EDITORIAL

Take time to hand-pull weeds if not so numerous as to make that task a hopeless one. In growing grain use the "spudder" on Canada thistles.

Particulars regarding the next Ontario Fat Stock Show prize list, of special interest to breeders and others, appear on page 275 of this issue of the ADVOCATE.

A conference of road associations, State, county, township and municipal authorities, corporations and individuals concerned in road improvement, will be held at Ashbury Park, N. J., July 5-6.

A great deal of time may be saved and frequent mishaps avoided by carefully going over harvesting and other machinery before it is actually required for use. If any repairs are required, have them made at once.

Mr. M. A. Carleton, late assistant in the Bontanical Department of the Kansas Agricultural College, has been made an assistant in the Division of Vegetable Pathology, U. S. Department of Agriculture. The rusts of cereals and other plants will be his special objects of study.

The Massachusetts Agricultural College, at Amherst, recently lost its large barn and contents, except the live stock, by fire. The institution has been unfortunate of late, cases of tuberculosis and (suspected) hydrophobia having occurred among the cattle, the latter disease, or something resembling it, having killed eleven head.

We find the people of Australia are quite alive to the subject of export. Among the new additions to the Royal Agricultural Prize Schedule of Australia for this year is a prize of £6 for cheese suitable for export to the British market, not older than three months. Also a prize for dressed poultry suitable for export, and a prize for dressed capons.

The office of Secretary and Treasurer of the American Guernsey Cattle Club has been moved from Farmington, Conn., to Peterboro, N. H. Mr. Wm. H. Caldwell, recently Assistant Professor of Agriculture in the Pennsylvania State College, succeeds the late Edward Norton, who has managed the office for over seventeen years. Mr. Caldwell had charge of the World's Fair Guernseys in the

The New Hampshire College of Agriculture and Mechanic Arts announces a summer school of biology, especially adapted to the needs of secondary teachers. This step is taken in co-operation with the State Superintendent of Public Instruction. Prin. C. A. Clark, of Sanborn Seminary, Kingston, N. H., and Prof. C. M. Weed, are the instructors in botany and zoology respectively. The school opens July 5th and ends August 4th.

The Agricultural Committee, at Ottawa, has decided to recommend that a veterinary staff should be appointed in connection with the Department of Agricultural, to deal with tuberculosis and other infectious diseases, and that Dr. McEachran be retained as head of the staff. It was also decided that a salary should be given to Dr. McEachran, or whoever was appointed as chief, so that he could devote his sole time to the service of the Government.

Messrs. Wm. Davies & Co., pork packers, have addressed a letter to persons who are feeding large numbers of hogs, such as cheese factory proprietors and others, warning them against buying short, chunky store hogs for that purpose. Long, rangy, growing shoats are the sort wanted. They are also cautioned against making the hogs "too fat." "Give us," say this above firm, "nice, smooth, long, what we used to call half-fat hogs, and you will receive better prices and obtain a better return for the food given. Canadian bacon is under a cloud in England because of its over-fatness."

The Utah Experiment Station has issued a bulletin, which treats of the economical use of grain when fed alone, or when fed with green grass, and also of the economy of raising hogs on grass alone. Furthermore, the relation of exercise to the economical use of food is treated of. The experiments were so extensive as to prove almost conclusively that pigs allowed to roam over a large area of good grass, while receiving a liberal grain ration, made the most rapid growth, and made the test use of food fed. Those confined and fed grass and grain made more rapid gain than those fed grain alone. Those fed grass alone made too slow by a the to be profitable.

About one hundred and fifty members of the British Dairy Farmers' Association have been on an excursion to Switzerland, mainly for the purpose of gathering information regarding the dairy methods of that country. There is much to be learned from the Swiss, as would appear from the article on one of their famous breeds of cattle which appeared in the last issue of the ADVOCATE.

The Melbourne Australasian states that the trial shipment of Australian frozen pork, shipped from Victoria and sold in Old London at 4½d. per pound, is disappointing to those who had hoped for an extension of export trade in that direction. One mistake was made in putting up too heavy weights, and at the wrong time of year. The charges in connection with the shipment were 2½d. per pound, so that very little was left for the farmer who grew the pigs. The experiment will be continued. Choice bacon pigs have been selling at about 3d. per pound in Melbourne. The Australasian states that 140 is the most profitable weight.

The Australian Government has undertaken to introduce legislation providing for the advance of loans on leaseholds. The advances about to be made by the Savings Bank Commissioners will be on freehold land only, the act under which they operate prohibiting them lending money on the security of leaseholds. The Government will, however, when this bill is passed, accept leases of land in process of alienation from the Crown as security. The rate of interest will be 5 per cent., but in addition to that 2 per cent. per annum will have to be paid as a sinking fund for the redemption of the loan. The advances will be made, not by the Ministry, but by commissioners specially appointed for that purpose, and free from political influence, so that the danger of pressure being brought to bear by members of Parliament to restrain the commissioners from foreclosing on those who have fallen in arrears with their payments will be minimised.

A contract has been entered into between the Peninsular & Oriental and Orient Steamship Companies and the Agricultural Department at Melbourne, for the carriage of butter from Melbourne to London at 3d. per lb. net for the next two years. The steamship companies will carry the boxes free of charge, and guarantee a regular weekly delivery in London. This is one of the prime conditions of success in British markets. One condition in the contract allows either company to reject the consignments of a shipper who, after taking advantage of the reduced rate of 3d., sends a shipment by a rival line of steamers. This condition is justified on the ground that it would never do to require the mail steamers to provide a certain amount of coolstorage space only to find that the expected cargo was not forthcoming because some "tramp" steamer happened to be offering to carry the butter at a slightly lower rate. No one will be compelled to send butter by the Peninsular & Oriental and Orient Companies, but if an exporter comes into the contract to secure the 3d. freight, and then goes out to suit his own convenience, he will not be allowed to again participate in the reduced freight except with the sanction of the shipowners.

The Cultivation of Corn.

It is not many years since it was thought necessary to plant corn in hills, rowed both ways, so that cultivating could be pretty thoroughly done by horse labor. That idea was all right, but some hand hoeing was necessary to be done about the hills. In the corn-growing States, where ordinary farmers have from 75 to 100 acres, the old process is found to be far too slow and expensive. Corn is now sown in drills about three feet apart, and a single stalk every eight to ten inches. As soon as the blade appears above ground it is harrowed. thus pretty thoroughly cleaned of weeds, as well as rendering the soil friable and moist. Now and then a corn plant may be torn up, but when planting, a slight excess of seed may be put in to allow for this loss. While horse cultivating seems a great improvement on hand hoeing, it is now thought to be necessary to use the two-horse cultivator, working two rows at once. If the rows are straight, a good man can cultivate so close to the rows as to destroy nearly all weeds, and to cover up the very last of them. It is said that from fifty to seventy-five bushels of shelled corn can be grown per acre by this method.

In cultivating, it is well to cultivate pretty deeply, after harrowing ceases, in the centre of the rows: but as growth advances, shallow cultivation is necessary, or many roots will be broken off. The surface soil should be kept mellow for a couple of inches down, to act as a mulch to retain moisture and assist the ramification of the roots in search of plant food.

The Toronto Exhibition.

There are prospects that this year's Toronto Industrial Fair, from the 3rd to the 15th of September, will be much larger than any of its predecessors. Already a large number of important exhibits that were at the World's Fair last year have been entered for the Toronto Fair, and as there is no Columbian Exhibition this year to compete with the Industrial, every department is sure to be well filled. The grounds have been vastly improved. and the new stables and cattle sheds erected last year have had the finishing touches put to them. The prize list has been issued, and the amount is even larger than last year. A proposition was made to reduce the prizes in some departments, but this the directors decided would be a retrograde movement, and instead of a reduction, an increase has been made to the list. The only decrease made in any class was in the striking out from the list the class for agricultural horses. The principal additions and alterations made in the live stock department are as follows:—Special prizes are offered in addition to the regular prizes for Hackneys, by Mr. H. N. Crossley, of Rosseau; by Mr. John Holderness, of Toronto, and by the Canadian Hackney Horse Association. Two sections have been added in the class for saddle horses; for two and three-year-old geldings or fillies, not thoroughbred, but this the directors decided would be a retrograde year-old geldings or fillies, not thoroughbred, but sired by a thoroughbred horse, likely to make a good hunter or saddle horse. Valuable prizes are offered for four-in-hands, tandems and turnouts, etc. A lot of purses are offered for trotting and running races during the Fair. A prize of \$50 is added to the Holstein class for bull and four of his progeny, and special prizes are offered by the Holstein-Friesian Association of Canada for fat Holstein grades. New prizes are added in the sheep department for Canadian-bred pens of Leicesters, Lincolns, Oxford-Downs and Dorsets; prizes for similar pens in Cotswolds, Shropshires and Southdowns having been put on the list last year. Special prizes are also given by the American Shropshire, American Oxford-Down, and American Southdown Associations. In the swine department a new class has been added for Duroc-Jerseys, and two sections have been added in every class for a boar and four of his progeny, and for a sow and four of her progeny. Special prizes are offered by the American Berkshire Association. offered by the American Berkshire Association. The poultry list remains exactly the same as last year. In the dairy department new sections have been added for June cheese, both white and colored, as well as the usual prizes for August cheese. The exhibit of cheese and butter has increased so largely at this Exhibition that in future a whole building will be set apart evalueively for a whole building will be set apart exclusively for this purpose. The Eastern Dairymen's Association and the Ontario Creameries' Association have made grants towards the dairy prizes.

Exhibitors will notice an important change in the dairy and agricultural products classes this year, it having been decided to have both of these departments open both weeks of the Exhibition. All dairy products and roots, grain and vegetables, will, therefore, have to be delivered by September 5th, the first week of the Fair, and the judging will take place the following morning. The prize list for the Toronto Exhibition is a very liberal one, the amount offered being more than double that given by any other Fair in Canada, and equalling the largest in the United States. All entries in the live stock departments have to be made before the 11th of August, and the pedigrees of all thoroughbred stock must be sent in with the entry. The stock exhibit at the Industrial last year was a very large one, notwithstanding the fact that many of the best herds from Canada were at the World's Fair at the time, so that this year the exhibit will undoubtedly be much larger. A larger number of special attractions, which many seem to look for at the present day in connection with an Agricultural Show, will be provided, and cheap excursions will be given on all railways. Copies of the prize list and entry forms can be obtained by dropping a post card to Mr. H. J. Hill, the manager, Toronto.

Mr. Mey, a young gentleman who came from Germany a couple of years ago, and who has since spent some time at the Agricultural College, Guelph, and later at the Minnesota State Experimental Farm at St. Athony Park, has now settled down on his 600-acre farm near Niverville, on the east side of the Red River. Mr. Mey has built a good substantial dwelling house, and one of the best barns in the Province. He brought with him from St. Paul three fine teams of horses. The farm is well adapted to mixed farming.

Teaching the Colt to Back.—This should be done when the colt is small, but it seldom is until he is being broken to harness. Hitch him up with an old horse that will back at the word of command, and stop them where the wagon will move easily; tighten up the lines a little, and say "back, back." If he refuses to step back with the old horse, don't try to pull him back, or he will brace up against it, but have an assistant step in front of him with a buggy whip, and, as you say "back" and pull gently on the lines, switch his fore leg that is most advanced, and as he moves that back, touch the other one. Don't whip him around the fore legs, but switch him just enough to make him pick up his foot. Keep trying, and keep "sweet." Exchange.