

made prominent at the expense of the purely practical, the work accomplished is of little value to the farming community. The farmer who is in the business for the money there is in it is not very much concerned whether his fowl have the fancy colorings or markings so long as they give a profitable return in the way of eggs and good broilers. From what we know of Mr. Graham and his work we believe we are safe in stating that the really practical side of the work will not be neglected under his management.

Remedies for Smut in Oats

In a communication received from Dr. Saunders dealing with this object, he points out that the manner of growth, etc., of this form of smut has been fully explained in Bulletin No. 4 of the Experimental Farm Series, prepared by Dr. James Fletcher, copies of which may be had on application.

In discussing the various remedies, Dr. Saunders points out that copper sulphate, so effective for wheat smut, has not given very satisfactory results when used for smut in oats. Soaking the oats in water heated to 132 to 133 degrees for five minutes has been found to give good results. Potassium sulphide has proved an effectual remedy. This is used in the proportion of one and a-half pounds of potassium sulphide dissolved in twenty-five gallons of water, and the oats steeped in this solution for twenty-four hours. The Bordeaux Mixture, made with four pounds of copper sulphate and four pounds of lime in forty gallons of water, and soaking the oats in this fluid for four hours, gave fairly satisfactory results in 1897, but later tests show that, though it is very helpful, it is not a complete remedy.

Formalin has been recently tried for "loose" smut in oats and has given the most satisfactory results. This liquid is a 40 per cent. solution of a chemical known as formaldehyde. In the experiments conducted at the Experimental Farms the Formalin was mixed with water in two different proportions — one of three ounces to ten Imperial gallons, and the other four and a-half ounces to ten gallons of water. The oats were soaked in this solution for two hours, and the results obtained show that Formalin may be regarded as the most satisfactory remedy for this disease. In some further tests made by soaking the grain for ten to fifteen minutes equally good results were obtained. When steeping the grain it is a good plan to enclose it in bags made of cheese-cloth or some open fabric which will allow of the free passage of the water through it. Formalin sells wholesale at fifty cents per pound, and retail at about seventy-five cents per pound. This latter price would be a shade less than five cents an ounce, which would make the cost of the weaker solution fifteen cents per ten Imperial gallons, and the stronger twenty-two and a half cents. The stronger solution is recommended, and soak the oats in it for not less than fifteen minutes.

This last named remedy is simple and easily applied, and as the cost is not great it will pay farmers to use it rather than sow oat seed containing smut. Farmers cannot afford to sow unclean seed of any kind. When a great deal of time and trouble have been spent upon preparing the soil a special effort should be made to have the seed that goes into it pure and clean.

British Shorthorn Exportations

According to Thornton's Circular of Shorthorn transactions for the quarter ending December 31st, 1898, there were exported from the United Kingdom during that time in all 102 Shorthorns. Of this number four went to South Africa; eight to the United States; sixty-three to South America and twenty-seven to Canada. Of the number that came to Canada fourteen were shipped to H. Cargill & Son, Cargill, Ont., and nine to Arthur Johnston, Green-

wood, Ont. The remaining four were shipped to Ontario, but the name is not given.

One of the gratifying features of this report is the increased number of Canadian importations. A year and a half ago a report from the same source which we published showed that out of 207 exportations of Shorthorns from Great Britain during three months not one came to Canada. The above importations show an increase of from no per cent. to over twenty-six per cent. But another notable feature in this comparison is the fact that eighteen months ago South America imported 195 Shorthorns during three months, while Canada imported none, but for the quarter mentioned above South America imported only sixty-three to Canada's twenty-seven. This great change in the relative number of importations for the two periods must be very gratifying to those interested in the beef cattle trade of this country. It is also worthy of note that for the quarter ending December 31st last the United States imported only eight animals to Canada's twenty-seven.

Growing Early Potatoes

The Kansas Experimental Station has been experimenting for two years on the methods of hastening the growth and maturity of early potatoes. During 1897 some whole potatoes were set in shallow boxes with the blossom side up on Feb. 23rd. They were filled around with sand, leaving the upper fourth exposed and the boxes placed in a room of rather subdued light, and a temperature of 50° to 60°. Vigorous sprouts soon began to push from the exposed eyes. These potatoes were planted on March 22nd in furrows in the same position as they were in the boxes and fourteen inches apart in the rows. They were not cut but kept entire. Similar rows were planted of potatoes taken from the storage room and unexposed to the light till planted. As they grew the sprouted potatoes took the lead from the start and both lots of whole seed kept ahead of cut seed of the same varieties. On June 1st the sand-sprouted lots showed excellent young table potatoes, while none of the others were yet large enough for use. A week's difference was apparent in the two lots. On June 16th the sand-sprouted potatoes were still ahead in size, and at the final digging, July 24th, the sand-sprouted lots showed better tubers and 10 per cent. larger yield than the others. Last year somewhat similar experiments were carried on with about the same results.

Sheep Feeding

In this branch of farming, as well as others, the farmer must study the markets and its needs. Many farmers in the United States, adjacent to the large cities where the demand is good, make their money out of sheep by raising early winter or fall lambs, and fitting them for the Easter market. This practice is followed to a limited extent in this country, though the market is not so large. Other successful sheep farmers follow the practice of wintering the spring lambs and selling them when about a year old. When followed properly, and the lambs well fed during the winter, there is good money in this plan. The more general plan, however, in this country is to sell the lambs off in the fall. While there may be money and less labor in doing so, the lambs are put upon the market when the supply is the largest, not only of lambs but of grass cattle. The farmer who is so situated that he can specialize a little, and have his lambs ready when a couple of months old, or when yearlings for the spring market, runs a better chance of getting the highest value for his product. In England the demand is now more for young and tender meat. Sheep of light weights seem to be more suitable, as they are generally quoted about 2c. per lb. more than heavy weights. Some butchers there would not buy sheep over two years of age. Quarters weighing from 10 lbs. to 14 lbs. make nice family cuts. The British public seems to demand early maturity, and sheep feeders there aim to supply the quality desired.