

found mildew seriously affecting my plants. A few of my potato plants were affected by it, and young seeding oaks, and then apple trees—the second year of their bearing. Sulphur is recommended as a certain remedy. Not having sulphur at hand I dusted them lightly with air slaked lime, and it has proved to be a perfect remedy, not a trace of the mildew remaining.

The June frost lay heavy on my grape vines, though well shaded from the north. The young tender shoots and tendrils were badly frozen, quite killed. I cut off the frozen parts and the vines have since grown luxuriantly—young wood, rich heavy foliage, and many a cluster of grapes. "Cut them down to the ground" was the advice given to me when they were frozen. There is much enduring vitality in the stem as well as the root of our grape vines. They are like our people, hardy, tenacious of life, and having great power of endurance. The caterpillars, in great numbers, invaded the garden. We swept them in hundreds off our forest and fruit trees, day after day, and killed them. The only injury they caused us was the daily labor of contending with them as long as they remained.

Our Paris Letter.

The Paris Exhibition — The Cattle Show.

ITS MANAGEMENT AND ITS PARTICIPANTS.

12 Boulevard du Temple,
Paris, June 15, '78.

The show of live stock, opened yesterday on the Esplanade of the Invalides, and to be closed this day week, is one of the novelties connected with the exhibition, and is well worth a visit. It is, however, attended with inevitable drawbacks. Expense and risk prevent the despatch of animals from considerable distances, and the peasant farming prevailing in certain countries does not conduce to enterprise in stock-breeding. Hence this cattle show, though a section of the Universal Exhibition, is not universal, not even European, but is French, English and Belgian, with a sprinkling of Dutch, Italian, Swiss, Danish and Portuguese. France has 356 exhibitors, England 145, Belgium 39, Holland 12, Italy 12, Switzerland 9, Denmark 2, and Portugal 1. England is represented by nearly all its eminent breeders, and amply justifies its reputation. Indeed its superiority would have been all the more manifest had the international competition extended over a wider area, and much of the best French stock is the result of crossing with English breeds. A point, moreover, has been made of not allowing French and foreign animals to be pitted against each other. Cattle, sheep and pigs are all divided into two categories, those bred in France and those bred abroad. To the poultry, indeed, no such classification has been applied, and it may be suspected that had the cattle, sheep and pigs of all nations been similarly treated, a still larger proportion of the prizes would have been carried off by Englishmen. France, however, as the country giving the invitation and bestowing the recompenses, had a clear right to lay down its own conditions, and there was, perhaps, a fear that Frenchmen who cultivate foreign breeds would be deterred from exhibiting if they had to compete with the countries where these breeds originated. The show is excellently arranged on the square fronting the Invalides. The cattle are placed in about forty lofty and spacious sheds, with plenty of air and light, but covered in, so that the visitors walking through them are sheltered from the sun and rain. The sheep, pigs and poultry are penned at each extremity, where lines of trees afford protection, and

in the centre is a broad belt of flower beds. There is not the slightest crowding, and all discomfort, both for the public and for the stock, has been avoided. The journey and the heat are nevertheless telling on some of the pigs, whose owners are prudently inviting offers from Paris butchers. Of Dutch oxen there are many large and well-shaped animals, and thirteen miscellaneous northern breeds, a Danish count carrying off several prizes. The Swiss cattle number fifty, and are admirable specimens. Their bells hung up beside them call up reminiscences of pleasant mountain music. Seven individual breeders and two societies—those of the canton of Schwytz and of the Simmenthal—furnish the entire collection. Italian and Portuguese cattle are scantily represented. Turning to the cattle bred in France, attention is first attracted by a choice assortment of Normans, various in form and coloring, but robust, quiet, and producing good milk, as well as good beef. The Flemish is also a well-filled class of cattle, of imposing size, with good heads and level backs, but with narrow flanks and chests. The Charolaise, however, are by far the handsomest of the French breeds, with their white and silky coats, fine heads and cylindrical bodies, though they are not good milkers. The Gascon and Charolaise, Garonnaise, Bazadaise, Pyrenees, Breton, and other native breeds, are likewise seen to advantage. The French Durhams, however, take the lead in the point of numbers, forming an imposing collection; while the crosses between Durhams and various French and other breeds seem in many cases highly successful.

The great attraction in the sheep department is the collection of Merinos, which, being unshorn, are seen to great advantage. The Merino, introduced by the Government from Spain towards the end of the last century, is now widely diffused in France, and has given a great stimulus to the laying down of pastures. Its fleece, form and capacity for fattening, have undergone much modification during the last fifteen years to meet the lower price of wool and the higher price of mutton. The Rambouillet flock, the property of the State, serves as a nursery for French and foreign breeders, the race having been unmixed. Twelve fine sheep from this flock figure in the show, but do not compete, for the Government, as the organizers of the show, could scarcely award itself prizes. French breeders exhibit about 250 Merinos, mostly from the South and South-East. The prize for the best show falls to M. J. Cotton, of the Cote d'Or. M. Lefevre Poisson, of the Loiret, is also one of the most successful exhibitors. In the foreign section there is likewise a Merino class, but it has only a dozen entries, all from Italy, except one or two from Hungary. Had Germany taken part in the Exhibition generally, specimens would doubtless have been sent from some of the German States. French agriculturists have crossed the Merino with several other breeds, and the cross with the Dishley or New Leicester, seems the most successful of these experiments. In poultry, natives and foreigners compete together, without reference to the native soil of the exhibits. Most of the foreign poultry is English, but it fights a losing battle. Thought most of the breeders fighting prominently in English shows enter the lists in this section also, only a few crumbs in the way of prizes fall to them. The French poultry are in general finer, and of higher style.

The show does not draw many visitors, the Exhibition and the Salon presenting superior attractions to most foreigners, especially as the weather is showery. The attendants are chiefly French country people. The shepherds of various nationalities seem on excellent terms, and it is amusing to witness their attempts to converse, or rather to gesticulate, with each other. P. E.

Veterinary.

Scouring in Calves.

BY PROF. JAMES LAW, ITHACA, N. Y.

When the young animal comes into the world it is called upon to exercise new functions of the most varied kind. Its lungs, hitherto unused, are inflated with air, and the red blood drawn into a new channel, circulates in the almost endless membrane which lines their cells and cavities. The digestive organs, hitherto the torpid and inactive receptacle of the excretions from its own walls, from the liver and pancreas, must take in aliment, secrete the digestive fluids, absorb the elaborated products, and expel the effete matter, in order to sustain their own integrity and that of the system at large. With the skin exposed to the all-unwonted vicissitudes of cold and heat, and too often of dryness and wet, and the lungs compelled to breathe air at all degrees of temperature, tension and aqueous saturation, and with all grades of impurity, it is not to be wondered at that the digestive process is sometimes retarded or rendered imperfect, and that the foundation of serious and fatal disorders is laid.

Perhaps the most common cause of indigestion and scouring during the first week of life is the want of tone and activity in the bowels. These are clogged at birth with tough, yellowish-brown billiary products that have been accumulating for months, and that virtually glue the walls of the intestines together and prevent their natural movements or the passage of anything through them. To remove this nature has provided a first milk—colostrum—rich in albumen and salts, and actively laxative, and if from any cause this is withheld danger can only be obviated by the substitution of some other purge, such as 2ozs. castor oil or magnesia. To make these more effectual and more like nature's laxative they should be given in one-half these doses for several days in accession until the natural activity of the bowels has been established.

Apart from costiveness, other evils may result from improper milk. If the dam is worked or otherwise excited till fevered, the milk is altered in quality, and often proves poisonous to the offspring, and the same may result from diseases of various kinds in the mother, or from supplying her with unsuitable food, the hurtful elements of which pass into the milk, or lead to an altered secretion. Another common cause is giving the meals at too long intervals, so that the calf comes with stomach empty, faint and languid, and loads it with an excess in the shortest possible time, and the simple distention for a time partially paralyzes it, not only in movement but in secretion as well. If to this is added that the milk has been altered by too long retention in the udder, or soured or otherwise decomposed by standing in vessels of questionable purity, we have a combination of evils that too often prove effectual for harm. There is, therefore, always greater danger in bringing up on hand, on cold or on soured milk, though the mere souring, apart from putrid decomposition, may soon beget an accommodating action on the part of the stomach, which will in many cases render it proof against its evil effects. Even this, however, it is well to avoid, and hence the allowance of a couple of tablespoonfuls of lime water with each meal is a valuable precaution when young animals are fed milk from a pail. This substitution of farinaceous gruels for the natural milk is still more reprehensible, and its effects should be watched with the greatest care. Another common cause of direct disorder of the stomach is the pressure of hair-balls that the calves have swallowed while licking themselves or sucking their fellows, and which rolled into firm masses in the fourth stom-