6	0
American.....	6	0	6	0

Printed by HAZELL, WATSON, & VINEY, 265, Strand London.

THE FARMER'S MAGAZINE.

CONTENTS.

DECEMBER, 1878.

PLATE.—OMEGA AND PRIDE OF OXFORD.

	Page
DESCRIPTION OF PLATE	393
AGRICULTURAL SOCIETIES	393, 429, 449
FARMERS' CLUBS	398
CHAMBERS OF AGRICULTURE	406, 449
GENERAL VIEW OF BRITISH AGRICULTURE—PART III.	410
LIVE STOCK NOTES	414, 420
EMIGRATION OF PAUPER CHILDREN	415
COGGESHALL ROOT SHOW	417
REPORT OF THE LOCAL TAXATION COMMITTEE	418
NOTES FROM A CORNISH FARMER	421
FARMERS AND THEIR MEN	423
THE WEIGHTS AND MEASURES ACT	425, 439, 451
AGRICULTURAL TABLE TALK	427
FRENCH STATISTICS	430
THE OAT-BARLEY QUESTION	430
THE SMITHFIELD CLUB CATTLE SHOW	431
INDUSTRIAL ENTERPRISE	432
THE ENGLISH FARMER AND FREE TRADE	433
NATIONAL INSURANCE VERSUS POOR RATES	434
THE STRIKE IN KENT AND SUSSEX	435
ROOT SHOWS	440
NORWICH FAT CATTLE SHOW	445
PROSPECTS OF AGRICULTURE	446
FOREIGN AGRICULTURE	447
THE LAW OF DISTRESS	447
MR. E. W. BAXTER ON AGRICULTURE	448
THE AGRICULTURE OF LOMBARDY—No. I.	450
LAND DRAINING	452
SARAWAK AS A FIELD FOR EMIGRATION	453
LANDLORD AND TENANT	454
FARMERS AND FOXHUNTING	455
MISCELLANEOUS	456
REVIEW OF THE CORN TRADE	459
MARKET CURRENCIES, &c.	—

THE
ROYAL FARMERS' & GENERAL
INSURANCE OFFICE.

ESTABLISHED 1840
TO INSURE AGAINST LOSSES BY
FIRE AND HAIL STORMS,
AND TO GRANT
INSURANCES ON LIVES.

DIRECTORS:

Chairman—ALFRED DENISON, Esq., 6, Albemarle Street, Piccadilly.
Deputy-Chairman—B. P. SHEARER, Esq., 17, Gloucester-place, Portman Square.
Thomas Henry Burroughes, Esq., 17, Lower Berkeley Street.
Richard L. Loveland, Esq., 4, Hare Court, Temple.
John Reddish, Esq., 9, Highbury New Park.
William Clutton, Esq., 7, Clifton Villas, Peuge.
Major F. Anderson Stebbing, 1, Cleveland Gardens, Castle Hill, Ealing.
A. J. Duff Filer, Esq., 10, Aberdeen Park, Highbury.
M. J. Hawker, Esq., 37, Cadogan Place, Sloane Street

FIRE.—Insurances at moderate rates.
LIFE.—Insurances on equitable terms. Profits divided every five years.
HAIL.—Crops insured against Hail Storms at 5d. per acre.
LOSSES.—Settled promptly and liberally.

AMPLE CAPITAL AND LARGE RESERVES.

Prospectuses and Reports may be obtained of the Secretary, JOHN SHARP, 3, Norfolk Street, Strand London, W.C., or of the Agents.

THE
MARK LANE EXPRESS
AND
AGRICULTURAL JOURNAL

IS THE

LARGEST AND THE LEADING FARMER'S AND GRAZIER'S NEWSPAPER.

PUBLISHED EVERY MONDAY EVENING, IN TIME FOR POST.

Office of Publication and for Advertisements, 265, Strand, London. May be had of all Booksellers and Newsmen throughout the Kingdom, price 7d., or £1 10s. 6d. per annum.

J. C. NESBIT AND SON, Analytical, Agricultural, and Consulting Chemists (Manager A. Anthony Nesbit, F.C.S., &c.), undertake the analysis of manures, feeding stuffs, seeds, soils, waters, and all agricultural requisites. And may be consulted upon the cause of the failure of crops, or any questions in scientific agriculture. Laboratory: 38, Gracechurch Street, E.C. A list of fees sent on application.



