

the tendency of bodily growth. In combination with the grain foods he should have access to a pasture, or run and should receive green foods, which will promote growth and lower the cost of maintenance. A pasture will also furnish exercise which is an important essential in growing thrifty breeding animals.

At nine to ten months of age the boar will have reached normal breeding maturity and may be used with care. He should not be used to excess, and in fact as little as possible until he is one year old. Full maturity is reached at two years and if used to excess when young he will always remain undersized and lack the thrift and vigor well marked in a prepotent boar.

The fully mature or aged boar simply requires to be maintained in a healthy, vigorous disposition, and in fair flesh. The feeds should be of a cheap, bulky, nutritious nature, and not of heating or flesh-producing type. Ground oats and bran in equal parts by weight fed in quantities according to the condition of the boar will meet the demands necessary in ordinary season. Other grains may be substituted. Shorts or bran and small amounts of barley may be given, but an excess of barley causes loss of vitality and vigor in the breeding animal. Such carbonaceous concentrates as corn should not be fed unless in very limited amounts in winter, when the boar can use foods for the production of body heat. Such foods as skim milk, buttermilk, or whey, will decrease the amount of grain needed and hence lower the cost of feeding. Even water may be used to advantage to keep the grain foods moist and is better than feeding grain dry.

In summer the boar should be allowed all he will readily take of some green crop as pasture grass, clover or rape. The feeding of such not only decreases the amount of grain required but aids the digestion of all foods. It also produces a more rugged state of the body than where grain is fed exclusively. In winter, he should be fed roots to replace the green succulent foods of summer. Two or three average sized roots per day will suffice and will give just as good returns if fed whole as when cut or pulped.

Exercise is one of the essentials in maintaining a vigorous, thrifty animal, and this applies to the stock boar in full. Some form of pen, paddock or run should be provided to give him sufficient space to take all the exercise he needs. In summer it is an easy matter to keep him in a small pasture or paddock, and a shelter to protect him from the summer storms will be all that is needed. But in winter, when he must be kept fairly warm and allowed freedom as well, it is a difficult problem. If he is perfectly quiet, as few aged boars are, he can be allowed to run in an outside paddock with one or two aged sows until they approach farrowing. However, if there is a danger of him being rough, he should be allowed the run of a large pen in connection with a shed. If he can be kept in a pen without a floor, except where he must sleep, better results in sound feet and legs will be noticeable. Heavy boars are often of little or no value, from having been allowed to stand too long on a cement floor, or even a plank floor. Here the feet will become dry and sore from the heavy weight of the body and the unyielding nature of the floor.

If we visit the herd of the average breeder the three defects commonly noticeable in the care and feeding of the boar are underfeeding, overfeeding and lack of exercise. Few breeders realize how far-reaching each of these defects is, and how much it is affecting the profit coming from the herd. Keeping the boar in an underfed condition, is keeping him in a low state of vitality and it will be plainly seen in the young pigs coming from such a sire. Overfeeding has much the same effect, but we find it less prevalent. Lack of exercise produces a sluggishness in the boar, which results in general weakness or lack of strength in the offspring. The policy of the breeder, therefore, should be to keep the boar in a fair state of flesh and induce strength by the choice of feeds of cheap, bulky, and yet nutritious nature and by permitting or even forcing exercise. Such treatment would raise a profit-paying herd to a higher degree than that experienced by many breeders who treat the boar as a necessary evil.

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Few people have any clear idea of the exact amount of straw or other material required to keep an animal well bedded. In some experiments carried on at the station in connection with the Pennsylvania State College it was found that 9851 pounds of straw were required to bed ten cows for 140 days and from this lot 88,405 pounds of manure were removed. This means that practically the straw from one acre of grain would be required per cow for this length of time and each cow would make 8,840 pounds of manure. More straw could have easily been utilized but enough was used to keep the cattle comfortable.

Our Scottish Letter.

Possibly you may be thinking that "Scotland Yet" has given up business. It is not so, he is still to the fore—but he is a very busy man, and finds it not easy to keep up his monthly letter to Canada. The weather has been on its best behavior here for about ten days, and February goes out with a balmy sensation of April. Up to the middle of February we had about as bad a winter as could be pictured. A long frost is not so detrimental to stock as a combination of sleet, snow, floods and violent storms, entailing heavy loss of life at sea and hindering farm work. Flockmasters on the Grampian ranges have not had a winter like this since 1881. There have been longer spells of frost but not such deep snowdrifts, and the bringing of flocks through this weather has been a costly business. Added to this the losses from smothering have been considerable. On the other side of the account stand several notable cases of endurance among the flocks, and several rescues have been made of Blackfaced ewes alive after many days of burial beneath the snow. A Blackfaced ewe is about the hardiest animal to be found on the farm. She will find a living in the most impossible surroundings, and her maternal instinct is one of the wonders of the animal world. The recent severe weather has illustrated this anew, and everyone is thankful that it is over. Work on the fields in the low country was greatly retarded through flooding, and there is considerable leeway to make up in the ploughing. But now with the lengthening day a big spell of work can be got through by man and beast, and it is surprising how soon the arrears can be wiped out. The outlook for the farmer here is fairly bright. Prices are on a much higher level than has been known for many years, and the dreadful days of the eighties are almost forgotten. In every department there is advance. The cessation of imports from the United States, has greatly helped things, and in spite of increased costs the farmer sees his way to make a little money.

The triumph of the Board of Agriculture and Fisheries over the outbreak of foot-and-mouth disease seems to be complete. The Minister of Agriculture, Mr. Runciman, was feasted by Scots stockbreeders at Perth on Tuesday evening. William Duthie, Collynie, the world-famed breeder of Shorthorns, presided over the gathering, and Sir James Sivewright, of Tullyallan, one of the South African magnates and a spirited breeder of Shorthorns, proposed Mr. Runciman's health. The banquet was an acknowledgment of the success of the administration in keeping Scotland free of the disease all through the painful months which have elapsed since the first reported outbreak in England on the eve of the Royal Show at Doncaster. Mr. Runciman is, at the moment, able to make the proud boast that Great Britain and Ireland are more free of disease of every kind among live-stock than any other country in the world. There can be no doubt that we have a most efficient Veterinary and Animals Department, and Mr. Runciman is showing himself to be an extremely able administrator. He has succeeded in obtaining im-

portant concessions with respect to the period during which foreign countries are closed to British stock after an outbreak of foot-and-mouth disease has taken place. The antipathy of the Argentine to this disease in Great Britain is rather puzzling in view of the fact that the disease is rampant in the Argentine. However, we must admit the right of the Argentine people to manage their own affairs, and we certainly gain nothing by seeming to dictate to them or anybody else.

The export trade is a big thing for this country, and at the long last Great Britain is to have a testing station under Government control where cattle for export can be put through the tuberculin test, and this is to be accepted as final by several foreign Governments. The station is to be placed at Aldershot, south of London, and Scotland has a grievance, because this is so remote from the breeding areas in the north. Unfortunately Scotland is herself largely to blame for this. Mr. Runciman said he fully proposed getting funds to establish a station in Scotland, but at a conference held in Glasgow a motion was carried disapproving of such a station. The aim of the mover of that motion was to force the hand of the Government to do more than test cattle intended for export. His argument was that it was much more to the purpose to embark on a crusade for the elimination of tuberculosis, and in place of having only cattle for export tested he would have all animals tested, and "the reactions earmarked" in some way so as eventually to rid the country of this scourge. It is now announced that the Government have this also in hand, and on May 1st a tuberculosis order comes into force which will attach the cow with the tuberculous udder and get rid of her altogether. Compensation will be paid on a fixed scale, and evidence therefor accumulates providing that alike in the human and the bovine creation the white scourge is to be warred against.

The spring bull sales so-called are almost over, and so far have been uniformly successful. The trend of prices has been upward, and the whole of the breeds have shared in the advance. The Shorthorn still leads for top prices, but, on the whole, one would say that sound commercial bulls for crossing purposes were making quite as much money amongst the "blacks." The top price so far has been 1400 guineas, or £1470 paid at Perth by Mr. Duthie for Lothian Augustus, a beautiful roan bred by the Earl of Rosebery in his Dalmeny herds. This is a remarkable score at the very first appearance of the Dalmeny herd in the Shorthorn rings, and reflects great credit on the splendid management of the Earl's agent, J. T. McLaren, who is one of the best judges of Shorthorns in the country. The bull was fourth in his class. The next highest price was 1000 guineas, or £1050 paid by Mr. Casares, London, for Star of Dawn, the first-prize bull which was bred by J. J. Moubray of Naemoor, whose manager, it is worthy of note, is a son of J. T. McLaren, above named. It is rare indeed that father and son make such a notable record on one day. We believe that the dam of Star of Dawn was



Who's Afraid.

A lamb is the personification of innocence.